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Edwin Dwight

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EDITED BY

HENRY BARNARD, LL.D.

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I. MEMOIR OF EDMUND DWIGHT:

BY FRANCIS BOWEN,

Professor of Moral Philosophy in Harvard College, Mass.

THE services of the late Edmund Dwight to the cause of common school education were numerous and important enough to earn for him the title of a great public benefactor. During his lifetime, they were but little known beyond the small circle of his intimate friends, and of those who were closely associated with him in his labors. It was his pleasure that it should be so. His taste was nice even to fastidiousness; and any public mention of what he had done, seemed to grate upon his feelings and to lessen in his opinion the efficiency of his work. The agency which is bruited abroad, appeared to him, partly by bringing the motives of the agent into suspicion, and partly by mingling personal considerations with the cause, to lose in force what it gained in notoriety. In reference to the workings of society and government, he was deeply convinced of the truth, that far the most important and beneficial results are produced by that part of the social machinery which is most quiet in its operations, and consequently attracts the least notice and remark. He made it a condition of his numerous benefactions to the cause of common schools, that his name should not be mentioned in connection with them; and whatever of personal effort, of time and attention, he contributed to the same end, was in like manner studiously kept back from public observation and acknowledgment. During his lifetime, his friends respected his wishes in this particular; but death has removed the seal of secrecy, and the story of what he accomplished ought now to be told, in order to discharge a debt of gratitude from the public, and to set forth a useful example to others.

Other considerations impart interest to a notice of Mr. Dwight's life and character. He was an eminent member of a remarkable class of men,—the merchant princes of Boston during the last half century,—a class remarkable alike from the nature of the enterprises by which they acquired their wealth, from the high qualities of intellect and character which were manifested in their undertakings, and from the munificence of their public and private charities. He was the compeer and associate of the Eliots, the Appletons, the Lawrences, the Perkinses, and other distinguished merchants, whose liberality, foresight, and public spirit have contributed so largely, not only to the

material prosperity of New England, but to her high commercial reputation both at home and abroad. They extended the bounds of her foreign trade, devised and supported her manufacturing establishments, planned and built her railroads, created or endowed her institutions of charity and education. A few of them obtained eminence as legislators and statesmen, though political pursuits never formed more than a brief episode in their active career. Generally they preferred to serve great public ends in a private station, where their influence was not less extensively felt because it was never obtrusively manifested. The biographies of a few among them have been recently published, and have been received by the community with an interest proportioned to the importance of their labors and the worth of their example. A brief sketch of the life of Mr. Dwight, compiled from scanty but trustworthy materials, may now be added to the number of these records.

EDMUND DWIGHT was born at Springfield, Massachusetts, November 28th, 1780. His father, Jonathan Dwight, was a second cousin of the celebrated theologian and poet, Timothy Dwight, who was, for nearly a quarter of a century, the President of Yale College. The mother, whose maiden name was Margaret Ashley, died while Edmund was yet a child, and his father married a second, and subsequently a third wife. There were six children in the family, two daughters and four sons, of whom Mr. Henry Dwight, of Geneva, New York, is now the sole survivor. These children were chiefly educated at home, in such schools as Springfield, then a small place, afforded. The father, who was in prosperous circumstances, kept a store and also cultivated a piece of land; and his sons, as was usual with country lads in New England, when they were not occupied in school, often assisted in performing the ordinary labor upon the farm. Edmund, who was active and athletic, found his share of this work by no means unpleasing, and often afterward referred to it with pleasure. He was trained to careful and thrifty habits, after the pains-taking way of New England agriculturists in the last century; and the homely maxims, which he then learned, were remembered and cited by him with point and humor in his subsequent career. Thus he would remind a negligent or heedless worker of the necessity of "sweeping after the cart." He was wont to boast, also, that he was the best foot-ball player in the village.

After completing his preparatory education at school, he entered Yale College, at about the same time that his distinguished relative became president of that institution; and he was graduated there in good standing in 1799. His early destination was for the bar, though the choice was probably made more in compliance with

the wishes of his friends, than from his own predilections, which certainly inclined rather to an active than a studious life. He entered the law-office of Fisher Ames at Dedham, and probably lived for a time in Mr. Ames' family; at any rate, he formed and always retained the strongest admiration and affection for Mr. Ames, who was very kind to him, introducing him to his friends, and thereby to the best society in Boston. The conversation of Mr. George Cabot, Chief Justice P'arsons, and other members of that brilliant circle of which Mr. Ames was the centre, made a deep impression upon him, and in later life, he spoke of it as the most fascinating and effective which he had ever heard. These gentlemen were the leaders and champions of the old Federalist party, which was still predominant in New England, though it was fast losing its ascendancy in the country at large. There was something chivalrous in their attachment to it long after their sagacity perceived that its prosperity was waning, and that defense of its principles was no longer an introduction to popularity and power. Veneration for the character of Washington was a part of their political creed, almost of their religious belief. The earnestness with which these opinions were held, the high-toned conservatism which characterized them, and the eloquence and wit with which they were defended, naturally had a strong effect upon the mind of a young man, who, at the same time, was grateful for the notice which was taken of him and for many marks of personal kindness. Mr. Dwight was too resolutely self-reliant in his turn of mind to follow implicitly, and through life, the opinions of others, however high the authority whence they emanated; but it is probable that his views of society and politics, and even his estimate of many distinguished individuals at that epoch, were a good deal colored by the conversation which he heard in the law-office at Dedham, and in that circle of society of which Mr. Ames was one of the brightest ornaments.

After completing his law studies, Mr. Dwight became desirous of visiting Europe, a project which was then far less common than it has become, through the growth of opulence and the increased facilities of travel, in our own day. To obtain the means of carrying this plan into effect, he proposed that his father should give him immediately what would be his ultimate share of the inheritance, saying that he would not ask for any thing further, but would depend in future entirely on himself. Such a proposal was in perfect accordance with his character; at once resolute in executing any purpose which he had deliberately conceived, and confiding in his own strength for meeting any future exigences which such conduct might bring upon him.

His father having acceded to this proposition, he crossed the Atlantic in 1802, and remained abroad about two years. It was a busy time in the affairs of Europe, and especially in the politics of England, to which country Mr. Dwight's visit was chiefly directed. The peace of Amiens, which might rather be called a truce, as it was made without good faith on either side and lasted only a little over a year, had just been declared; and a vehement party struggle attended both its commencement and its close. The Whigs, though their party comprised much of the best talent and the highest rank in the kingdom, were in a hopeless minority; but the Tories were shorn of their strength through their dissensions with each other. William Pitt had retired from office, that he might not have any hand in the conclusion of a peace which he deplored, at the same time that he recognized its necessity; but when the renewal of the war became imminent, he was haughtily indignant that his substitute, Mr. Addington, should be unwilling to restore to him the reins of power. In order to drive out the administration, he entered into a coalition with his old opponents, the whigs; and though the king resolutely supported his prime minister, an opposition made up of the combined forces of Pitt, Fox, Sheridan, and Grenville was too much for the nerves of Mr. Addington, who, after a memorable struggle, and while a majority were yet at his command, gave way to his imperious opponent, and shortly afterward humbly consented to take office as his subordinate. Mr. Dwight was present as a spectator in the gallery of the House of Commons during the vehement debates which preceded the dissolution of the Addington ministry. The eloquence of the chief debaters made a strong impression upon him, especially that of Pitt, who, he thought, had finer natural qualifications for oratory than any speaker he had ever heard. A rich and powerful voice, and great copiousness of speech, added much effect to his loftiness of tone and weight of argument. He spoke like one who held in his hand the destinies of three kingdoms and the fortunes of a great war. The politics of America at this period hinged in a great degree upon those of Europe, and perhaps the predilections of Mr. Dwight as a Federalist enhanced his administration of the great English statesman.

Sometime in 1804, Mr. Dwight returned to Massachusetts, and immediately engaged in commercial business with his father and brothers in Springfield. Though his mind was cultivated by study, travel, and acquaintance with the world, he had not the distinctive tastes of a scholar, and was entirely free from the love of display which draws so many young men into the liberal professions. His choice of an

occupation was probably determined by his strong love of independence, his disposition to form extensive and far-reaching plans, and his wish to exert the influence which the possession of great wealth invariably bestows. Under a quiet demeanor and very courteous manners, he concealed an iron will and great steadfastness of purpose. These qualities had ample scope in his occupation, and contributed to its large success. The business in Springfield had its head quarters in a large store on the corner opposite his father's house; but it was rapidly extended, and soon included several branches in the neighboring towns. Being united with banking and other matters, it gave full employment to the several members of the firm, and exerted much influence on the commercial prosperity of the town and the neighboring country. It was attended of course, with the usual vicissitudes of trade; but Mr. Dwight's excellent judgment and cool but persevering character saved him from any marked reverses. His mind was fertile in schemes and resources, though it was somewhat impatient of details, which he willingly intrusted to others. He belonged to the second class of persons characterized by Lord Bacon, when he says that "expert men can execute and judge of particulars one by one; but the general counsels, and the plots, and the marshaling of affairs come best from those that are learned."

Mr. Dwight's business led him frequently to Boston, and here he became acquainted with and married Miss Eliot, in April, 1809. She was the daughter of Samuel Eliot, then an eminent and successful merchant, whose munificence in founding during his lifetime that professorship in Harvard College which now bears his name, was allowed to become known only after his death. The marriage was an eminently fortunate one, contributing largely to the happiness of both parties to it for more than thirty-five years, Mrs. Dwight's decease taking place but a short time before that of her husband. Her sweetness of disposition and firmness of Christian principle diffused sunshine not only in her own household, but throughout the sphere in which she moved. Her goodness was spontaneous; it cost her no effort to be patient, loving, and charitable, but her excellent understanding and severe habit of self-control were needed to preserve these gentler virtues from passing by excess into their neighboring faults. She had much to bear; ill health, in a form attended by great suffering, cast a shadow over many of her years. But the gloom never touched her character or chilled her feelings; on the contrary, her sympathies were never more quick and active, or her charities more unceasing, than when pain seemed to require her attention to be centred on herself. She found her medicine in doing good; she

could derive an enjoyment from entering into the feelings of others, and especially from sympathizing with the happiness which she had helped to create, which brightened her darkest hours of personal suffering. As a wife and a mother, her virtues were best known and appreciated, of course, by those of her own household and her own blood; but there was an atmosphere of goodness about her, which not even a comparative stranger could approach without acknowledging its genial and sunny effects. Out of her own family, she preferred that her kindness should be felt, not known. Her charities were constant, but secret, like the rivulet whose sunken course is betrayed only by the brighter green along its banks. Yet to those who knew her intimately, it seemed that even her beneficence could be better spared than the influence of her visible example; and that her peculiar province was to render goodness attractive by the charm of her manner and the silent teachings of her character.

The first ten years of Mr. Dwight's married life were spent in Springfield, in the active pursuits of his business, diversified only by an occasional visit to Saratoga or Washington. He took considerable interest in politics, though in his characteristic way, preferring to accomplish certain results, rather than to allow his own action in the matter to become known. From the strength of his character and his resoluteness of purpose, he had very considerable influence over others when he chose to exert it. They were content to follow his advice, because it was so quietly given, and because he claimed no merit to himself when the end was attained through the means which he had pointed out. His convictions were strong, and his use of means varied and unwearying, when he had a point which he thought worth carrying. Before he left Springfield, it was understood that he might have been chosen to Congress from that district. But the office had few attractions for him; he was no public speaker, and he probably thought at that time that he could ill afford to leave his business. By not becoming a candidate himself, moreover, he could exert more influence over the action of those who were chosen.

Mr. Dwight removed his family to Boston about 1819, and soon afterward, formed a partnership there with Mr. James K. Mills, which continued till his death. The firm thus established soon became deeply interested in the manufacturing enterprises on a large scale which were then just obtaining a foothold in New England. There was something peculiarly attractive in such undertakings to a person of Mr. Dwight's temperament and opinions. It gratified both his pride and his benevolence, to be largely instrumental in building up villages and towns in districts which before were but sparsely popu-

lated, in compelling hitherto unused waterfalls to do the work of man, in opening a wide range of profitable occupation to thousands of families, and filling the ear with the noise of engines and the busy hum of industry, where once only green fields silently basked in the sun. His interest in these nascent enterprises was further increased by feelings of local attachment. Though a resident in the metropolis for the last thirty years of his life, he always continued to regard Springfield, and the country immediately around it, with the peculiar fondness which no person of quick sensibilities ever ceases to entertain for his birthplace and the home of his earlier years. The noble Connecticut, with its fair margins of fertile meadows, always retained, in his estimation, the preëminent importance which he had naturally attributed to it as a boy born and bred upon its banks; and up to the close of his life, he was accustomed to speak of it as "the river." The Chicopee, one of its fair tributaries, emptying into it a little above Springfield, and well adapted for manufacturing purposes, was selected by him for the beginning of the experiment; and the work thus commenced was carried forward, more or less through his agency, till every spindle was turning which the lower portion of that stream—all that came within his sphere of operation—could set in motion. The manufacturing villages thus created upon its banks were regarded by him with feelings of peculiar pride and interest. It was not merely that they were the tokens, as they had been to a considerable extent the means, of the increase of his wealth; though his fortune had grown with the growth of the manufactures of New England. But he could point to them and to the prosperity of their inhabitants as, in great part, his work. One fine summer morning, in the latter part of his life, I had the pleasure of accompanying him on a drive in his own vehicle through these villages, to visit the site of the projected new city of Holyoke. The magnificent scheme for building up this new city, by damming the broad Connecticut itself, and thus obtaining almost an illimitable water-power, was one, if not entirely of his own inception, to which he had largely contributed from his means, and his powers of contrivance and execution. If the undertaking was begun too soon or carried too far, still the mistake was such as to show the bent of his mind and the generosity of his feelings. He spoke of it to me as a noble project, and as one in which he was deeply interested, though, at that period of his life, he could expect to see it carried but a very little way toward completion. He had only put the affair in motion, he said, in order that his son, and others who were to come after him, might have the pleasure of watching its progress, managing its details, profiting by its results, and at last, when the new

city had become flourishing and populous, of being able to say that it was *their* work. He wished them to have the same feelings of pride and enjoyment, though on a much larger scale, which he had experienced in building up the manufacturing establishments along the Chicopee by the side of which we were riding. Of the magnitude of these enterprises, which he had fostered or first put in motion, we find incidental notice in a letter which his partner had occasion to write and publish in 1841, in order to aid the movement in favor of common schools. "The house with which I am connected in business," said Mr. Mills, "has had, for the last ten years, the principal direction of cotton mills, machine shops, and calico-printing works, in which are constantly employed about three thousand persons."

Another undertaking of a still more public character, in which Mr. Dwight took an early and active share, was the construction of the Western Railroad from Worcester to Albany. Those only who know how heavy were the clouds and difficulties under which this magnificent work was planned, prosecuted, and finished, can appreciate the persevering efforts and continued sacrifices of its early friends and directors. Mr. Dwight's sound judgment and far-reaching foresight saw the end from the beginning,—the ultimate triumph, in the midst of the early perplexities and the accumulating causes of delay and disappointment. His public spirit was deeply interested in the enterprise, and he saw clearly its transcendent importance to the prosperity of his native State; and his local pride was an additional spur to exertion in the cause, as it was finally determined, probably in a great degree through his efforts, that the road should pass through Springfield. The scheme was of that large and generous character, also, which was peculiarly attractive to his temperament. It did not appear to him as a mere commercial speculation, likely to be profitable in itself. Had this view alone prevailed, the road would not have been constructed till a much later day. But he appreciated its indirect advantages, its effects upon the large towns along its route, and upon the commerce and industry generally of the whole State. These gains were sure; and hence he never faltered in the undertaking amidst all its early failures and discouragements. At the first meeting of the corporation in which any decisive movement was made, held January 4th, 1836, he was appointed one of a committee of three persons, to see that all the necessary preliminary steps required by the charter had been taken. This committee reported at an adjourned meeting held on the following day, when Mr. Dwight was chosen one of the Board of Directors which commenced active operations. He

was continued at this post, by successive re-elections by the stockholders, till February, 1839, by which time, all the main features of the policy of the company had been determined, the road had been nearly completed as far as Springfield, and considerable work had been done upon the line west of that place. The policy which he supported, and which finally prevailed, was to intrust the execution of the work to highly educated scientific engineers, so that it should be completed in the most thorough and durable manner, instead of consulting cheapness by the employment of another class of persons, familiar only with the practical details of such business. During the three years, 1839-41, Mr. Dwight was not upon the board; but in 1842, he was elected by the legislature a director on the part of the State, and in the following year, he was appointed president of the company, in place of Mr. Bliss. This office, however, he held but one year, though he remained a director on the part of the State till February, 1849, when, by the terms of the law, he was no longer eligible. But he was immediately re-elected by the stockholders, and was a member of the board at the time of his decease. He had thus an active share in the management of the road for about ten years, embracing the earlier period, in which its completion and success were most doubtful, and the later one, when its affairs were most prosperous and the utility of the work was unquestioned.

A full account of Mr. Dwight's services to the cause of education could be given only in a complete history of that renovation of the common school system in Massachusetts, and indeed throughout the northern States, which took place during the last fifteen years of his life. But such a history would be out of place here, where there is room only for general statements and a brief mention of a few particular facts. Mr. Dwight's fortune had become large through his own exertions, and he had the disposition to make a munificent use of it; but he was not content to give for the mere sake of giving, or in order only to establish a reputation for generosity. His ambition was rather to set on foot some large enterprise, of comprehensive and lasting utility to his fellow men, to which he could render efficient but silent aid by his counsels, his personal efforts, and his purse. If he had any private feeling to be gratified in the matter, it was a consciousness of power and influence. He was an eminently a sagacious and practical philanthropist, far-reaching and even magnificent in his purposes, but patient in execution, finding, perhaps, a pleasure in contending with difficulties, shrewd and clear-sighted in the selection of means, and yet preferring to leave the details, and what may be called the out-door conduct of the matter, to others. No undertaking could

have been better suited to his temperament than this endeavor to raise the standard and enlarge the means of popular education. The common school system of New England, once its peculiar boast, had not kept pace with the age or with the increasing population and prosperity of the country. It had degenerated into routine, it was starved by parsimony. Any hovel would answer for a school-house, any primer would do for a text-book, any farmer's apprentice was competent to "teach school." The evils and defects of the system, or rather the want of system, were perceived by a few reflecting persons, who began, as early as 1824, to expose them by the voice and pen, attempting to rouse the people of the State from their apathy upon the subject. Among these earliest friends of the cause, Messrs. William C. Woodbridge, James G. Carter, and George B. Emerson deserve to be gratefully remembered. In 1835, through the agency of Mr. James S. Wadsworth of New York, Mrs. Austin's abridged translation of M. Cousin's celebrated "Report of the State of Public Instruction in Prussia," was republished in this country, in a large edition, and extensively circulated. This was a judicious and timely step, as the work contained the outlines, and even the minute details, of the most elaborate and complete system of common schools which had yet been devised in the civilized world. The attentive reader of it could perceive how much there was to be done, and could see the general character of the means and agencies through which the work was to be accomplished.

Mr. Dwight's attention had been previously directed to the subject, probably, in part, through his observation of the effects of a want of education upon the efficiency of the operatives in our great manufactories; but the perusal of this Report served to inspirit and harmonize his designs. Henceforward, he gave his whole energies to the work; it became one of the leading purposes of his life. His house became a centre of meeting and consultation upon the enterprise, and for many years, hardly one important step was taken in relation to it but with his advice, or on his urgency. Many of those whom he sought to interest in it looked coldly upon the design, because it was so encompassed with difficulties as either to appear quixotic, or to promise only meagre and profitless results. No one was more clear in his perception of these difficulties than Mr. Dwight, for his temperament had all the warmth and persistency, but none of the blindness, of enthusiasm. A clear and precise estimate of the obstacles in the way was the first step to be taken toward their removal. Massachusetts had established her school fund in 1834; this was an engine to work with, but unless skillfully directed, the existence of such a fund might be, as the example of Connecticut had proved, rather a curse than a blessing.

The decentralized system of government, which is the peculiar boast of our New England polity, throws the management of the schools into the hands of the towns, or rather of the school districts, which are small subdivisions of the towns. To take the control away from these little local authorities, and vest it in a central power at the seat of government, which was the European plan, would be to sacrifice all the advantages of exact supervision and frugal management, and to render the pressure of taxation for the support of that central power an odious and intolerable burden. Yet some centralization was necessary, in order to introduce method and regularity into the system, and to obtain the statistical returns and detailed information, without which, all the labour expended would be but groping in the dark, and might do more harm than good. The plan devised by the little volunteer council of which Mr. Dwight was the centre, was carried into effect by the school law of 1837, passed by the legislature under the active patronage and influence of Mr. Edward Everett, then governor of the State. It established a Board of Education, consisting of the governor and lieutenant governor, with eight unpaid members appointed for a limited term from the people at large. The duties of this Board were to collect information, devise plans, and make recommendations; it had little or no direct authority. It was made obligatory upon the towns to furnish the information which the Board might require, as a condition of receiving their share of the income of the school fund. Mr. Dwight was appointed one of the original members of this Board, and though his actual term of service upon it was short, owing to the limitations of the law, he continued a virtual member of it for the rest of his life.

The following is an extract from the Thirteenth Annual Report of this Board, made in December, 1849. Alluding to the then recent death of Mr. Dwight, the Report goes on to say, "it was through his exertions, perhaps, more than other individual, that this Board was established, and through his liberality, more than that of all others, that it was enabled to prosecute the system of measures which has resulted in whatever of success it has achieved. One of the first members of the Board, he watched over and took part in its proceedings with a never failing interest. To obtain the highest order of talent in the office of its Secretary, he at the outset engaged to increase the compensation allowed to that officer by the State to an amount which secured the object. The contribution was continued until his death, when it was found that he had provided by his will for its payment three years longer. In the early history of the proceedings of this Board, when it was deemed indispensable to establish

a system of normal school instruction, and it was feared that it would be difficult to obtain an appropriation from the legislature sufficient for the trial of the experiment, he promptly placed in the hands of the Secretary of the Board the sum of ten thousand dollars, to be used for that purpose, on condition that the State would appropriate an equal amount for the same object; and thus at once insured its accomplishment. On numerous other occasions, with open-handed liberality, he contributed important pecuniary aid in carrying forward the designs of the Board and of its Secretary. All this was done in that quiet and unostentatious manner which was characteristic of the man, it never having been made known to the public from what source these benefactions came until a short period before his death, and then by no agency of his. He was content with the consciousness of having done a noble deed, and regardless of the fame which followed it."

Mr. Dwight's benefactions to the cause, here briefly alluded to, were as seasonable and judicious as they were munificent. The first in time may also well be deemed the first in importance, as it was the means of securing the invaluable services of Mr. Horace Mann, whose peculiar fitness for the post of Secretary and principal agent of the Board was early discerned by him to be an indispensable requisite for the success of the measures which were then contemplated. To the mere pittance which the State granted as a salary for this office, Mr. Dwight added five hundred dollars a year from his own purse; and as this annual payment was continued for sixteen years, the whole amount of his contribution for this particular end was eight thousand dollars.

In about six months after making provision for these payments, Mr. Dwight made the further offer, above mentioned, of ten thousand dollars for the support of normal schools; and the commonwealth having acceded to his conditions by granting ten thousand dollars more, these schools, an indispensable part of the original plan of operations, were soon organized and put in efficient action. To this donation Mr. Mann himself alluded as follows, in a published address delivered the following year, in which, however, the donor is mentioned only as a "private gentleman." "Vast donations have been made in this commonwealth, both by the government and by individuals, for the cause of learning in some of its higher, and, of course, more limited departments; but I believe this to be the first instance, where any considerable sum has been given for the cause of education generally, and irrespective of class, sect, or party. Munificent donations have frequently been made amongst ourselves, as well as in other States and countries, to perpetuate some distinctive theory or dogma of one's

own, or to requite a peculiar few who may have honored or flattered the giver. But this was given to augment the common mass of intelligence and to promote universal culture; it was given with a high and enlightened disregard of all local, party, personal, or sectional views; it was given for the direct benefit of all the heart and all the mind, extant or to be extant, in our beloved commonwealth; and in this respect, it certainly stands out almost, if not absolutely alone, both in the amount of the donation, and in the elevation of the motive that prompted it."

Again, in 1845, an offer was made to raise five thousand dollars by private subscription, on condition that the legislature would grant five thousand more, in order to erect two buildings for the Normal Schools; and the offer being accepted, the money was raised, chiefly, it is understood, through the exertions and by the aid of Mr. Dwight. The following is extracted from Mr. Mann's Annual Report, made in December of the same year, the transaction to which it refers having taken place but few months before. "Early last summer, when explaining to that liberal and well known friend of our common schools, the Hon. Edmund Dwight, the advantages which might accrue from holding Teachers' Institutes in Massachusetts, and stating my apprehensions to him, that an obstacle to their adoption might arise from their expense, which the country teachers, on account of their small compensation, might feel unable to incur, he generously placed at my disposal the sum of one thousand dollars, to be expended in such manner as might be deemed most expedient for promoting the object. This sum was amply sufficient for a fair trial of the experiment."

Large as were these pecuniary gifts, amounting in the aggregate, with the inclusion of some the history of which can not now be traced, to a sum little less than twenty-five thousand dollars, they must not be accounted the most valuable of Mr. Dwight's contributions to the movement for enlarging and improving our system of common schools. His personal exertions in the cause were indefatigable and incessant; it was the chief business of the latter part of his life. He was consulted at every step; his clear judgment and practical sagacity suggested many of the most effective measures that were pursued, and smoothed the way for the accomplishment of others. He was especially watchful to guard the movement against any connection with party or sect, and even against any suspicion of such; as he foresaw that opposition based upon political or sectarian grounds would quickly make shipwreck of the whole plan. To be successful, the people must be unanimous in its favor; and no one knew better

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than he how to make and keep them unanimous. He had much influence with the members of the legislature, especially with those from the country and the western part of the State; and after 1840, he was himself elected for several years to the lower House, where his opinions upon any matter connected with public instruction were sure to command attention and ultimately to prevail. Not less important was his action in moderating the ardor of those who were actively and heartily coöperating with him in the work. If the hot zeal and impatient temper of some among them stirred up hostile feelings, which might possibly grow into a formidable opposition, his wise and moderate counsels allayed the excitement and restored harmony. His own disposition, though very firm, was tolerant; he was patient of any diversity of honest opinion, while he abhorred meanness, evasion, or duplicity.

It is hardly necessary to speak here of the brilliant success of the noble undertaking, which in great part originated with him, which he so munificently supported, and for which he thought and labored so patiently and so long. The results are notorious, and have already become matter of history; they have far surpassed all the expectations which any judicious observer could have formed at the outset. The school system of Massachusetts has been renovated, and it is once again the pride of the State. Our public schools may now challenge comparison with any others in the civilized world, and a spirit has been awakened in the people which will probably sustain them in their preëminence. There needs no prouder inscription for any man's tombstone, than to say of him, that he was a principal agent in accomplishing so magnificent a work.

Mr. Dwight's habits during the latter part of his life were simple and regular. He went once a day to the counting-room, and was systematic in taking exercise. His evenings were almost invariably spent at home, and a part of every afternoon and evening was given to reading. And here his taste was, in one respect, peculiar; he had a great liking for sermons, especially those of the old English divines. He seemed to find more pleasure in actually reading Barrow and Jeremy Taylor, than some modern clergymen do in talking about them. His manners, though courteous and refined, in one particular did him no justice. The fastidiousness of his taste inclined him to repress all outward manifestations of his feelings and sympathies, though these were warm and active; and hence he often appeared cold and reserved, not only to strangers, but to those for whom he entertained a high personal regard. He indulged in no professions of esteem, and his eyes would sometimes fill with tears in keen sympathy

with the success of one to whom he had shown no previous indication of kindly feeling. Toward young men, whom he believed to possess good abilities and pure motives, his manner was always friendly and encouraging; he liked to see them at his house, and talked freely with them respecting their circumstances and intentions. His charities, which were mostly private, often took this direction; he assisted some members of the Cambridge Divinity School, who were never known to him except as having talent and needing help; and in two instances, at least, he paid the bills at college of the sons of clergymen to whom such an expense might have been burdensome. A communication which appeared in the *Christian Register* shortly after his decease, and which is understood to have been written by a distinguished clergyman, is so honorable both to him and to the writer, that it is subjoined in a note.*

Mr. Dwight's regular habits and almost uninterrupted health during his later years seemed to justify the expectation that he would attain to great age. But the summons came suddenly, before he had quite reached the limit assigned by the Psalmist. What seemed at first only an attack of influenza, brought on an inflammation of the diaphragm and pleura, and, after a short but severe illness, caused his death. He died on the first of April, 1849, at the age of sixty-eight years.

Instead of attempting to give a summary of Mr. Dwight's character, it is fortunate that I am able to complete this imperfect sketch by the following letter, written by one whose acquaintance with him commenced at a much earlier day than mine, and who wishes to add his tribute to the memory of the friend whom we have lost. The writer is the Hon. Theophilus Parsons, now Dane Professor in the Law School of Harvard University.

CAMBRIDGE, April 22, 1857.

TO PROFESSOR BOWEN.

My Dear Sir.—I am very glad that you are preparing a memoir of our friend, Mr. Dwight. Few men have a better claim to be remembered than he; and few or none are better able than you to make this remembrance just, because you knew him long and well; and your relations with him were of a kind to bring forth his characteristic qualities with great distinctness. I am obliged to you for the opportunity of speaking of one at whose death I mourned, as for the loss of one of my best friends.

I became acquainted with him thirty-six years ago. I was then twenty-three years old, and intending to go to Taunton to open an

* See note, p. 28.

office there, and hearing that Mr. Dwight had some friends in that town I called on him for letters. He received me most kindly; and after a brief conversation, remarked that a great manufacturing corporation was then going into business there under favorable prospects, and that it might be useful for me to own a few shares. They were then in demand, and above par in price. He said, at once, however, that I should have six of his, (\$500 each,) and when I asked him the price, said, "O this is hardly a business transaction; take them at par." I did so, and they rose very rapidly on my hands.

From that time to his death, I was honored with his intimacy and friendship. There were periods when I lived out of Boston, during which we met only at long intervals; but at other times I saw him very often. And as if to end as he began, a year or two before he died, he came into my office one forenoon, and said he had been thinking over certain matters we had talked of the evening before, and came to advise me to take a personal interest in an arrangement then going on. I replied that it seemed to me to offer a favorable opportunity, but I had no surplus funds undisposed of, and not being in the way of raising money I could not do it without some trouble. "I will see to that" said he; and the next day, he placed in my hands not only without request or even thought on my part, but entirely on his own suggestion, ten thousand dollars. Nor was this all; for a day or two after he said to me, "I have been thinking that this affair may not end at once, and for a while you may need further advances; and life is uncertain, and I have arranged with my friend, —— who will supply you if I should be taken away." The obtrusion of these personal matters upon your notice can only be pardoned, if I can show a good and sufficient reason for doing so, and I think I have that reason in my wish to illustrate so far as these occurrences may do it, some of the grounds of my judgment of this man. To many he seemed harsh, severe, and withholding; and to many I believe he was so. But when I have spoken to others of the way in which he always treated me, I have found again and again, that to others also he was equally kind; nor do I think it difficult to explain his character on this point.

He did not think well of mankind. He was sagacious and sharp-eyed, and could detect through any disguise, any of the many elements of character which constitute untrustworthiness. He saw these quite too often; and he expected to see them very often. And therefore he distrusted most persons; and however courteous in manner, kept them at a distance. But he did not *love* to distrust. Where he had satisfied himself that he might safely give his confidence, he gave

it as one does what he is glad to do; he did it fully and unreservedly. And then he indulged himself in being kind, benevolent and useful, to a degree in which if I were to speak from my own experience or observation, I should say he was surpassed by no man.

There was another point in his character, in which it seemed to me he was somewhat remarkable. While he exacted prompt and full obedience from all those from whom he was entitled to expect it, I never saw in him the slightest approach to a demand of submission from any who did not stand in relations which gave him or seemed to give him a right to it. If I may again refer to myself, I should say that no one more perfectly respected my freedom of thought, utterance, or act, than he did through the whole of our long intimacy. On many points we differed greatly; but he never, in the slightest degree, presumed upon our friendship or upon his kindness, to play the master. Still, in any case and in any degree in which he thought he should be master, he would be.

Of his public relations you knew more than I did. Of his constant endeavors to promote whatever seemed to him the interests of sound learning; and of his sagacious and generous aid to the great cause of education, you will speak fully.

He was not himself eminent as a scholar. But he was well educated, and read a good deal; and read thoughtfully, and with wise selection; and profited by what he read; and many pleasant conversations have I had with him on topics which his reading suggested. But he was not a scholar; and no man was ever further from a false pretense of scholarship.

During many years, he was the man whom I most consulted when I wanted advice on almost any subject, especially if of a practical character. More than any other person whom I have known he seemed to me to reconcile the antagonistic qualities of boldness and caution. Years ago I said to one who was intimate with both of us, that Mr. Dwight was a living proof that phrenology—as I understood it—was entirely mistaken in identifying *fear* with *caution*, by ascribing both to the same organ. Be that as it may, (and I am no phrenologist,) I never knew a man who was more cautious than he appeared to be at all times and on all occasions; but I never knew him to manifest any thing like *fear*. I mean that he decided slowly, and after a careful weighing of all the reasons which a very wide and far-reaching view of the subject could suggest. But fear never came in to cloud his insight, or disturb his conclusions, or obstruct the execution of his plans. How he was to others in this respect, I can not say. I knew him but in few and limited relations, although I knew

him so long and so well; and can only say that to me he seemed eminently, *a man who did not make mistakes*. And I have supposed that his great success in life was built up, step by step, by the same combination of caution and courage, of sagacity and executive force, which I thought I saw him constantly manifest.

If I speak of him with what may appear to you or others undue commendation, let me at least assert, by way of apology if one is needed, that during a very long period he had been kind to me always; and as kind to me as was possible; had never exacted from me or seemed to desire any other return than that of an equal friendship; and that in all this I am describing, not a day, nor an incident, but thirty years.

I am, Dear Sir, your friend and obedient servant,

THEOPHILUS PARSONS.

P. S. I wrote the above this morning in my office. As I was writing the last words, my friend and colleague ex-governor Washburn came in, and I read the letter to him, because I knew that he too was intimately acquainted with Mr. Dwight.

"I am delighted," said he, "that you have written just that. It is all of it his due. I knew him well more than a quarter of a century; and was in the habit of frequent and confidential intercourse on many topics, and especially on many of a public or legislative character; and to the extent of my own knowledge and belief, I fully indorse every word you have said of him."

NOTE.

"A DEBT OF GRATITUDE.—About seventeen years ago, two graduates of Harvard College, who had resolved to enter the Christian ministry were at a loss for the requisite pecuniary means, and had decided to delay joining the theological school, until they had, by their own earnings from teaching, or some other occupation, procured the needed amount. An offer from a secret source was made them of a sufficient sum to meet the expenses of the school, if they would immediately enter upon its duties. The offer was accepted, and exerting themselves all they could to aid themselves and lessen the burden upon their secret benefactor, they found always a sum adequate to their needs, ready for them at stated intervals. They completed their studies, and have now been for many years in the ministry, happy in its labors, and grateful for its privileges.

The writer of this note, one of the two, was long wholly ignorant of the source of the opportune bounty; and when the name of the giver was accidentally discovered, it was under such circumstances as forbade even a word of gratitude, as the communication was made to the informer on condition of secrecy, and this condition, though not rigidly observed by him, could not but be respected by the party thus informed of the kindness of a benefactor who insisted on remaining unknown.

Death has now removed this condition.

Deprived of every other opportunity of expressing his feeling, a Christian minister who has enjoyed much in his profession, takes this method of paying something of his debt of gratitude, and thus adds his humble offering to the numberless tributes due to the memory of Edmund Dwight."

[This letter was written by Rev. Samuel Osgood, D. D., of the Church of the Messiah. Ed.]

II. PUBLIC PRAYERS IN COLLEGES

BY PROF. F. D. HUNTINGTON.

IN all the principal seats of learning in the United States there is a daily social service of devotion for the students. We are not aware of a single exception to this religious usage. There is doubtless an extensive and spreading impatience of religious forms; there are tendencies in American society and in our political institutions which operate to heighten this jealousy; there are habits of speculation which foster distrust of everything like constraint or fixed ceremony in the concerns of faith; even among some avowed Christian believers, and in the name of a special spirituality, there exists a theory that every exercise of worship is false which is not strictly spontaneous, and accordingly that to compel attendance on a prayer is both an absurdity in administration and an affront to piety. But, thus far, these views have not, where our knowledge extends, organized any considerable seminary, for either sex, in which the inmates are not regularly assembled to own their daily dependence on the Almighty Father, to confess Christ, and to implore the gifts of the Spirit. Whatever the notions or doubts of educators may be, it seems to be practically felt that some sort of moral power is lodged in such an observance. An indistinct sense lingers in the mind that somehow the interests most sacred and most prized, in these assemblies of youths, are at least safer with it than without it. Whether its essential spiritual comeliness and dignity are generally recognized or not, the venerable traditions of Christendom sustain it and demand it. To a literary institution wholly renouncing it, the community would find a grave difficulty in continuing its confidence.

With the right-minded guardians and officers of education it becomes a vital and important question, how to conduct these exercises so that they shall fulfil the manifest purpose of their appointment; have a spirit as well as a shape; bring a devout sacrifice as well as a bodily attendance; diffuse a hallowing influence over the restless and eager life congregated there; awaken strong resolves and pure aspirations, call down the answer and benediction of Heaven. In many

instances, as we have abundant reason to believe, the method is far from satisfactory either to those that listen or those that lead. Sometimes the whole performance appears like a performance merely, — a mechanical repetition, a lifeless routine, negative at best, a scenic exhibition, too familiar to be interesting, and too bare to be beautiful, — a simulacrum. But it is instantly known that it cannot be *that*, without being something worse than that. Professing to be communion with God, the highest and holiest of all acts of which man is capable, the moment it degenerates into a heartless function it falls below respectability into profanity, becoming as offensive to the Omniscient Majesty as it is irksome to the compelled participators. Sometimes the occasion is one of listlessness. Sometimes it is a scene of positive disorder. So many are the elements to be reconciled, in fact, and so delicate the conditions of a sacred success, that it may be said, we presume, without hazard, that the result is very rarely all that is desired.

Perhaps the first condition of any adequate benefit from the service is that it be treated by all that are responsible for it as a reality; as what it pretends to be; as real prayer. After all, to a striking degree, the tone and manner of a whole institution will insensibly take their character from the manifest spirit and bearing of its principal conductors. Let it be plain to every hearer and witness that in these gatherings there is more than a pretence of praying. Let it be seen that in one at least, in him who is speaking, and in as many as do truly accompany him, man is verily speaking to his Maker, and speaking in an humble expectation that he shall be heard; — telling his real wants, acknowledging sins that he really deplores, breathing requests for helps and blessings that he really desires. A nameless power and impression will inevitably go with such devotions. Artifice will be driven out. The ingenuities of invention, in thought or phrase, will never so pass the line of simplicity as to trespass on the awful sanctity of the Ineffable Presence invoked. Excess of human elaboration and indolent neglect are equally alien from a veritable intercourse with the Father of spirits. And nowhere is either error more likely to be seen through and despised than in an auditory of young men. Their quick moral instincts, and their yet unperverted habit of judging without the bias of a mere current and institutional propriety, render them accurate and searching critics of sincerity.

Were the modern naturalistic theory of prayer and its effects to be generally accepted, our suggestions would, of course, be impertinent. That theory, making all devotion not only dramatic, but illusory, and ascribing all its apparent effects to a reactionary excitement of

the worshipper's own faculties, turns the idea of *reality* into ridicule. We are to go through the genuflexion, the mumbling, the expectant posture, the use of the vocative case, the solemn tone and pleading cadence, and measured form of stately language, *just as if* God heard and might answer, but with a perfectly cool private understanding of the philosophical mind, all the while, that the display is purely scenic, the Deity himself being as much removed from the transaction as he is from the praying-machine of the Eastern idolater. Indeed, is there a Deity left? Where is he? What is his care for his creatures? Of what nature are those affections that enjoin prayer as a duty, under a promise that it shall be heard, only to cheat first the credulous intellect, and then mock the disappointed heart? This cannot be the God and Father of our Lord and Saviour Jesus Christ, who was so wonderfully and tenderly revealed to his children, when it was affirmed of him that he numbers the hairs of their heads, and notices the fall of the sparrow, and who has compressed the whole mystery and *rationale* of prayer into the one gracious and eternal pledge, — "Whatsoever ye shall ask, believing, that shall ye receive." Nothing can more effectually dissipate veneration and explode worship, whether among the young or the old, than this superficial and impious interpretation, which is offered by some nominal teachers of the Bible to their pupils. It justifies the worst sneers that recklessness and infidelity have thrown at a histrionic, hypocritical priesthood. It is as short-sighted and self-contradictory as it is insulting to our manhood. If we are to pray only to warm our emotions, kindle our energies, elevate our mood, under the delusion that we are heard, as by a fetch, while He to whom the offering professes to ascend sits with sublime unconcern in a distant chamber of the universe, or slumbers like Brahm, then it is obvious only they will pray who have not yet found out the secret of the trick; and to explain the nature of the exercise, or to offer a reason for it, will be to dispel the charm and abolish the practice! Probably the notion was broached to protect the uniformity of what are called the laws of nature, and is a part of the qualified Pantheism that is so apt to attend certain stages of an immature and conceited science. But Nature's reputation is not to be saved by limiting the freedom or power of God. We shall not vindicate creation by binding the Creator. How it is that the free-will of God plays into the order of his works, and yet that he heareth and considereth the faint cry of the least of his poor offspring, is a wonder that science will not solve, at least till it passes over from its acknowledged province of analyzing, classifying and discovering facts, to define and exhibit the essence of being. No: Education, from its very beginnings, must

render unto faith the things that are faith's. The outward exercises of adoration must rest on a serene, immovable confidence in the personality of God, in the communications of his Spirit to man, in his willingness to draw nigh to them that draw nigh to him, in all those emotional attributes that move his Infinite Heart to answer to the sigh of pain, the tremblings of fear, the throb of hope, the anguish of penitence, and the joyful upspringing of love in every tempted and erring child. There must be a *reality*. Except for this it will be vain to make room, in the curriculum of secular institutions, for sanctimonious addresses to the Most High. To preceptors and pupils alike, the ceremonies of the chapel, so far from being effectual, will not even be decent, but a dismal conspiracy of mutual imposition and make-believe, — an awful initiation not only into the darkness of unbelief, but into the crime of a sacrilegious lie.

The particular circumstances of a literary institution will naturally impart a somewhat local and special character to the petitions and thanksgivings offered before its members. Young men are not insensible to this direct and peculiar reference to their wants. It touches their feelings and carries them more easily up to the Mercy-Seat. Thorough and relentless despisers of every species of cant, and commonly sensitive to sentimentalism, no class of persons will be found more readily and cordially to appreciate a kind word or a considerate desire in their behalf. Whatever the negligence of that external air which, in youth, is so often found to be the uncomely and graceless mask of honest gratitude and trust, they still like to know that their teachers care enough for their best welfare really to pray for it. Thoughtless and impulsive in their hours of social amusement, they are yet bound in esteem and affection to those set over them, who remember their troubles, sympathize with their conflicts and discouragements, and entreat God to bless their life, their homes, their friends, their studies, their reciprocal relations with their instructors, their bodies, their sports. And, therefore, allusions to the passing events of their experience, to the little incidents of the community, and to their individual trials, if made in a manly tone and with some delicacy of expression, are apt to engage their interest, and aid the best impression of the service. The differing usages of sects, as well as early associations, will have much to do in determining the frequency and particularity of such allusions. It is of the utmost consequence to avoid what may provoke comments, excite curiosity, or raise so much as a question of taste. Undoubtedly those are everywhere the best public prayers which at once enlist the most entire and respectful attention, by their fitness, variety and earnestness, while they are

being offered, and are afterwards treated with silence. For, in respect to worship, considered as a product of human thought or originality, silence is a higher tribute than the most approving criticism—except, perhaps, in those confidential intimacies where friends take sacred counsel together about the deepest things. And whatever the specific mention of the supplication may be, it will never be invested with so august a dignity, nor raised so completely above all cavil or levity, as when it can be put into some words out of the Inspired Book.

It is an interesting inquiry, what other exercises should attend the offering of prayer. But in this regard we apprehend there is already a considerable uniformity of usage, and that the simple schedule usually followed is not far from the best. Of course the Scriptures will be read. Here again let there be no formality. Let the passages be selected from different parts of the volume; and they may be profitably selected from almost every part of both the New Testament and the Old. Sometimes a consecutive passage, or even a short book may be read on successive days, with a certain advantage in keeping up the connection in the narrative or argument. But sequences of that sort often fall, we have thought, into a kind of visible mechanism, which young men do not love. It looks like a saving of trouble, and they feel put upon. Further, the Bible is not to be read as if it were an exercise in elocution. The grand object is to bring out the meaning, and get it in contact with the hearer's soul, with as little showing of self as possible. Whoso has reached into the depths of the Bible's heart will read it well. Some men's reading of it is more original, more suggestive of new ideas, than some other men's sermons. And this is no declaimer's device. It comes by a profound spiritual acquaintance with the inmost sense of that revelation of the mind of Christ. Whether brief remarks could be profitably thrown in, not to convey doctrine, but simply to uncover and explain the text, is worthy of consideration.

In some of our colleges the Scriptures and the prayer are accompanied by a hymn, sung by a choir, or, perhaps better yet, by the general body of the students. We are convinced the value of this addition cannot well be over-estimated. In all true, simple sacred music there is a nameless effect of good, against which few exceptional breasts are wholly steeled. It falls in with the better inclinations and hopes. It soothes irritability. It abates appetite. It shames meanness and lust. It assists the incipient resolves of the penitent. It comforts grief. It puts the whole mind into a more appropriate attitude for the prayer that comes after, unconsciously opening the hidden

avenues by which heavenly blessings flow down to nourish the growths of character. Probably this effect lies more with the strain of harmony than with the words. Hence the greatest pains and discretion are to be used in fixing the style of the music, — seeking to combine the noblest practicable artistic with the purest religious expression, attaining animation without a florid movement, and solemnity rather than surprises or startling transitions. Operatic flourishes and complicated fugues are as much out of place in chapel as rhetorical confessions of sin. Chants, if there is patience enough for the discipline and practice, are more appropriate for praise than any kind of psalmody. If a hymn is sung, let it be a hymn. A hymn is not a chapter of didactics, nor a moral essay, nor a piece of reasoning, nor a precept, nor a creed, nor an exhortation, nor a narrative, nor a catalogue of virtues, nor an inventory of the animal and vegetable kingdoms. A hymn is an aspiration cast into poetical language. Its purpose is to stir devout feeling, — at the same time conducting the soul in a penitential or jubilant frame to heaven, and quickening within it those social affections of humanity which prove mankind to be of one blood, in one brotherhood, under one Father. Nor can any group of human beings be anywhere found in whom these sentiments may be often waked to a grander purpose than a band of companions, already associated in the little commonwealth and the intense politics of their academic economy, and destined soon to take central and commanding places in the nation, for Christ, or against him.

Recent debates, in many quarters, have broached the question whether congregational worship is not, in some sense, disowning its own name, by being practically the least congregational of any worship in the world. Even if the sacerdotal idea has gone out, a service confined exclusively to one officiating individual retains the priest. To what extent a liturgical practice might be advantageously introduced into our colleges, where men of all denominations are assembled, is a point to be determined rather by cautious and guarded experiment than by preconceived opinion, or precipitate guess-work. We cannot conceive why such experiment should not be freely made, and conducted with forbearance and good-will on all sides. Among all parties there is, as we suppose, a common interest in finding out the best mode. Surely we can afford, at this time of day, to purify ourselves of the sectarian suspicion and the ecclesiastical narrowness which would reject the best, or refuse to search for it, because it might involve the adoption of a neighbor's way, instead of the pursuit of our own. We confess ourselves inclined to believe that if the Scriptures could be generally read alternately, as according to the

Hebrew parallelism, or responsively, between the minister and the congregation, in our colleges as well as in the churches, it would aid the whole object, by giving the laymen something so do, by enlivening the mind, by fixing the eye, by engaging two senses and a tongue in the service, instead of hearing alone. A free use of different methods is better than bondage to any one. Respecting the prayer itself, we feel very sure of this: it should be either expressly and obviously liturgical, or else be strictly extemporaneous, having the natural verbal variety of a spontaneous exercise. What pretends to be the latter, and yet consists of a familiar repetition of clauses, whether following in a certain order or not, is almost certain to become subject, at last, to unfavorable notice, and to fix upon the service a reputation of heartless routine.

Common sense and observation teach that the entire daily service should be short, — not extending over twenty minutes, altogether, at the longest. Fifteen are better than twenty. It is idle to attempt settling this matter by abstract notions, or to chafe at necessity, or to expect a promiscuous troop of boys, or men either, to be saints, and to keep positions of discomfort all the more quietly because they fatigue the limbs. Edification is the object, and edification should supply the rule.

And, as to the bodily posture, there is still occasion for experiment. It ought certainly to be uniform throughout the room. Sabbath assemblies may continue to affront decency, by the present mixed and vulgar manners, if they will; but in the decorum of a college or school such irregularity should be forbidden as an offence. If principles of absolute adaptation and correspondence were to govern the matter, there could be no doubt that the three appropriate postures for the house of God would be *standing during praise* (i. e., in all singing and the responsive readings of the Bible), *kneeling or inclining the head and body during confession and prayer*, and *sitting to hear the discourse*, or the lessons read, by the minister. In daily chapel services this order may be found impracticable, on the score of the maintenance of stillness, or the supposed necessity of keeping the persons of the pupils exposed to the eye of the government. Certainly the body during the prayer — the most important of the services — should have the greatest degree of ease consistent with a proper dignity, so as to furnish the least possible disturbance to the mind. Trifling accessories are not to be overlooked. Where it can be done, a palpable help would be gained to the silence, and thus to the just impression of the place, by some sort of carpeting on the floor.

The chief perplexities attending the subject arise from what was

just referred to, — the connection of the devotions with the discipline. Just so far as it can possibly be accomplished, that connection ought to be at once and completely dissolved. That this has not been more generally done in our colleges betokens an indifference to the highest claims of religion, and the laws of the spirit, painful to think of. In this direction, as it seems to us, is the great call for reformation. The secular administration of a college is one thing, and should rest on its own legitimate resources. The worship of God is another thing, and should have no other relation to the former than that of a morally pervasive and sanctifying influence. The chapel is not a constabulary contrivance, nor the chaplain a drill-sergeant. The Bible is no substitute for a policeman's club, nor for a proctor's vigilance. In some seminaries, it would appear as if the final cause for prayers were a convenient convocation of the scholars, as a substitute for a roll-call. They must be somehow brought together, in order to come under the eye of a monitor and be counted, and so they are summoned to praise God. Now we maintain — and surely it is a case that needs no other argument than an appeal to common Christian feeling — that all this should be forthwith changed. A spiritual approach to the Almighty Source of Truth should not be compromised by an extrinsic annoyance. If any students come to prayers reluctantly, their reluctance should not be aggravated by the additional odium of an academic economy put under a sacred disguise. Physical constraint should not thrust its disagreeable features unnecessarily into the sanctuary. And therefore such arrangements should be secured that, by classes or otherwise, the presence of the students on the spot might be certified at the given hour, independently of the chapel service.

On the other hand, one is easily satisfied that the attendance should be universal, and should be required; and also that entire order and a decorous deportment should be positively enforced under strict sanctions. These are indispensable conditions of any proper effect of the service, whether on the devoutly disposed or the reckless. Moreover, the reasons for them are plain, and find a substantiating authority in every human breast. Let the compulsion be exercised in a kind spirit, and be patiently explained. The reverence that demands it should be evident in the officer's own soul and bearing. Only, behind the reasonable persuasion — a silent, retiring, but ever-present force — should stand the imperative figure of law, always in abeyance, but always there. And above all, as just urged, let not the *cause* of this compulsion be mixed up with a secular regulation, but depend on its own inherent rectitude and conformity with the Divine Will. The student is to understand that he must come; but then this "must".

has nothing to do with the local policy. It is the combined dictate of revelation, of history, of human want and welfare, and of the ripest judgment of the best men. So an external order *must* be maintained. The intrinsic right of the matter is satisfied in no other way. Disturbance, levity, whispering, the furtive use of a book or pencil, a slouched dress, or a lounging attitude, should all be prohibited at every cost. If the pupil pleads that his heart is not in the service, and that an outside compliance is an insincerity, the fallacy can easily be shown him. The rule comes to aid his deficiency, and disposes everything to facilitate an interested participation. Besides, there are others close by who are really and thoughtfully worshipping, entitled to decorous surroundings. There is not the least hostility to free and cordial devotions in such regulations. Every sensible man knows that his strongest and happiest and healthiest labors are braced up and kept in place by law. Every transition from term-time to vacation, or from professional tasks to purely voluntary ones, illustrates that. As we lately heard one of our most faithful and unremitting scientific minds, — one where we should have hardly suspected the existence of any such reliance, express it, — “Our most spontaneous studies have to be subjected to some form of constraint.” We get our freedom under a yoke. Almost every busy man who would acquire an extra language must put himself in bondage to a clock or a door-bell, till habit takes the place of the private teacher. The spiritual motions of man are no exception to this peculiarity of his constitution. They are not discredited by being regulated. Besides, the fundamental idea of a college or a school is that its members are “under tutors and governors;” and the success of every part of the educational process depends on the forming hand of law. Here, then, seems to be the true principle: the secular discipline of an institution has no right to subordinate the devotions to itself, nor to use them for its purposes; but those devotions demand a rational and gracious discipline of their own, in keeping with their dignity, and precise enough for their external protection.

Though perfect order, or the nearest possible approximation to it, ought to be insisted on, after the form of the exercise is determined, we hold that Christian pains should be taken to remove every burdensome element and circumstance pertaining to it. A principal one is often found in an unseasonable hour. The lessons and lectures of college, especially when the numbers of students are large, require a long day. It is a common impression that the day should begin with public prayers. This often brings that service so early that the prayer-bell acts as a wrench to pull the reluctant attendants out of

their beds. This is laying upon a duty, which needs every accessory to make it agreeable and attractive, a foreign and extrinsic load, giving it a bad reputation. During our own college course, rooming nearly half a mile from the chapel, we attended prayers, through the whole winter, at six o'clock, — both that duty and a succeeding recitation of an hour being performed by candle-light. The hardship was not at all too great for a vigorous training, and we never got an absence-mark. But, taking the habits of the people as they are, and especially of the more luxurious classes, this hour, or anything like it, would be accounted barbarous and cruel; and therefore we should consider it inexpedient. We account it an irreverence to bring inevitable and superfluous dislike on any worship. Morning prayers should be held at an hour when every healthy student may be reasonably expected to be up and dressed. Otherwise, a habit of feeling and of speaking is gradually engendered incompatible with due veneration.

In Harvard University the experiment has been tried, within a year or two, of assembling for morning prayers after breakfast, and indeed at two or three different times, in the first part of the day. The result, on the whole, has been favorable to making the prayers the first exercise, before breakfast; and this appears to be the preference of the students themselves, both on the score of natural fitness and personal convenience. The subject justifies an extensive comparison of different judgments and experiences.

At Harvard, at Brown, and perhaps at other institutions, the custom of an evening service has been suspended. It was thought advisable to concentrate the interest on one daily assembling for prayers. There were various reasons. The appointments of the buildings generally require that, if held at all, that exercise should come at night-fall, and not at the more intrinsically suitable time of retiring to rest. But, during the winter, night-fall comes in the midst of the day's work. At all seasons, that part of the day is commonly appropriated to out-of-door exercise, and by many to distant walks. Frequently the students are engaged, in large companies, in their noisiest and most exciting sports. From these stirring and jovial games, altogether proper and wholesome in their place, the tide of animal spirits running at its height, a stroke of the bell summons them suddenly to a reverential homage of their Maker. It is not in human nature to make that quick transition with entire dignity, and to the honor of the homage. At any rate, it is observable enough that the evening worship is far less impressive and edifying than the morning. From these and other causes, the change has been instituted, and, so far as we are informed, with such manifest and

unequivocal advantage, that the officers in these colleges would be slow to return to the former usage. But here again a longer experience must finally decide.

This seems to us quite clear, that whatever sacrifices of comfort, or effort of the will, this attendance may demand, the sacrifices and the effort ought to be borne by the board of government and instruction along with the pupils. With a few allowances, the prayers are indeed just as important for the one class as the other. If the officers are absent, it is at least natural that the pupils should tacitly ask why *they* are obliged to be present. The great law of voluntary self-denial comes into action here, as in so many of the relations of teachers to their scholars. Say what we will about universal principles, the ethics of a college and a school are peculiar. They exempt from no general duty, but they impose special and local ones of their own. The great universal principle is to do the most good in all circumstances. So sensitive are the moral sympathies of these seminaries, that a conscientious, high-principled Christian teacher will put away from him many an indulgence otherwise harmless, and cheerfully take up many a task otherwise needless, solely from a reference to the moral purity of those under his care, and in deference to that grand ethical law so nobly interpreted by Paul in the fourteenth chapter to the Romans. We are persuaded that very much of the present disaffection in these institutions at the exacted attendance would gradually disappear, if it were seen that the officers all regularly came of their own accord. Nor should they come merely to use an oversight of the under-graduates. That may be done incidentally. The prime purpose should be to engage honestly in the worship, to offer praise and supplication to the Lord of life, to learn that august lesson of faith and love toward Him, of whom "day unto day uttereth speech, and night unto night showeth knowledge," which is just as necessary for the strong and the wise, as for the weak and simple.

We come back from the details of method,— none of which can be insignificant where the end is so high,— to the spiritual forces involved, and the infinite object contemplated. God, who alone is true, has promised that he will hear the prayers of his people, and has conditioned the bestowment of his richest blessings on their being sought in singleness of heart. The history of our country is all bright with evidences how he watches over the nurseries of a pure learning, and from the very beginning has turned the seats of Christian education into fountains to gladden the wilderness and the city of God. "Such prayers as Dr. Dwight poured forth in the Chapel of Yale College, when, in the agony of his spirit, he wrestled with God, as well as struggled

with men, for the victory over error and sin, never fall powerless on the ear of man or God, never fail to carry the worshippers into the very presence of their Maker." Nor was it ever plainer than now, that the healing branch of devotion needs to be thrown into the head waters of popular intelligence to sweeten their bitterness. Intellectual pride, a cultured self-will, unbelieving science, literary conceit, all lift their disgusting signals to show us that the knowledge of this world is not to be mistaken for the wisdom of Heaven. Knowledge is power, but what kind of power? A power of beneficence, or a power of destruction? That depends on other questions. For what is knowledge sought? To whom is it consecrated? Into whose name is it baptized? Let us save ourselves, if we may, from a brain developed only to be demonized, and from the delusion of mastering the secrets of nature only to be brought into a poor bondage to ambition. Knowledge is not sufficient of itself. Now, as of old, and forever, it must wait reverently on the Unseen, and kneel in lowly faith. Men may talk of the pure and passionless air of scientific research, of the certainties of scientific deduction, of the absoluteness of scientific conclusions, decrying, at the same time, the strifes, and altercations, and fluctuations of theology, as if thereby to affirm some independence of thought on God, or some superiority of the understanding over the heart. It is an impertinent comparison and an insane jealousy. Let them explore their own fallacies. Let them not confound theology and religion, nor the processes of science with its ultimate results. Let them read the biographies of scholars, and the history of thought; let them trace the course of the principal scientific discoveries within the last dozen years; let them acquaint themselves with the quarrels of authors, and the disputes of schools, and the gossip of cliques. They will soon find that petty contentions are not confined to ecclesiastical councils, though Heaven knows *their* air is too foul and vexed with them. They will see that everywhere the mind wants the guidance of God's Spirit; that education without piety is only a multiplying of the means of mischief; and that Christ came into the world as much to teach scholars humility, as to comfort the illiterate. No: those who say such things are not the strong friends of science, nor the true advocates of her dignity, but novitiates in her sacred tuition, and flippant champions whom she disowns. Knowledge and faith have one interest, one aim, one God and Saviour to confess and serve; and therefore over every step in education, every lesson in learning, every day of the student's tried and tempted life, should be spread the hallowing peace and the saving benediction of prayer.

Deep down in their souls students feel this. At least in their better moments they realize it. Even the most impulsive and inconsiderate have some dim, instinctive witnessing within them that it is good to call on God. Many an earnest believer has felt his first renewing convictions, the first strong grasp of the hand of remorse, the first touch of penitential sorrow, amidst these apparently neglected entreaties. The sure arrow from the Divine Word has there reached many a haughty and obdurate heart. The silent struggle in a young man's exposed nature, between early principle and fierce solicitation, has often received there the blessed help that secured the victory to virtue. Some germ of holy resolution has found nourishment, and light and air to grow in. Some half-formed plan of dissipation or vicious amusement has there risen up in its hideous aspect, and been forever dashed to the earth and broken to pieces. Some yielding rectitude or chastity has been re-assured and set on its blameless way again in gratitude and joy. Images of home have come before the closed eyes. The voices of mother and sister, of the affectionate pastor that childhood had revered, and of many a saint on earth or angel in heaven beside, have seemed to speak and plead in the simple, fervent petitions. Could the secrets hid in the hearts of educated men be revealed, we have no doubt it would be seen how large a part the college prayers bore in the initiation or the reinvigorating of their best designs. Many a man has there, in silence, said honestly and faithfully to his own conscience, "To-day I shall live more righteously; meanness and sin shall be more hateful to me; generosity and goodness more lovely;" and all the day has answered to the pledge. Admonitions, that would have been rejected if offered from man to man, work their effectual plea in the indirect persuasion of a request to the Father of Lights. Noble friendships between young hearts have felt themselves more disinterested and more secure for the holy appeal to the Source of Love. The noble claims of humanity, making each man feel himself a brother in the mighty fraternity, girding him to labor and suffer for his kind as the only worthy calling of his scholarly life, have there pressed their way into the heart of hearts, through a clause of that Bible that speaks to the rich and the poor, or a supplication for sage and slave alike, for bond and free, for the heathen and the helpless. Eminent servants of the best causes, disinterested patriots, preachers of Christ, missionaries to the ends of the earth, have taken there the first impulse that bore them on to their places of heroic action or martyr-like endurance, — faithful unto death, awaiting crowns of life.

Whatever appearances of neglect may attend the familiar repeti-

tion of these holy occasions, therefore, there can be no apology for discouragement. As in all coöperation with the vast, slow achievements of the Providence that predestines a spiritual harvest from every seed sown in faith, there must be an unhesitating continuance in well doing, and a patient waiting, for results, on Him who is so unspeakably patient with us. Only let the prayers be real prayers; such asking as humbly refers each entreaty to the Supreme, Unerring Will, yet with the fearless trust that He who hears in love will answer in wisdom; let the things prayed for be such things as those then and there assembled most heartily desire, rather than such things as precedent or old tradition have decided it is merely proper to implore; let Christian care and painstaking be applied to the arrangements of the company and the parts of the service; let the intercessions of thousands of sympathizing and anxious homes throughout the land arise in unison; and then there can be no ground of doubt that God will accept our offerings, sanctify our scholarship, lead more of our young men to bring their gifts and attainments to the Saviour's ministry, uniting a broad culture with high aspirations and a profound faith in the structure of the civilization that is to be. Then many a man who enters college only with a vague purpose to profit or to please himself, while there shall listen to a higher call, and become a cheerful servant of the King of kings. Then right-minded, pure-hearted youths will not find their collegiate course a perversion from integrity, nor a snare to principle, nor a ruin of honorable hopes, but a confirmation of every worthy desire, and a progress in all manly living. Then the thoughts of parents will not turn to these institutions with regret, with maledictions, or with shame, but with confidence, gratitude and joy. Then the Republic will not be disappointed when she looks to the University as "the light of her eyes and the right arm of her strength." Then the most powerful agency that can be conceived will be inaugurated to make our literature healthful, earnest, humane. And then, not only by the motto of a seal, and not only in the pious hopes of its founders, but in the daily spirit of its administration, and in the characters of its graduates, shall each college be dedicated to Christ and the church.

III. PUBLIC INSTRUCTION IN SARDINIA.

BY VINCENZO BOTTA.

Late Professor of Philosophy in the Colleges of Sardinia.

(Continued from page 530, Vol. III.)

TECHNICAL SCHOOLS.—As primary schools are intended to give to all the citizens a general knowledge, such as is necessary to man without distinction of class or difference of calling, secondary instruction has for its object the education and development of more special intellectual capacities, and the preparation of its students for different scientific or artistic professions. The secondary classical schools prepare youth for the professions of the university, while the technical education proposes to direct the students through other courses which find no opening in the university. This instruction, considered as a general system, is of a recent origin; having been organized only since 1848. In that year, when the government founded the national colleges, there were annexed to these institutions technical courses, which were afterward established in connection with many other schools. The course of these schools is of five years, and the students are admitted to it after they have passed the full primary course. The programme taught in these courses, embraces religion, Italian literature, history and geography, elementary and superior mathematics, mechanics, physical science, chemistry, statistics, political economy, commercial law, commercial arithmetic, book-keeping, drawing, both ornamental and of machines, natural history, French, German, English languages, drawing of figures, singing and playing of pianoforte, declamatory art, gymnastics, military exercises, fencing, dancing, calligraphy. There are about fifteen of these schools more or less complete; the best of which are connected with some of the national or royal colleges. The number of the professors of the technical courses varies from ten to twenty, according to the less or greater development of the programme.

Besides these courses there exists in Turin a ROYAL TECHNICAL INSTITUTE, with the following classes: 1st, mechanics applied to arts and industry. 2d, chemistry, applied; 3d, geometry, applied; 4th, agricultural chemistry. 5th, agriculture. 6th, forestry. 7th, descriptive geometry and geometrical drawing. A professor of the institute is entrusted with the direction of the school, and he is assisted by a council of administration especially appointed by the government. The professors are requested to expound in their courses the theoretical principles of the science, over the teaching of which they preside, and to make the applications, the best adapted

to the objects. Besides this ordinary instruction, they are directed to deliver one or more special courses on some particular branch of application, and to organize practical exercises adapted to the nature of their lectures. Each professor is obliged to deliver at least two lectures a week, which must be illustrated by demonstrations and experiments. The institute possesses for this object a laboratory, and various collections of scientific apparatus, drawings, models, engines, and natural productions. The lectures are public and free, and no examination is required from the students, in order to be admitted to them. The students, however, after having completed the course of their instruction, have the right to present themselves for the examination, and to receive a certificate from the examiners. The course of the institute is opened in the middle of November, and ends with the month of June.

There are also in Turin THREE SPECIAL COURSES, directed according to the programme of the national colleges, two PUBLIC TECHNICAL COMMERCIAL SCHOOLS, and a FREE SCHOOL OF DRAWING APPLIED TO ARTS AND INDUSTRY. In the same city we find a SCHOOL OF ELECTRIC TELEGRAPHING, a SCHOOL OF GYMNASTICS connected with the association for the progress of gymnastic exercises, and a VETERINARY SCHOOL supported by the government and directed by three professors and two assistants. The pupils are obliged to attend most of the lectures delivered in the ROYAL TECHNICAL INSTITUTE, in addition to the instruction which they receive in the veterinary school.

Genoa can boast of a TECHNICAL SCHOOL in which are taught chemistry, mechanics, and geometry, applied to arts, geometry, arithmetic and trigonometry applied to navigation, navigation, naval construction, and design. There is also a TECHNICAL COURSE connected with its national college, and a SCHOOL OF COMMERCE; besides a ROYAL SCHOOL OF MARINES, in which are given courses of mechanics, of astronomy and hydrography applied to navigation, of elementary, analytic and descriptive geometry, of infinitesimal calculus, algebra, plain and spherical trigonometry, navigation, chemical and physical sciences, naval construction, fortification, artillery and military art, history, physical and political statistics, and commercial geometry. The pupils are also taught Italian literature, the English and French languages, drawing, calligraphy, fencing, and dancing. In the summer of each year the pupils make a voyage of instruction in ships belonging to the State. The institution is conducted by sixteen officers and professors, and has about sixty pupils. In Genoa, there is in operation a FREE AND MUNICIPAL INSTITUTION OF MUSIC, for both sexes, with the following course of instruction: musical composition, singing, piano-forte, violin, double bass, violoncello, clarinet, flute, cornet, and other instruments. It is directed by thirteen professors.

Chambery has a SPECIAL COURSE connected with its national college, and TECHNICAL SCHOOLS of mechanics and chemistry applied to arts. Nice possesses also a SPECIAL COURSE in its national college, a SCHOOL OF COMMERCE supported by a private association and by subsidies from the government and the municipality, and a FREE SCHOOL OF NAVIGATION.

We find in the other principal cities technical schools, more or less extensive, according to their means and specialities, and which are all free and supported either by the government, or by the municipalities, or by private associations. Among those we may mention as the most prominent :

THE SCHOOL OF AGRICULTURE, of Motte-Servollex, in Savoy.

THE SCHOOL OF WATCHMAKING, of Cluses, in Savoy.

THE SCHOOL OF COMMERCE, of Bonneville, in Savoy.

THE SCHOOL OF ARTS AND TRADES, of Biella, connected with the Association for the advancement of arts, trade, and agriculture of that province.

THE SCHOOL OF ORNAMENT AND ARCHITECTURE of Chiavari, connected with the Economical Association of that city.

BELLINI'S INSTITUTION OF ARTS AND TRADE, at Novara.

THE SCHOOL OF LAND SURVEYING AND THE SCHOOL FOR ARTISANS, of Casale.

THE SCHOOL OF DESIGN, of Varallo.

THE COLLEGE FOR THE CHILDREN of officers and soldiers, at Racconiggi.

THE MILITARY SCHOOL OF CAVALRY, of Pinerolo.

THE SCHOOL OF PONTONEERS, at Casale.

THE SCHOOL OF NAVIGATION of Villafranca.

THE ECCLESIASTICAL SEMINARIES belong to the system of special instruction, as their object consists in training students of Divinity, and candidates for the priesthood. The pupils are boarded and lodged in these institutions, for which either they pay a moderate price, or are entirely exempted from any payment, according to the means of the seminaries, and the pleasure of the bishops. The entire course of the seminary lasts seven years, and embraces courses of philosophy, and of theology. The course of philosophy lasts two years, and does not differ from the collegiate course. Theology is divided into two main parts, dogmatic and moral. In the best institutions there is also a course of canon law, ecclesiastical history, liturgy and sacred oratory. They own property and support themselves. The government, however, pays a salary to one of the professors of theology, whenever the bishops submit the appointment to its approbation, admit in their establishments the treatises prescribed by the university, and allow them to be inspected by the official inspectors. There are about forty-four of these seminaries, most of which have of late refused to submit to any control from the government.

SCHOOLS OF THE WALDENSES.—Though the Waldenses enjoy the full right of availing themselves of public instruction, under the direction of the government, yet in those places where they constitute the majority of the population, they have schools of their own. Such is TRINITY COLLEGE, established at Torre, where pupils are taught theology, philosophy, and belles-lettres, and with which three elementary schools are connected. We find also primary schools in all the parishes of the Waldenses in the valleys of Lucerne, Perosa, St. Martin, etc. They have also a SUPERIOR SCHOOL FOR GIRLS, at Torre, and some LATIN SCHOOLS—all of which are conducted according to the programme of the state.

The government of the TECHNICAL COURSES AND SCHOOLS, which are

supported by the government itself, belongs to the general Council of elementary instruction, the organization of which we have described elsewhere. The ROYAL TECHNICAL INSTITUTE, however, is directed by a special council of administration, under the immediate direction of the minister. In regard to the others, they are under special administrations, over which the government retains a right of control and inspection.

In connection with the public technical or special schools we may glance at a number of provident and reformatory institutions which, though they do not belong strictly to the system of public instruction, contribute largely to the education and general improvement of the capital.

ROYAL HOUSE OF VIRTUE, (*R. Albergo di Virtù*), founded in 1587, in which 120 poor boys are gratuitously lodged and supported, instructed and trained to some art, such as the manufacture of silk and woollen goods, ribbons, laces, stockings, or to some mechanical trade.

COLLEGE OF YOUNG ARTISANS, (*Collegio degli Artigianelli*), recently founded by private benevolence for the purpose of sheltering, educating and training poor and abandoned boys to some mechanical or agricultural pursuit.

ROYAL MENDICANT ASYLUM, (*R. Ricovero di Mendicanti*), founded in 1840, for persons found begging in the streets, who are provided for, and set to work—they enjoy a part of the proceeds of their labor.

ROYAL COLLEGE OF PROVIDENCE accommodates 140 respectable young ladies, and gives them instruction in every kind of feminine employment.

HOUSES OF REFUGE, (*Il Soccorso e il Deposito*), where the daughters of respectable impoverished families have a home, and are educated and trained to different kinds of work.

ASYLUM OF THE ROSINE, (*Il Ritiro delle Rosine*), where 330 poor girls are boarded and lodged, and provided with instruction and employment.

ASYLUM OF THE SAPELLINE, founded in 1822, as a home for young girls who are morally endangered, where they are instructed and trained to feminine occupations.

HOME FOR ORPHAN GIRLS, (*Monasterio delle Povere Orfane*), founded in 1550.

ROYAL ASYLUM for daughters of military officers. This institution accommodates about seventy inmates, with a home education.

INSTITUTION FOR VAGRANTS, founded in 1776. It gives employment and instruction to the extreme poor and their children, and bestows a small dowry on the girls when they marry. The instruction is given by volunteers, gentlemen and ladies of high social standing.

THE LITTLE HOME OF DIVINE PROVIDENCE, (*Piccola Casa della Divina Provvidenza*), founded in 1829, as a home for infirm, sick, and poor people of every age. It has accommodations for 1200 inmates, who are classified according to their condition in the *Orphan Asylum*, the *Infant Schools*, (of which there are five,) *School for the Deaf-mutes*, the *Hospital*, &c. The workshops are well appointed and managed. The carpets, laces, and wool-tissues manufactured here are in great

dímanù, and have twice received the golden medal at the national industrial exhibition. There is also a *School for Music*, in which pupils are trained for the Royal Chapel.

ROYAL NORMAL SCHOOL FOR DEAF-MUTES, founded in 1834. It receives pupils of both sexes between the age of 10 and 16 years, who pay a small sum for their board and lodging. After they have received a sufficient instruction, the boys are trained to the practice of some trade in some workshops of the city, and board in the establishment during the five or six years of their apprenticeship,—the girls are instructed in all kinds of feminine occupation. Day pupils are also admitted to the school of the institution, without any charges. The city of Turin supports at its own expense some pupils in the institution. Other provinces follow this example. This institution trains teachers for similar schools in other parts of the kingdom.

Other cities of the kingdom abound in similar institutions. Many of them are under the care of religious sisterhoods and voluntary associations, and are supported by endowments and annual contributions.

Among the technical or special schools may be mentioned the Correctional and Reformatory School for young *detenues*, two miles out of Turin. It is organized and managed substantially after the plan of Parkhurst Prison in England, and the State Reform School at Westborough, Mass. There are over 300 inmates, divided into four sections, mostly employed in gardening and in mechanical trades closely associated with agriculture and common life, such as carpentering, tailoring, &c. The construction and internal management of this Reformatory has led to the improvement of the prisons and prison discipline of the kingdom generally. There is also at Turin a HOUSE OF CORRECTION, which is both a *Prison* and a *Hospital*, supported by the government for criminal and abandoned women; a *House of Charitable Refuge*, supported by private benevolence for the same class of women desirous of entering on a better life. Associated with these institutions there is a Patronage Society, to assist discharged inmates of the reformatory school in finding employment.

From this survey of institutions of secondary including special instruction, it is evident that the government of Sardinia is behind no European State in assisting the development of the industrial resources of the country, while it at the same time provides for universal elementary instruction, and the demands of higher learning and science. Quite recently the government has divided the technical or special schools into two classes:—the first having a course of three, and the second of two years; the last having two sections, one commercial and the other industrial, so as to meet the wants of different pupils, and different localities. The government also distributes an annual subsidy of seventy thousand francs among these schools, for the special benefit of the teachers.

The examination, which leads the pupils from the secondary schools to the university, is called the examination of *Magistero*, and constitutes the first degree on which the university bestows a diploma.

The diploma is given under the control and direction of the faculties

of letters and philosophy, and of physical and mathematical sciences; which are represented by special committees, each of which consists of three members, of whom one at least must be an ordinary professor of the faculty. The other members are annually appointed by the minister of public instruction, selected from the doctors of the same faculties. These committees in the university of Turin can not be less than three for each subject of examination. The examination consists of three different subjects; two scientific and one literary, which embrace all the subjects of the secondary instruction of the State colleges. The first scientific examination embraces questions in logic, metaphysics, arithmetic, algebra, and geometry; the second, questions in ethics, and physical science, which are drawn by lot from the prescribed programmes, and answered orally. The literary examination is written and oral. The written consists of a Latin and an Italian composition, on two themes drawn by lot from six, which have been proposed by the president of the faculty. For each of these compositions three hours are allowed to the pupils, and in this time they must write their exercises under the inspection of an assistant, and without aid of any books, except the dictionaries. The oral examination lasts one hour, and is on the compositions and on questions suggested by them, on the interpretation of Latin and Italian writers, and on questions on history, according to the programme. The oral examinations are made with open doors, and the public can attend them. These examinations take place twice during the year; viz.: forty days before the closing of the university, and in the day after its opening, for the succeeding twenty days. The programmes of the examinations are in their substance the same as of the instruction, but are so arranged as to embrace it in twenty-five numbers, each of which comprehends many questions. These programmes are upon the following subjects: 1, logic and metaphysics; 2, ethics; 3, arithmetic, algebra, and geometry; 4, physical science; 5, ancient history; 6, modern history; 7, geography.

The Latin authors studied in the Secondary Schools, and on which an examination is held for the degree of *Magistero* arc,—

1. Cato—*De Re Rustica*. 2. Cicero—*Orationes Selectæ*. 3. Cicero—*Quæstiones Academicæ et Tusculanæ*. 4. Cicero—*De Natura Deorum*. 5. Cicero—*De Legibus et de Republica*. 6. Sallustius—*Bellum Catilinarum*. 7. Sallustius—*Bellum Jugurthinum*. 8. Livius—*Historiarum*, lib. 1, No. 3. 9. Livius—*Ex aliis Historiarum libris*. 10. Tacitus—*Annales*, lib. 1. *Historiæ*, lib. 1. 11. Tacitus—*Agricola*. *Germania*. 12. Plinius Secundus—*Epistolæ*. 13. Plautus—*Trinummus*, lib. 2. 14. Terentius—*Excerpta*. 15. Lucretius—*De Rerum Natura*. 16. Catullus—*Excerpta*. 17. Tibullus, et Propertius—*Excerpta*. 18. Virgilius—*Bucolica*—*Georgica*. 19. Virgilius—*Æneidos*, 6—12. 20. Virgilius—*Æneidos*, 1—6. 21. Horatius—*Carmina*. 22. Horatius—*Epodon*—*Satiræ*. 23. Horatius—*Epistola de Arte Poetica*. 24. Ovidius—*Metamorphoson*, 1—3. 25. Ovidius—*Excerpta*, *Hcroidum*—*Pastorum*—*Tristium ex Ponto*.

The Italian writers are:

1. Dino Compagni—*Cronaca Fiorentina*. 2. G. Boccaccio—*Decamerone*, *Vita di Dante*, *Fiammetta*, and *Filocolo*. 3. A. Pandolfini—*Del buon governo della famiglia*. 4. N. Machiavelli—*Storie Fiorentine*, *Discorsi sulla prima Deca*. 5. P. Bembo—*Lettere*, *Storie Veneziane*. 6. F. Guicciardini—*Storia d' Italia*. 7. A. Firenzuola—*Narrazioni tratte dalle sue opere*. 8. A. Caro. *Lettere*. 9. Della Casa. 10. G. Galilei—*Opere*. 11. F. Redi—*Lettere*. 12. P. Segneri—*Descrizioni e Narrazioni*. 13, 14, 15. Dante Alighieri—*Divina Commedia*. 16. F. Petrarca—*Sonetti*, *Canzoni* *Trionfo della Morte*. 17. A. Poliziano—*Poesie Liriche*, *Orfeo*, *Stanze*. 18. L. Ariosto—*Orlando Furioso*. 19. F. Berni—*Orlando Innamorato*. 20. F. Tasso—*Gerusalemme liberata*. 21. G.

Chiabrera—*Conzoni*; A. Guidi—*La Fortuna*. 22. G. Gozzi—*Sermoni*; G. Parini—*Liriche, Giorni*. 23. V. Alfieri—*Saul, Polinice, Oreste*. 24. U. Foscolo—*I Sepolcri*. 25. V. Monti—*La bellezza dell'Universo. Liriche*.

III. SUPERIOR INSTRUCTION.

UNIVERSITIES.—There are in the Kingdom four universities; in Turin, Genoa, Cagliari and Sassari, the two latter in the island of Sardinia. We shall speak only of the university of Turin, that being the most complete in its organization, the highest in scope of instruction, the most important institution of the country, and the model of all the others. Indeed the university of Turin may claim a prominent place among the institutions of Europe, and in Italy takes rank with those of Pavia, Padua, Pisa, and Bologna.

The university of Turin was founded in 1405 by Louis of Savoy, Prince of Piedmont. In 1412 it obtained its rights and privileges from the Emperor Sigismund, and in 1424 Amedeus VIII. organized a Council of direction of the university, composed of the governor-general, and three other members, who were called Reformers, (*Riformatori*.) Some years after it was transferred to Chieri, on account of the wars of that time; then again, from Chieri to Savigliano, and in 1436 restored to Turin. Emmanuel Philibert in 1516 gave new life to the institution, reformed the council of direction, and established separate faculties. Still further improvements were made by Victor Amedeus II. to whom Piedmont owes in no small degree its present welfare and strength. He built the magnificent palace of the university, called to it the illustrious professors from other parts of Italy, from France and other countries, founded the college of the provinces for the support and education of poor and talented pupils, and established the botanic garden. Charles Emmanuel III. was not less eager in promoting the prosperity of the institution, promulgating a code of academic laws, which, for its time, was the most complete in Europe; and which was modified and improved by Charles Albert, who created many chairs, built the magnificent new anatomic theater, enriched the botanic garden and museums, and founded a new era of national independence, freedom, and of scientific glory in the annals of public instruction in Sardinia. His son, the present king Victor Emmanuel II. has shown himself a worthy successor of the founder of the free institutions of the country, by placing Sardinia at the head of the national party of Italy, sustaining before European diplomacy the rights and the independence of the nation, emancipating the country from the relics of ancient despotism, and maintaining with religious affection the political constitution of the country, and improving in every way the material as well as the educational condition of the people; and especially in increasing the splendor and raising the standing of the university of the capital of his kingdom.

Many celebrated scholars have from the beginning given honor to its name, among whom we may mention CARA, who lived in the 15th century, a lawyer, as well as a Latin scholar of great celebrity, who attracted to his lectures distinguished audiences, not only from every part of

Italy, but even from France, Spain, and Germany. In the 16th century CUJACIUS, that miracle of legal erudition, left Toulouse, his native country, and repaired to this university. In the same century and in the same institution, Argentieri taught medical science, and Benedetti mathematical astronomy. THESAURO in the 17th century was celebrated among Latin scholars; in the 18th, the university could boast of a GERDIL in moral philosophy, of ALCASIO and BONO in jurisprudence, of CIGNA in anatomy and physiology, of BERTRANDI, BRUGNONE and PENCHIENATI in Surgery, of DONATI, the botanist, who by his extensive travels in Asia, enriched the garden of the university with many precious treasures; of ALLIONI, who proposed a new classification of the vegetable kingdom, of MICHELLOTTI, celebrated in hydraulics, and of BECCARIA who divided with Franklin the laurels of the discoveries of electricity. In the present century, BARDI acquired an European fame for his high attainments in Hebrew literature and in sacred history; ALARDI, GRIDIS, and BESSONE were celebrated in jurisprudence; GIULIO discovered muscles in plants; ROLANDO developed a new theory of the structure of the brain; BALBI followed with devoted zeal the study of botany; VASSALLI EANDI showed himself a worthy pupil of Beccaria; BONELLI and BORSON enriched the zoölogic and mineralogic museums; BONVICINO and GIOBERT acquired great reputation in chemistry, and BIDONE in mathematics; finally the names of LAGRANGE, ALFIERI, BERARDI, CHARLES BOTTA, GIOBERTI, CÆSAR BALBO, SCIOLLA, TARDITI, BOUCHERON, &c., who either received their scientific education at the university, or presided over some branches of its instruction, would be sufficient to raise that institution to an equal standing with the most celebrated universities of Europe. We do not speak of the living professors, among whom are many names of great repute, in theology, jurisprudence, medical and surgical science, philosophy and letters, physics and mathematics.

The palace of the university built in 1714, according to the design of RICCA, stands on the widest and most beautiful thoroughfare of the city, the great street of the Po, which is adorned on both sides with wide and lofty arcades, ending at each extremity with a wide square, looking on one side toward the old castle, which stands alone in the middle of its square, and on the other to the picturesque hills, which overlook the city. The palace has within a court surrounded by arcades, divided by columns which support above another gallery of the same style, as the arcades below. In the walls of these are many Roman inscriptions, statues, and bas-reliefs, discovered in Piedmont, and which have been described by Scipione Maffei and other celebrated antiquaries. On the arcades above are a marble group representing fame chaining time, and four urns representing the seasons, which were presented to the university by Victor Emmanuel I. The imposing staircase is adorned with marble vases, and ornamented with sculpturing. All the interior of the University is grand and magnificent, and admirably fitted for its objects.

The University consists of five faculties,—THEOLOGY, JURISPRUDENCE, MEDICINE AND SURGERY, BELLES-LETTRES AND PHILOSOPHY, PHYSICAL AND

MATHEMATICAL SCIENCES. Each faculty is composed of the professors, and of the Collegiate Doctors, and it is represented by a Council which is formed of the president of the faculty, of three professors, and of two doctors, all of whom are elected by ballot, by the members of the faculty itself. The faculty of belles-lettres and philosophy is divided into two classes, one of belles-lettres and one of philosophy. The faculty of physical and mathematical sciences is also divided into two classes, of physical and mathematic science.

The Councils of the faculties have the immediate direction of the instruction, which belongs to each of them: over these presided until lately a Council of the university, to which the general administration and direction of the institution belonged. This council was composed of eight members; the president was appointed by the government, of the other seven counselors, five were elected from five lists; each of three professors, which were made by ballot by each faculty, and the two others were selected by the government, among the most distinguished men either in the scientific or literary department. This council was entrusted with the execution of the scholastic laws and with the direction and advancement of the instruction of the university. A new law relating to the administration of public instruction, which was a few months ago adopted by the Parliament, modified this organization, and we shall speak of it hereafter. There is also a rector of the university appointed from among the professors by the government, for a term of three years.

The faculties have a determined number of collegiate doctorships, and when one of these is vacant, an examination is opened in order to fill it. Doctors who received the diploma of the faculty can alone present themselves to this examination, but not before two years of doctorship. The examination consists of a written dissertation upon a subject drawn by lot, and of a public extemporary lecture; the candidate who in the contest, receives the approbation of the faculty, before being declared a collegiate doctor, is obliged to sustain a satisfactory public discussion on some of his positions, which he is required to publish as an exposition of the particular science. The collegiate doctors are, in connection with the professors, the examiners of the candidates for the memberships of the colleges, as well as of the students who apply for the diploma of their faculty. They are also the members of the committees appointed for the examination of students applying for admission to the university.

The professors are appointed by the government, after being proposed by the supreme council of instruction; as a general rule they are chosen among the collegiate doctors, though in some exceptional cases men of high scientific reputation, who do not belong to the university, may receive the appointment.

The colleges of the faculties at present contain as follows: 1st, College of theology, twenty-four doctors; 2d, of jurisprudence, twenty-two; 3d, of medicine and surgery, twenty-nine; 4th, of belles-lettres and philosophy, *a*, class of belles-lettres, ten, *b*, class of philosophy, seven; 5th,

of physical and mathematical sciences, *a*, class of physical sciences, ten, *b*, class of mathematical sciences, nine.

Some of these doctors are appointed by the government, as extraordinary professors of the faculty, whose duty is to take place of the ordinary professors, when prevented from lecturing or examining.

There are also attached to the university, private teachers who are called *Ripetitori*, from whom the students can receive private instruction on the course. These teachers are licensed by the council of the university, after being proposed by the councils of the faculties; the students, however, are not obliged to follow these courses, and should they choose to follow them, they are by no means exempted from the course of the university, which is the only one recognized as the necessary condition of admission to the examinations and to the doctorships. The private courses are paid by the students who wish to follow them, but the courses of the university, as well as of the colleges, are entirely free. The students, however, are obliged to pay to the public treasure a fee for their examination, which varies according to the different faculties. From the payment of these fees all pupils are exempted, who prove the inability of their parents to pay them.

In order to be admitted to the course of a faculty, it is necessary for the students to present the certificate of having completed all the secondary courses, including that of philosophy; another, of having passed satisfactory all the examinations of *magisterio*. They then declare the faculty, of which they intend to follow the courses; after which they are obliged to attend the lectures prescribed for those courses, to obtain every quarter a certificate of their attendance from each professor, and to pass an annual examination upon the subjects of the programme.

The following are the courses connected with each faculty; to each course is appointed a professor.

FACULTY OF THEOLOGY. 1st, Biblical theology; 2d, Bible and the elements of Hebrew; 3d, Ecclesiastical History; 4th, Dogmatic theology; 5th, Speculative theology; 6th, Sacraments; 7th, Moral theology; 8th, Art of preaching. The course continues through five years, and the subjects are arranged in the following order: 1st year, Biblical and Dogmatic theology; 2d and 3d years, Moral theology, Speculative theology, and Sacraments; 4th and 5th years, Moral theology, Speculative theology, Sacraments, and Bible. The students, who propose to contend for the three prizes established by the government for the best written solution of theological questions, attend the lectures of an additional course, which is of two years, and embraces ecclesiastical history, the art of preaching, elements of Hebrew, and exegesis of the Bible.

The bishops have the right to establish theological schools in their seminaries; but the instruction received in those seminaries can not give to the students the privilege of presenting themselves to the examination for receiving the Doctorship of Divinity from the university, unless the professors of theology have been appointed by the government, and unless these professors follow the programmes and the general regulations of the

university. In this case the professors of the seminaries receive their salary from the government. The diploma of doctorship in divinity is a necessary condition for obtaining the incumbency of many ecclesiastical benefices and employments, to which the government has the right of nomination, and as this diploma can be only granted by the university, it follows that a great part of the clergy are obliged to pass through this course in one of the universities of the state. During late years, however, the church having entered into an open opposition to the state, on account of some reforms introduced into the political institutions of the country, the bishops became reluctant to allow the students of divinity to follow the course of the university, so that from recent statistics this faculty appears almost deserted.

The following is the catalogue of the professors of the theological faculty of the university of Turin, with the subjects of their lectures for the scholastic year, 1856-7. (November--June.)

PARATO FELICE, member of the Council of the University, in Moral Theology, will lecture on *human actions, on moral law and on the laws of the Decalogue and of the Church*, at 9 o'clock, every day.

SERAFINO ANGELO, in Speculative Theology, will lecture on *God and his attributes*, at 10 o'clock, every day.

GHIRINGHELLO GIUSEPPE, member of the Supreme Council of public instruction, in the Holy Bible, will lecture on *Acts of the Apostles, the Epistles, and Revelations*, at 3 o'clock, until April; then at half past three, every day. He will also teach *Hebrew and Biblical Exegesis*, every day at 4 o'clock, until April, then at half past four.

BANAUDI CASIMIRO, will teach *Biblical Theology*, at 10 o'clock, every day.

SAVIO CARLO LUIGI will teach *Dogmatical Theology*, at 11 o'clock, every day.

BARONE FRANCESCO, in Ecclesiastical History, will lecture on *the History of the Church from Constantine to Charlemagne*, on Mondays, Wednesdays, and Fridays, at 12 o'clock.

N. N. will teach *the Art of preaching*, on Tuesdays, Thursdays, and Saturdays, at 12 o'clock.

N. N. in Speculative Theology; will lecture on *Sacraments in general, and on Baptism and on Confirmation*, at 11 o'clock, every day.

FACULTY OF JURISPRUDENCE.—The course of this faculty extends through five years, and consists of the following thirteen chairs. 1st, History of Jurisprudence; 2d, Institutions of Roman Law; 3d, Ecclesiastical Law; 4th, Roman Law; 5th, Civil Law; 6th, Penal Law; 7th, Political Economy; 8th, Constitutional Law; 9th, Commercial Law; 10th, Judiciary Law and Theory of Evidences; 11th, Administrative Law; 12th, International Law; 13th, Philosophy of Jurisprudence. These subjects are divided through the course in this way: *1st year*, History of Jurisprudence, Institutions of Roman Law, Ecclesiastical Law. *2d year*, Ecclesiastical Law, Roman Law, Civil Law, Penal Law, Political Economy. *3d year*, Roman Law, Civil Law, Penal Law, Political Economy, and Constitutional Law. *4th year*, Roman Law, Civil Law, Constitutional Law, Commercial Law, Judiciary Law. *5th year*, Commercial Law, Judiciary Law, Administrative Law, International Law, Philosophy of Jurisprudence.

No one can obtain the title of lawyer, or practice the legal profession or plead any cause before any court of the country, or be appointed in any place of the judiciary department, without having received the diploma of Doctorship in this faculty. This diploma opens also the most part of the official employments, both in the executive and in the administra

tive departments, and gives a better chance for election to the legislative body.

In order to afford a better opportunity to the students of this faculty who reside in the most distant parts of the country, there is a school of jurisprudence in Chambery and in Nice for the students born in those provinces. The programme, however, of these schools does not exceed the subjects which are taught in the first year of the course, after which it is required of the students to continue their course at the university. Thus three professors deliver lectures in each of those schools, according to the programme of the university and under the direction of the faculty of Turin, and of the council of that university. In every city, besides, which is at the head of a provincial department, there is a school of *Civil and of Judiciary Law*, which prepares its students for the professions of public notaries and advocates. This course extends through two years; in the first of which they are taught the elements of civil law, in the second the judiciary law, in causes both civil and criminal.

The professor of the history of jurisprudence, after having given to his students the fundamental ideas which are necessary to understand this part of their course, commences with the origin of the Roman law and follows it through its decline at the fall of the empire; and treats of the different laws promulgated by the succeeding rulers, of the most useful principles of the feudal system, of the canonical law, of the contests between the civil and ecclesiastical authority, and of the statutes of the ancient commons, and pursues the genesis and the changes of our legislation to the present time. In the course of his history the professor is required to point out the sources of law, and the causes of progress of justice, and of other phases of jurisprudence.

The professors of the institutions of Roman law, and of Roman law itself, expound compendiously the parts of that law, which do not enter into Sardinian legislation, and dwell upon the other parts, which are the foundation of the law of the country.

In the first year of the course on ecclesiastical law, the lectures treat, 1st, of the church and its authority; 2d, of marriage. In the second year their subjects embrace the doctrine of ecclesiastical benefices. The study of penal code is divided into two parts, in the first of which the general theory is taught, in the second special applications to different offenses. In this last part the professor dwells especially upon offenses against public faith, and against the peace and property of families and individuals. The lectures on commercial law embrace all the parts of this law, and include the maritime law. The course of judiciary law is divided into two parts, accordingly as it refers to civil or criminal proceedings, and includes in both parts the theory of evidences.

We give here the catalogue of the professors of this faculty, and their programme for the present year:

VACCHINO FRANCESCO, in Commercial Law, will lecture on it, on Tuesdays, Thursdays, and Saturdays, at 10 o'clock.

NUITZ GIOVANNI NEPOMUCENO, member of the Council of the University, and Rector of the University, in Roman Law, will lecture *on Obligations*, Mondays, Wednesdays and Fridays, at 8 o'clock.

CESANO GASPARÈ, extraordinary member of the Supreme Council of instruction, in Civil Law, will lecture *on the Contract of Marriage, on subsequent rights in both parties, and on the contract of partnership*, Mondays, Wednesdays, and Fridays, at 10 o'clock.

PATERI ILARIO FILIBERTO, in Ecclesiastical Law, will lecture *on the Church, and on its authority, and on Marriage*, Tuesdays, Wednesdays, and Saturdays, at 8 o'clock.

ALBINI PIETRO, in the Philosophy of Jurisprudence; after having given *the theory of juridical law*, will lecture *on the theory of juridical rational law, and on rational principles of family right, and of public right*, Mondays, Wednesdays and Fridays, at 10 o'clock.

GENINA LUIGI, in Penal Law, after having given *the general ideas of offense, of imputation, and of punishment*, will lecture *on offenses against public faith, and on offenses against the peace and the order of families and of individuals*, Tuesdays, Thursdays, and Saturdays, at 9 o'clock.

PESCATORE MATTEO, in Judiciary Law, will expound *the principal parts of criminal proceeding, and will give its theory of evidences*, Tuesdays, Thursdays, and Saturdays, at 9 o'clock.

MELEGARI LUIGI AMEDEO, in Constitutional Law, will give *an historical introduction on representative institutions, after which he will lecture on the rights of citizens and on their guarantees*, Tuesdays, Thursdays, and Saturdays, at 11 o'clock.

BUNIVA GIUSEPPE, in Civil Law, will lecture *on Testamentary Successions*, Mondays, Wednesdays, and Fridays, at 9 o'clock.

FERRARA FRANCESCO, in Political Economy; will deliver lectures on it, Tuesdays, Thursdays, and Saturdays, at 10 o'clock.

LIONE ANTONIO, in Administrative Law, will lecture on it, Mondays, Wednesdays, and Fridays, at 9 o'clock.

MANCINI PASQUALE STANISLAO, in International Law; will lecture *on the Elements of international, public, national and positive law*, Mondays, Wednesdays, and Fridays, at 11 o'clock.

ANSELMI GIORGIO, will lecture *on the Institutions of Roman law*, every day, at 10 o'clock.

DEMARGERITA ALESSANDRO, in the History of Jurisprudence; will lecture on it, every day, at 9 o'clock.

AVONDO CARLO and GASTALDETTI CELESTINO, extraordinary professors, will take the place of the above professors, in case of their being prevented from lecturing.

FACULTY OF MEDICINE AND SURGERY.—This faculty possesses nineteen chairs, and its course continues through six years. It is strictly prohibited by the law of the country to exercise the profession of medicine or surgery, without having obtained the diploma of doctorship from one of the universities of the state. This diploma is only bestowed upon the accomplishment of the full course of the faculty, and of passing the examinations which are prescribed by law. The same provision is enforced in all the faculties of the university for the exercise of the professions relative to them. 1st chair, Chemistry; 2d, theoretical and practical Pharmacy, and toxicologic Chemistry; 3d, Mineralogy; 4th, Botany; 5th, Zoölogy; 6th, Anatomy; 7th, Physiology; 8th, medical and surgical Institutions; 9th, *Materia medica*; 10th and 11th, theoretical and practical Medicine; 12th and 13th, theoretical and practical Surgery; 14th, theoretical Obstetrics and obstetrical Clinic; 15th, surgical Operations and operative Clinic with anatomical and surgical exercitations at the hospital; 16th, Hygiene and public health; 17th, Legal medicine and Toxicology; 18th, Clinic of mental diseases; 19th, pathological Anatomy. The order of the course is the following: 1st year, Chemistry, Mineralogy, Botany, Zoölogy, Anatomy. 2d year, Chemistry, Anatomy, Physiology, medical and surgical Institutions, theoretical and practical Pharmacy, and toxicologic Chemistry. 3d year, anatomical Exercitations, Anatomy, *Materia medica*, theoretical and practical Medicine, theoretical and practical Surgery. 4th year, anatomical Exercitations, *Materia medica*, theoretical No. 10.—[VOL. IV., No. 1.]—4.

and practical Medicine, theoretical and practical Surgery, medical Clinic, Hygiene and public health. *5th year*, theoretical and practical Medicine, theoretical and practical Surgery, theoretical Obstetrics and obstetrical Clinic, surgical Operations and operative Clinic, medical Clinic, pathological Anatomy, exercitations of operations and bandages. *6th year*, surgical operations and operative Clinic, medical Clinic, Clinic of mental diseases, legal Medicine and Toxicology.

The first year of the course can be pursued in Chambery and in Nice, where four professors in the former city, and three in the latter deliver lectures on the prescribed subjects.

All the students are obliged to complete the entire course of the faculty, and to obtain the diploma of Doctorship, both in medicine and in surgery, whether they intend to practice the one or the other, or both. But those, who intend to devote themselves to the exercise of the obstetric art, are obliged to attend for six months the obstetric clinic at the maternity hospital, and to pass a practical examination on that art. Women, who intend to follow the profession of midwives, are obliged to frequent the same clinic and to pass the same examination. In the cities of Novara, Vercelli, Voghera and Chambery, there is a free practical school of obstetrics for women; and the students of the school of Novara are supported by the municipalities of the townships, which send them to that school.

There is a class of students, who intend to limit their practice to bleeding. In order to obtain the approbation for this practice, they are obliged to pass through a course of two years, in the first of which they attend the lectures of anatomy, in the second of anatomy, physiology, and medical and surgical institutions. They must also spend a year in the practice of their art, under a licensed phlebotomist, after which they are allowed to present themselves for a final examination, which, if successful, gives them the right to have the diploma of phlebotomy, and to receive the license of its exercise.

The following is the catalogue of the faculty for the year 1856-57:

RIBERI ALESSANDRO, member of the supreme Council of instruction, in Operations, will lecture on the *principal surgical Operations*, at 8 o'clock, A. M., Tuesdays, Thursdays, and Fridays; besides, he will teach at the hospital of *St. John the operative Clinic*, at half past 6 every day.

PASERO FRANCESCO, in theoretical and practical Surgery; will lecture on *Diseases of the Mouth*, in the first four months, and in the following on *Diseases of the Eyes*, at half past 10, Tuesdays, Thursdays, and Saturdays. Besides, he will teach at the hospital of *St. John, surgical Clinic*, at half past 2, every day.

BERUTTI SECONDO GIOVANNI, in Physiology, will deliver lectures on *general and special physiology*, and will occasionally perform experiments on living animals, at 9 o'clock, Tuesdays, Thursdays, and Saturdays.

GIROLA LORENZO, in theoretical and practical Medicine, will lecture on *Neurosis*, viz.: on *Neuropathy and especially on organic Innervation of sensitiveness, and of mobility*, Mondays, Wednesdays, and Fridays, at half past 10; he will, also, at the hospital of *St. John, teach medical Clinic*, at half past 2, every day.

ALLIPRANDI MICHELE LUIGI,* in Obstetrics, will lecture on *womb, pregnancy, Orology, Accouchment, the normal and abnormal state of new born children*, at half past 8, Mondays, Wednesdays and Saturdays. He will also give practical lessons on *Obstetric Clinic*, at the Maternity Hospital, on days and hours to be fixed according to the occasions.

* Since dead.

VIGLIETTI GIOVANNI ANTONIO, in Hygiene and Public Health, will lecture on it, at 8 o'clock, Tuesdays, Thursdays, and Saturdays.

CARMAGNOLA PAOLO ANDREA, in theoretical and practical Medicine, will lecture on *Inflammation generally*, and afterward on *Inflammations of the bowels*, at 8 o'clock, Mondays, Wednesdays, and Fridays; he will also teach *medical clinic*, at the hospital of St. John, at half past 2, every day.

FIORITO GIOACHINO, in medical and surgical Institutions, will lecture on *Methodology and History of medicine*, and afterward on *general, medical and surgical Pathology*, at half past 8, Mondays, Wednesdays, and Fridays.

MALINVERNI SISTO GERMANO, in pathologic Anatomy, will lecture on it, at the hospital of St. John, at three-quarters past 9, Mondays, Wednesdays, and Fridays.

DEMARIA CARLO, in legal Medicine, will lecture on it, and especially on *Toxicology*, at three-quarters past 9, Mondays, Wednesdays, and Fridays.

MAJOLI GIACOMO, in theoretical and practical Surgery, will lecture on *Inflammations and on their consequences, in regard to surgery, on Tumors generally, on organic, dynamic diseases of the bones and articulations*, at a quarter past 9, Tuesdays, Thursdays, and Saturdays; he will also, at 8 o'clock at the Charity Hospital teach the *Clinic of syphilitic diseases*, Mondays, Wednesdays, and Saturdays.

DEMICHELI GIUSEPPE, in materia Medica, after having given *the General Principles*, will lecture on *purgative, anthelmintic, secretive and hyposthenic Medicaments*, at half past 9, Mondays, Wednesdays, and Fridays.

BONACOSSA GIOVANNI, principal physician of the Royal Lunatic Asylum, in the Clinic of mental diseases, will teach *this Clinic in the said asylum*, at half past 9, Tuesdays and Saturdays.

N. N. in anatomy, in the first five months after having given an *Introduction*, he will teach descriptive *Anatomy on the subject*, at the amphitheatre of the hospital of St. John, and in the three last months he will lecture on *the general Anatomy of tissues of the human system*, at three-quarters past 11, every day.

CONTI MATTEO, the dissector of the anatomical theatre, will take the place of the above professors, when prevented from lecturing.

The students of medical and surgical science are trained in the practice of the profession in the hospitals of the Capital, of which we shall give here a short sketch :

THE HOSPITAL OF ST. JOHN THE BAPTIST was founded in the fourteenth century. It receives all medical and surgical patients, with the exception of those suffering from contagious diseases. It has 418 beds, of which 213 are occupied by those affected internally, 109 by external, and 96 by chronic diseases. There are also private rooms for individuals, who can afford to pay moderate charges. The number of patients annually received at the hospital is between five and six thousand. The two professors of the medical clinic have 14 beds each, for the instruction of the students, and the professor of surgical clinic has 6 in the hall of men, and as many in the hall of women for the same purpose. Twenty-one students of the faculty are selected among the best, who assist the ordinary physicians, and in return receive either free board or an annual pecuniary allowance.

THE HOSPITAL OF SAINTS MAURICE AND LAZARUS was founded in 1572, with the object of treating those acute diseases which are not contagious. It receives every year about a thousand patients; eight students of the university are appointed for the service of the hospital and the assistance of the ordinary physicians, and enjoy the same privileges of those of the hospital of St. John.

THE MILITARY HOSPITAL OF THE DIVISION OF TURIN.—Its object is to receive the sick soldiers and officers, whose station is in the Division of Turin. It has 430 beds, and affords the occasion of practical instruction to those students, who wish to become physicians and surgeons of the army.

For their assistance to the hospital they receive also free board, and are obliged to follow the courses of the university.

THE INSTITUTION AND THE HOSPITAL OF ST. LOUIS GONZAGA.—It was founded in 1794, with the object of aiding and nursing the sick who could not be admitted to other hospitals, on account of the nature of their diseases. The institution provides also with medical advice, visits, remedies, and comforts at their own home those, who do not wish to be brought to the hospital. This has 200 beds, and receives by preference patients affected by consumption, cancer, chronic dropsy, scurvy, and leprosy.

THE MATERNITY HOSPITAL, in which the obstetric clinic is established, receives about six hundred patients a year. There is also in this hospital the school for midwives, with eight or ten pupils.

THE ROYAL GENERAL CHARITY HOUSE, of which we spoke above, is the seat of the school for the clinic of syphilitic diseases; four students of the university are appointed to assist the physicians of the hospital, and they receive the same allowances as in the other institutions.

THE ROYAL LUNATIC ASYLUM affords the pupils the occasion of studying mental diseases, the clinic of which is here practiced. The asylum contains two hundred and fifty patients, of both sexes, and supports four students for their assistance.

THE OPHTHALMIC DISPENSARY affords free advice, remedies, and cure to the poor; patients who can afford it pay a small sum for their board and lodging. It contains two hundred patients.

THE ORTHOPEDIC ESTABLISHMENT was founded in 1823, with the object of curing the crippled, maimed, and deformed, etc. It has acquired a great reputation, and it is considered as one of the first establishments of the kind in Europe.

FACULTY OF BELLES-LETTRES AND RATIONAL PHILOSOPHY. This faculty prepares doctors and professors of rhetoric and philosophy. No one can be appointed professor of these departments, or allowed to teach either in public or private schools, if he has not completed the established courses and obtained the diploma of Doctorship from the faculty.*

THE COURSE OF BELLES-LETTRES, is given by seven professors, and embraces the following subjects: 1st, Greek grammar and general Grammar; 2d, Italian literature; 3d, Latin Literature; 4th, Greek Literature; 5th, ancient History; 6th, modern History; 7th, Roman and Greek Archæology. This course is divided into four years; in the *first year*, the students are taught Greek and general grammar, Italian and Latin literature, and Roman Archæology; in the *second year*, Italian, Latin and Greek literature, ancient history, and Greek archæology. In the *third and fourth years*, Italian, Latin and Greek literature, ancient and modern history.

THE COURSE OF RATIONAL PHILOSOPHY possesses three chairs: 1st,

* To the chairs of this faculty we must add three more, recently established by a law of the Parliament, viz.: 1st, Philosophy of history; 2d, Geography and Statistics; 3d, French literature. As the professors of these chairs are not yet appointed, we can not publish the programme of these branches of instruction.

Metaphysics; 2d, Moral Philosophy; 3d, History of the ancient Philosophy. The students are obliged also to attend the lectures on Italian and Latin literature, on general Methodology, on the higher Geometry, and natural Sciences, which are delivered by the professors of other faculties. The subjects are divided as follows:

In the *first year*, Metaphysics, higher Geometry, Latin literature, Chemistry; *second year*, Metaphysics, History of ancient Philosophy, physical Science, and Italian literature; *third year*, Metaphysics, Moral Philosophy, History of Philosophy, Mineralogy, Zoölogy; *fourth year*, Metaphysics, Moral Philosophy, History of Philosophy, and general Methodology.

THE COURSE OF METHOD, which is connected with this faculty, does not intend to give any diploma of Doctorship, but only to prepare professors for the provincial schools of method. From these professors the provincial inspectors of elementary instruction are generally selected. The course is completed in two years; in the *first*, the students learn general Chemistry, Mineralogy, Botany and Zoölogy, attending the lectures of the professors of these sciences, and prepare themselves for an examination on all the subjects, which enter into the programme of the four elementary classes. In the *second* they attend the lectures on Pedagogy, and on Method, both general and special, applicable to the elementary schools.

With this faculty a normal school is also connected, for the preparation of the professors of Latin grammar. The course is also completed in two years; in the *first*, the students attend the courses of institutions of belles-lettres, of Greek and general grammar, of ancient History, and Archæology. In the *second*, they attend the lectures on Italian and Latin literature, on method applied to the instruction of the Latin and Italian languages, on ancient History, and Archæology.

The doctors in belles-lettres and on philosophy, who come from this faculty, are appointed by the government to the chairs of those departments in the royal or national colleges. Their salaries are paid by the government, and after thirty years of employment, they are entitled to retire with a pension equal to their full salary. Their widows and children under age are also entitled to a pension. This provision is applied to all the officers of the government, and thus to all the professors of the colleges and of the universities.

The following is the catalogue of the faculty for the year 1856-7:

PARAVIA ALESSANDRO,* in Italian Literature, will lecture on the *Pleasure of Poetry*, and on *differences between a didactic Poem, and a Treatise*; he will also continue the *critical history of the tragic Theatre from Trissino to Alfieri*, at 12 o'clock, Mondays and Wednesdays; on Fridays the Students will read their compositions in verse and prose, on which he will make his critical observations; and on Thursdays, at 3 o'clock, he will continue his lectures on the *History of the country, from Count Amedeus VII.*

BARUCCHI FRANCESCO, member of the supreme Council of instruction, in History and Archæology, will lecture on *Roman history and Archæology*, on Mondays, Wednesdays and Fridays, at 10 o'clock.

PRIERI BARTOLOMEO, member of the Council of the University, in Greek literature, will explain in the first three months *some historical passages of Xenophon and Herodotus*; then *two Philippics of Demosthenes*, and at the end of the year *some passages of Homer*, on Tuesdays, Thursdays and Saturdays, at 12 o'clock.

VALLAURI TOMMASO, in Latin Literature, will lecture on the *critical History of Latin*

* Since dead.

Literature, from the death of Augustus to the Emperor Adrian; he will also comment on *some passages from the Histories of Tacitus, from the Satires of Juvenal, and from the Roman history of C. Vellejus Paterculus*; besides, on one day of the week he will give his *criticism on the compositions of the Students*, on Tuesdays, Thursdays and Saturdays, at 11 o'clock.

DANNA CASIMIRO, member of the general Council of the elementary schools, will lecture on *the Institutions of Belles-lettres*, Tuesdays, Wednesdays, Fridays, and Saturdays, at 3 o'clock.

BONA BARTOLOMEO, in Greek and general Grammar, will explain *the critical Grammar of Greek, and will develop the theories of the most accomplished modern philologists*; he will also exercise the Students on *the interpretation of Greek writers*, on Mondays, Wednesdays and Fridays, at 9 o'clock. He will lecture, on Saturdays, at 9 o'clock, on *the Philosophy of language, and will apply the general principles to the classical languages*.

RAYNERI GIOVANNI ANTONIO, member of the general Council of the elementary schools, in Methodology, will lecture on *general Method*, on Mondays, Tuesdays, and Saturdays, at 11 o'clock.

RICOTTI ERCOLE, in modern History, after having pointed out *the most important changes which have occurred in Europe, from 1492 to 1700*, will lecture on *the History of Europe, from 1700 to 1789, and more particularly on the History of France and of Italy*, on Mondays and Fridays, at 11 o'clock. On Wednesdays he will exercise the Students on *the knowledge of the historical writers, and on historical teaching*.

BERTINI GIOVANNI MARIA, member of the general Council of the elementary schools, and an extraordinary member of the supreme Council of public instruction, on the history of ancient Philosophy, will lecture on *the History of Philosophy, from Descartes to our times*, on Mondays, Wednesdays and Fridays, at 10 o'clock.

BERTI DOMENICO, in Moral Philosophy, will lecture on *the comparative History of the principal systems of Moral Philosophy*, on Mondays, Wednesdays, and Fridays, at 12 o'clock.

PEIRETTI GIOVANNI BATTISTA, in Metaphysics, will lecture on *Theological Metaphysics*, on Tuesdays, Thursdays and Saturdays, at 10 o'clock.

FLECHIA GIOVANNI, on Sanscrit, will lecture on *the Grammar of Sanscrit*, and will interpret *Visvamottra, an Episode of the Ramajana*; he will also explain *some fables from the Hitopadesa, and two hymns of the Rigveda*, on Tuesdays, Thursdays, and Saturdays, at 10 o'clock.

SCHIAPARELLI LUIGI, will take place of the professor of History and Archæology.

BERTINARIA FRANCESCO will take place of the professors of Philosophy.

RICHETTI CARLO and BACHIALONI CARLO will take place of professor of Method, when prevented from lecturing.

FACULTY OF PHYSICAL SCIENCES AND MATHEMATICS.—This faculty embraces the following courses: 1st, Physical Science and Geometry; 2d, Natural History; 3d, Chemistry; 4th, Mathematics; 5th, Architecture.

THE COURSE OF PHYSICAL SCIENCE AND GEOMETRY is attended by the students who intend to become professors of these sciences in the secondary schools. It comprehends the lectures of the following chairs: 1st, Finite and Infinitesimal Analysis; 2d, Descriptive Geometry; 3d, Experimental Physical Science; 4th, Superior Physical Science; 5th, Chemistry; 6th, Mineralogy; 7th, Zoölogy; 8th, Botany. The lectures are divided in the following order, through four years: *1st year*, Experimental Physical Science, Finite analysis, Linear Drawing; *2d year*, Experimental Physical Science, Differential and Integral Calculation, Chemistry; *3d year*, superior Physical Science, Mineralogy, Zoölogy, and Descriptive Geometry; *4th year*, Superior Physical Science, Botany, practical experiments of Physical Science and Chemistry.

THE COURSES OF NATURAL HISTORY AND CHEMISTRY intend to prepare professors of these sciences for the secondary schools. They embrace the following subjects: 1st, Algebra and higher Geometry; 2d, Physical experimental Science; 3d, Chemistry; 4th, Mineralogy; 5th, Zoölogy; 6th, Botany. The subjects prescribed for the course of natural history are divided through four years, as follows: *In the first year*, the students attend the lectures on experimental Physical Science, Chemistry, Algebra

and superior Geometry; *in the second year*, on Chemistry, Mineralogy, Zoölogy and Botany; *in the third year*, Mineralogy, Zoölogy, and Botany; *in the fourth year*, Mineralogy, Zoölogy, and Botany. The subjects for the course of Chemistry follow this order: *first year*, experimental Physical Science, Botany, Algebra, and superior Geometry; *second year*, experimental Physical Science, Chemistry, Zoölogy, and practical experiments in Chemistry; *third year*, Chemistry, Mineralogy, technical Chemistry, and practical experiments in Chemistry; *fourth year*, attendance at the laboratory of Chemistry, and the lectures on agricultural Chemistry.

THE COURSE OF MATHEMATICS proposes to prepare hydraulic engineers. They are requested to attend the lectures, 1st, on Algebra; 2d, on plain and spherical Trigonometry; 3d, on analytic Geometry; 4th, on infinitesimal Analysis, differential and integral Calculus; 5th, on descriptive Geometry; 6th, on rational Mechanics, and on Machines; 7th, on practical Geometry; 8th, on Hydraulics; 9th, on Architecture; 10th, on Buildings, and on Chemistry applied to the art of building. The order is as follows; *1st year*, Algebra, plain and spherical Trigonometry, analytical Geometry, architectural Drawing; *2d year*, infinitesimal Analysis, differential and integral Calculus, descriptive Geometry, Architecture; *3d year*, rational Mechanics, Machines, practical Geometry, Architecture; *4th year*, Hydraulics, Buildings, and Chemistry applied to the art of building. Should the students of this course intend to obtain also the diploma of *civil architects*, besides the diploma of hydraulic engineers, they are obliged to attend, in the fourth year of their course, the lectures on *Civil Architecture*.

THE COURSE OF CIVIL ARCHITECTURE proceeds through four years, on the following subjects; 1st, algebraic Analysis; 2d, descriptive Geometry; 3d, practical Geometry; 4th, rational Mechanics; 5th, Architecture; 6th, Buildings, and Chemistry applied to the art of building. The lectures follow this order: *1st year*, Architecture, algebraical Analysis; *2d year*, Architecture, descriptive Geometry; *3d year*, Architecture, practical Geometry, rational Mechanics; *4th year*, Architecture, Building, experiments on Chemistry applied to the art of building.

Besides the preceding courses, a course for the education of Apothecaries is connected partially with this faculty, and partially with the faculty of medicine and surgery. This course is of two years, and embraces the following subjects: 1st, Mineralogy; 2d, Botany; 3d, organic and inorganic Chemistry; 4th, Pharmacy, Toxicology, Chemistry, History of drugs; 5th, Exercises in preparations. The students are obliged to attend the lectures of all these subjects in both the years of their course. Besides this course and the relative examinations, the candidates are obliged to spend two years as assistants in a licensed pharmacy, to pass an examination in this practice, and to sustain a public disputation on Mineralogy, Botany, Chemistry, and theoretical and practical Pharmacy.

For the profession of *Land Surveyors*, there is no public course prescribed, but the students are obliged to file their names in the register of the university, declaring their intention of studying for that profes-

sion. After this, they are obliged to study and to practice for three years under the direction of an engineer, architect or land surveyor, to be chosen by themselves, and to pass afterward a private and a public examination, at the university, on the subject of their courses.

The catalogue of the faculty for the year 1856-7 is as follows :

PLANA GIOVANNI, vice-president of the supreme Council of public instruction, in Analysis, will lecture on *the introduction to the Infinitesimal Analysis, and on the Elements of differential and integral Calculus*, at half past 11 o'clock, every day.

MORRIS GIUSEPPE, member of the supreme Council of public instruction, in Botany, will lecture on *Organography, Glossology, vegetable Physiology, and Taxonomy*; he will also undertake excursions in the neighborhood of the city, in which he will exercise his Students in determining Species; he will point out the natural families, (3d series,) and the medicinal, economical, and industrial plants in the botanic garden; finally, he will lecture on the distribution of vegetables on the superficies of the globe, at half past 10, on Mondays and Fridays, till April, then every day, at half past 9.

SISMONDA ANGELO, member of the Council of the university, in Mineralogy, after having given the general principles of Mineralogy, will lecture on *Flint Stone and its compounds, and on fossil combustibles*, every day, at a quarter past 8.

POLLONE IGNAZIO, extraordinary member of the supreme Council of public instruction, and member of the general Council for the elementary schools, in Analysis, will lecture on *algebraic Analysis, on Trigonometry, and on analytical Geometry*, at half past 11, every day.

PROMIS CARLO, in civil Architecture, will lecture on it, at half past 9, every day.

MENABREA LUIGI FEDERIGO, in Construction, will give *the Theory of construction*, on Mondays, Wednesdays and Fridays, at half past 10; and on Thursdays will apply the theory to special cases.

DEFILIPPI FILIPPO, in Zoology, after having given the general Ideas of the Structure and functions of animals, will lecture on *mollusks, etc.*, and at the close of the year, will give a course of lectures on parts of the human body, at half past 8, every day.

ABBENE ANGELO, in Pharmaceutic Chemistry, after an *Introduction*, will lecture on *Galenic Medicaments, and then on Medicaments taken from the inorganic kingdom*, on Tuesdays, Thursdays and Saturdays, at half past 10. In the two last months he will lecture on *chemical Toxicology*.

RICHELMI PROSPERO, in Hydraulics, will lecture on this subject, every day, at half past 8; at the close of the year he will make hydraulic experiments at the Royal Hydraulic Tower, during the mornings.

ERBA GIUSEPPE BARTOLOMEO, in Algebra and superior Geometry, will lecture on these subjects, every day, at a quarter past 8.

FERRATI CAMILLO, in practical Geometry, will lecture on it every day, at half past 11; on Mondays, Wednesdays and Fridays, he will lecture on *descriptive Geometry*, at 3 o'clock.

CHIO FELICE, in Superior Physical Science, will lecture on it, at half past 2, on Mondays, Wednesdays and Fridays.

PIRIA RAFAELLE, in general Chemistry, after having given the general principles and laws of Chemistry, will lecture on *Inorganic and Organic Bodies*, at half past 9; he will make occasionally practical experiments.

N. N. in general and experimental Physical Science, will lecture on it, making occasionally public experiments, at 2 o'clock, on Mondays, Wednesdays and Fridays.

DELPONTE GIO BATTÀ will take place of the professor of Botany.

SISMONDA EUGENIO will take place of the professor of Mineralogy.

SOBRERO ASCANIO, in Chemistry applied to arts and industry, will lecture on *Chemistry applied to the Art of construction*.

BRUNO GIUSEPPE will take place of the professors of Mathematics.

CIMA ANTONIO will take place of the professor of Physical Science.

BORSARELLI PIETRO will take place of the professor of Pharmaceutic Chemistry, when prevented from lecturing.

The method of teaching is by lectures and by experiments in the experimental branches. Most of the professors publish elementary treatises on the subjects of their lectures, which are valuable both to the students and professors. These are also required to point out in their lectures and treatises the principal writers to be consulted by the students on the subjects of their study.

The discipline of the students is maintained by the same system, which is followed in the secondary schools. Indeed we should say, that expulsion

from the university is the only punishment, which can be applied by the scholastic authorities; we must also say, that the occasion very seldom arises of applying such a punishment. The Rector of the university is especially charged with the discipline of the institution.

Connected with the university, and under the direction of the government, there is a ROYAL COLLEGE OF THE PROVINCES, founded and endowed by the munificence of the kings of Sardinia and enriched by legacies of private benevolence. This is an establishment, in which the students are furnished with free board and lodging through all the course of the university, and with every aid in their studies and education. The royal college of the provinces disposes of about one hundred and fifty free places, which are given as a reward to those students, who have passed the most successful examinations. These examinations are opened whenever a vacancy occurs, and those students only can present themselves who have completed the secondary courses, and who are born in that province, to which belongs the vacant place. The students of the royal college of the provinces are also exempted from the examination fees.

After having completed the full course of the faculty, and having passed successfully all the annual examinations prescribed by law, the students are requested to enter upon a public disputation for obtaining the Doctorship. This disputation is upon subjects selected from those of the course, and published by the candidate. The discussion is sustained before the faculty, in which the collegiate doctors fill the office of examiners and opponents. The faculty afterward decides by ballot upon the merit of the candidate, bestowing upon him the Doctorship or rejecting his application.

The names of the students, who distinguished themselves in the examinations, are published at the close of the year, in the official paper.

From the colleges under the direction of the university of Turin, 740 students presented themselves in the year 1855-56 for examination preparatory to admission to the courses of the university, of which 607 were admitted, and 133 rejected. In the year 1856-7 there are in the university 1433 students, of which 2 belong to the faculty of theology, 709 to the faculty of jurisprudence, 264 to the faculty of medicine and surgery, 11 to the course of obstetric clinic, 17 to phlebotomy, 182 to pharmacy, 36 to the course of physical science and geometry, 7 to natural history, 16 to rational philosophy, 138 to the course of mathematics, 4 to the course of architecture, 32 to belles-lettres, 7 to methodology, 8 to the course of Latin grammar. Adding to this number the students, who pursued some part of their course in some provincial city, we have the total number of students 1858.

In the university of Genoa there were, according to the latest statistics, 556 students, of which 6 belonged to the faculty of theology, 282 to jurisprudence, 182 to medicine, surgery, and pharmacy, 86 to mathematics and architecture. The number of the students of the university of Cagliari was 325, of which 53 of theology, 125 of jurisprudence, 130 of medicine, surgery, and pharmacy, 11 of architecture, 6 of geodesy. Th

number of the university of Sassari was 245, of which 43 of theology, 123 of jurisprudence, 76 of medicine, surgery, and pharmacy. From the colleges which depend upon the university of Genoa, there pass annually to the classes of the university an average of 201 students, from that of Cagliari 120, from Sassari 94, and the students who obtain annually the doctorships in the university of Turin reach an average of 525, in that of Genoa 140, in that of Cagliari 74, in that of Sassari 49.

The number of the professors in the university of Turin, including those of the cities of Chambery and Nice is 89, of Genoa 46, of Cagliari 34, of Sassari 29. Their salary is not uniform, being greater in Turin than in the other universities.

The university of Turin possesses for the aid of the intellectual education of its students the following institutions, the free use of which belongs to the professors, as well as to the scholars and the people at large.

1. A PUBLIC LIBRARY, which was founded by Emanuel Philibert, endowed by other kings, especially by Victor Amedeus II, and enriched by private donations. The library contains more than one hundred and ten thousand volumes, among which the collection of works on theology, jurisprudence, politics, medicine, and surgery, is the most complete. The principal treasures of the library are the Arabic, Greek, Latin, Italian, and French MSS. It possesses also many rare editions of the century in which the press was discovered, not a few of which are on parchments, among these the POLYGLOT OF ANTWERP, which was presented to the Duke Emanuel Philibert by Philip II. of Spain. There are also over one hundred MSS., of the remotest antiquity, on parchment, and a very rich collection of books on the fine arts, of ancient and modern prints, and drawings. The collection of Floras is complete, and there are many choice and rare editions of Arabic, Persian, Chaldaic and Hindoo books.

2. ANATOMICAL THEATRE.—The new anatomical theatre was founded by Charles Albert. Its architecture is simple and elegant in its construction, and it is surmounted by a roof of glass. Within are pipes, spouts, washing tubes, polished floors, and marble tables. The spacious hall destined to dissections is provided with all the improvements, which health and cleanliness require in anatomical operations. Under the main amphitheatre there is a spacious vault, where the subjects are deposited, and from which they are raised by means of a machine to a room above, where they are washed and laid on a marble table, and at the hour for the lecture, elevated by the same means to the floor of the amphitheatre, and placed in their position before the professor and the students. By other mechanical contrivances the subject approaches or withdraws from the professor. The light of the hall is so regulated, as to modify it according to the occasions. The walls of this hall are plastered with calcareous stucco, and are adorned with four great medallions, representing BERTRANDI, CIGNA, MALACARNE, and ROLANDO. Near the amphitheatre, there is a room appropriated for the use of the dissector, provided with all the contrivances for experiments. Between the yard of the anatomical theatre

and that of the great hospital of St. John, there is a subterranean communication, which facilitate the transportation of the subjects.

3. ANATOMICAL PATHOLOGICAL MUSEUM.—This museum contains many preparations of the systems and parts of the human body, embryos at different periods, pathological sections in an abnormal state. Among the most remarkable collections of this museum we may mention the collection of bones decomposed by syphilitic diseases, and by the use of mercury; the general osteomalacy, in which bones are light and spongy; the osteosarcoma of an elbow, which is larger than the head of a man; and the specimens of aneurism.

4. CHEMICAL LABORATORIES AND AMPHITHEATRE.—There are six spacious rooms for the use of the laboratories, in which we find admirably arranged stoves and ovens, scales, and other instruments, and chemical and pharmaceutic preparations. The amphitheatre is designed for public lectures, and will seat five hundred pupils so advantageously, that the most minute experiments can be observed.

5. BOTANIC GARDEN.—The botanic garden was founded by Victor Amedeus II., and endowed and improved by his successors. Under Charles Albert the limits were enlarged, new canals made, and new pipes added in order to facilitate the irrigation of the plants; the trees and shrubs, which will grow in the open air, were planted and arranged, according to their natural classification in a suitable grove, in which we find also the officinal and economic species, methodically arranged. The same king purchased for the garden the rich collection of American plants brought to Piedmont by the botanist Bertero, and the plants of the islands of Sardinia and Capraja were added. The number of the cultivated species is about eleven thousand, including many of great rarity.

The species of the herbarium exceed forty thousand. There is also a collection of indigenous mushrooms, arranged in three hundred and fifty groups, cast in wax according to nature. The king has recently presented to the garden a beautiful collection of living plants, seeds, and woods brought from Brazil by the Prince of Carignano, and a not less interesting collection of dry species, seeds and fruits, for the study of carpology, gathered by Dr. Casaretto, in his excursion to the same country.

As early as 1732, the plants which blossom in the garden were painted, and that work having been continued to this time, the institution has a most complete botanic iconography, which contains more than five thousand plates *in folio*.

6. CABINET OF PHYSICAL APPARATUS.—This collection began to be formed in 1721, was enriched by Charles Emmanuel III., and increased by Beccaria. Charles Felix sent Professor Botto to France and England, to purchase all the modern apparatus required by the cabinet, and many fine instruments, especially relating to optics, were added to it by him.

7. ASTRONOMIC OBSERVATORY.—The observatory was located in the year 1820 on the northern tower of the four, which arise at the angle of the ancient palace of the Royal Castle, now used for the meetings of the Senate. The hall of the observatory is beautifully arranged, and its walls

adorned with many medallions, representing LAGRANGE, GALILEO, TYCHO BRAHE, NEWTON, KEPLER, and CASSINI. The meridian circle is erected between two marble columns in the centre of the hall, and can be turned east or west, at the pleasure of the observer. This instrument was constructed in Munich by Reichenbach, and has a diameter of three feet, divided on silver into arcs of a sixtieth, and reads to two seconds. The clear aperture of the telescope is of 12 centimeters, and its focal length of a meter and six hundred millimeters. Among the other instruments, we may mention a pendulum, which gives the sidereal time, constructed by MARTIN of Paris, two other telescopes by DOLLOND, one with an aperture of 65 millimeters, and of a focal length of a meter, the other of an aperture of a decimeter, and with a focal length of a meter, and 50 centimeters. There is a fourth telescope, by Fraunhofer of Munich, mounted on a brass tripod, with an aperture of 75 millimeters, and a focal length of a meter. There is also a reflector-sextant, by Troughton of London, with a diameter of two decimeters, divided on silver, which reads to five seconds. Ascending to the turning roof on the east, we find a Refractor circle of a diameter of 50 centimeters, divided on silver, which reads to four seconds, the work of Reichenbach. On the west side of the roof is an Equatorial, which has a circle of declination of a diameter of 62 centimeters, divided in silver, and reads to five seconds. The clock has a diameter of 45 centimeters, divided on silver, and marks minutes.

8. HYDRAULIC BUILDING.—This building is erected at a distance of two miles from the city. It consists of a large tower, with three floors, and it can be filled with water from a conduct above. Two large reservoirs receive the water from the tower and measure it; there are besides many aqueducts with different declivities and directions, and a collection of hydrometric apparatus and instruments.

9. ZOÖLOGIC MUSEUM.—Founded during the reign of Charles Emmanuel III., it received many donations from private sources, and was greatly increased by professors Borson and Bonelli; at present it is one of the best museums in Italy. The different classes of animals are arranged in two large halls, in a long gallery, and in many other rooms. The vertebrates, cephalopods, molluscs, and zoophytes occupy large convenient shelves; the living and fossil shells are disposed in elegant cases; the crustacea and insects fill a great number of cases. The invertebrates and testacea are abundant, as well as the shells both living and fossil. Among the living shells is worthy of being mentioned an *avicula margaritifera*, in which a pearl can be seen, wonderful for its volume and for its form. The fossils embrace a collection of shells discovered in the tertiary of Italy, and especially of Piedmont. Finally, a series of skeletons of rare animals well kept and arranged.

10. MINERALOGIC MUSEUM.—This collection embraces many specimens of minerals, rocks and earth of different countries, and especially of Piedmont, and of the island of Sardinia. It occupies two great halls, where the objects are exhibited either in shelves, on tables, or in cases enclosed by glasses.

11. MUSEUM OF ANTIQUITIES.—Among these, the coins take the first and most important part, and number fifteen thousand, Egyptian, Greek, Etruscan and Roman, of gold, silver and copper. The collection of marble statues, busts and heads is not large; there is a Cupid sleeping on a lion's skin; a head of Antinous crowned with a garland of vine leaves, like a Bacchante; here is also a mosaic work, which was discovered in the island of Sardinia, and represents Orpheus playing the lyre, surrounded by different animals. Among the statuettes of bronze, Etruscan, Greek, Roman, and Sardinian, may be mentioned a Pallas, a Faunus, many tablets of bronze with Roman inscriptions, a collection of ancient vases either of bronze or of silver, and a collection of Etruscan vases, many of which were discovered in Piedmont.

12. EGYPTIAN MUSEUM.—It is perhaps the most complete in Europe. It was enriched by Charles Felix, who bought a great quantity of these monuments from Chevalier Drovetti, a Piedmontese, who occupied the place of French consul in Egypt. Here are statues of the ancient Pharaohs, many colossal, and all made of one piece, either of spotless granite, or of green and black basalt, or of calcareous stone. There are many statues of ancient kings, or representing gods and goddesses, sacred animals, and mythic emblems; they are of different sizes from the colossal downward. More than two hundred square boards, either carved or painted, represent persons offering food, flowers or fruits. One of them, the other half of which is preserved in the Vatican Museum, represents Sesonchi, the chief of the 22d dynasty, who lived ten centuries before Christ; then we meet a collection of objects of worship: such are two altars of black granite, many marble and stone tables for the offering and the libation, sacred vases of different material and size, perfume vases of stone and of terra-cotta, loaves, grapes, grains, fruits—the specimens of scarabeus, a symbol most venerated by the Egyptians, amount to two thousand. There are a great number of mummies;—their linen or cotton wrappers, and wooden cases, as well as the mummies themselves, are admirably kept and preserved. Here are also many cases containing the mummies of animals, cats, fishes, hawks, reptiles, crocodiles, &c. In the museum are also exhibited more than two hundred rolls, or volumes of papyrus, which belong to the epoch in which Egypt was under the sway of Persia, and thence forward to the times of the Ptolemies and of Rome. Some are written on linen, some on parchment, wood, stone, or terra-cotta, in the Egyptian, Greek, or Coptic language, in hieroglyphic, hieratic or demotic signs. There are likewise linen, clothes, leather stockings, intertwined with palm leaves, vases of copper, of alabaster, etc.

IV. GENERAL DIRECTION AND SUPERVISION OF PUBLIC INSTRUCTION.

Before the year 1847, the general direction of public education belonged to the secretary of the Interior; but in reality it was in the hands of a council of instruction, called *Magistrato della Riforma agli Studi*, the members of which were appointed by the king, and which exercised full jurisdiction, and had an absolute power over all the scholastic institutions

of the country. In that year this Board was abolished, and a special department of public instruction created with a minister at its head, who takes an equal rank* with the other seven secretaries of state, who compose the cabinet of the administration. It belongs to this department to diffuse and to promote through all the country scientific and literary education, and to aid the progress of the fine arts. It has the supreme direction of all the universities of the state and all the other scientific or educational establishments, of the national, royal, and municipal colleges and schools, whether classic, technical or primary, either public or private, whether for boys, girls, or adults. The appointments of all professors, teachers, inspectors, superintendents, and officers of the instruction supported by the state come under the jurisdiction of this department, and to its approbation the appointments made by municipalities or other corporations for their own institutions must be submitted. It determines to what pupils free board is to be granted in the institutions of the state, and presides over the administration of legacies bestowed upon educational establishments. It promulgates regulations for their management, programmes of instruction, and methods of teaching, approves text-books, and establishes the rules of discipline. All other scholastic authorities, councils of universities and councils of faculties, permanent committees for the secondary schools, inspectors, both of secondary and of primary instruction, general councils for elementary instruction, provincial and collegial councils, royal, provincial, and local superintendents, presidents of boarding schools, directors of instruction, and all similar officers depend on the ministry of public instruction, and are referred to it, as to the central power and the highest authority.

Soon after, in 1848, a SUPREME COUNCIL OF PUBLIC INSTRUCTION was created, (*Consiglio superiore della istruzione pubblica*), and attached to the ministry, with the object of aiding and assisting it in the administration of the department. The council is presided over by the minister himself, and is composed of a vice-president, seven ordinary and five extraordinary members, appointed by the government, the former during life, the latter for three years. Five of the ordinary members must be chosen from among the professors of each faculty of some of the universities, while the two others can not belong to any university, but must be elected from among persons of high, scientific or literary repute; the extraordinary members may be either professors or collegiate doctors. Thus the general administration of public instruction was organized in 1848, and coördinated with all the other scholastic authorities, which were established over its different branches. Though a decided improvement on the former system, this organization has been proved by an experience of eight years to be too complicated in its structure, and too weak in its operation. By creating so many councils of different branches of instruction, as separate bodies, independent of each other, the law of 1848

*C. Alfiei, C. Boncompagni, V. Gioberti, F. Merlo, I. Cibrario, and P. Gioja, are the most prominent men, who have held this office. Dr. G. Lanza is the present incumbent; his noble character and large educational views place him high among the statesmen of Sardinia.

tributed the scholastic government among too many centers, and the administration, losing its unity, became perplexed, confused, and powerless. Besides, the supreme council in its first organization was filled with permanent members, who though of a high standing in the scientific world, yet, belonging to a past age, did not represent the necessities and conditions of the new era, and were entirely unable to direct the national education of the country conformably to its new institutions. Then, the council being mainly composed of one member from each faculty, it formed a body in its majority not qualified for making and enforcing provisions relative to any branches of learning, which were either imperfectly or not at all represented in that board. A like defect of organization was found in the subordinate authorities, where the power was too often entrusted to men lacking sufficient knowledge of the condition of the scholastic system of the country. Add to this, that political questions since that time have absorbed all the activities of the country, and it will be easily understood why the new system of administration proved a signal failure, and the necessity of a reform frequently arrested the attention of Parliament.

It was not, however, until February, 1857, that the House of Deputies passed a bill establishing a new system of administration, which was afterward approved by the Senate, and promulgated by the King. As it changes the organization of the educational authorities of the country, and constitutes a new basis, on which henceforth its administration will rest, we subjoin the bill in full, leaving to time to decide, whether the system recently enacted can be considered a reform, and while the bill contains provisions sufficient to ensure the unity of the directive power, it gives at the same time adequate guarantees of a liberal administration.

V. BUDGET OF THE DEPARTMENT OF PUBLIC INSTRUCTION.

The expenses authorized by the Parliament for the support of education, under the direction of the department of public instruction, during the year 1857, amount to the sum of 2,031,989 francs, viz.:

For the executive department of public instruction,	88,750 francs.
“ supreme council of public instruction,	16,500 “
“ general council of elementary and teachers’ schools,	9,300 “
“ university councils and offices of the four universities,	91,221 “
“ royal scholastic superintendents,	49,959 “
“ inspectors of secondary schools,	14,500 “
“ instruction in the universities,	492,862 “
“ university teaching in the provinces,	34,350 “
“ national, royal and municipal colleges,	600,580 “
“ technical schools,	77,540 “
“ veterinary school,	81,800 “

The balance of the appropriation is devoted to the scientific establishments, museums, library, subsidies to elementary schools, &c. Adding to this sum the amount raised and expended by the townships and provinces, for the support of public instruction, which reaches 3,557,229 francs, we have a total expenditure of 5,589,216 francs.

To enable our readers to institute a comparison between the other departments and that of public instruction, we give the expenditures of the different branches of the central administration, from the budget of 1856.

Department of finances,	75,41,753 francs.
“ “ grace and justice,	4,328,351 “
“ “ foreign affairs,	3,431,745 “
“ “ public instruction,	2,045,254 “
“ “ the interior,	7,601,846 “
“ “ public works,	11,783,714 “
“ “ war,	32,247,528 “
“ “ navy,	4,355,061 “

In the same year the revenues of the state amounted to 132,529,838 francs. The estimated expenditure of the department of public instruction, as submitted to the Parliament for the year 1858, is 2,100,709 francs.

(Concluded in No. IX.)

IV. LIFE AND EDUCATIONAL SYSTEM OF PESTALOZZI.

BY CARL VON RAUMER,

(Continued from Vol. III, p. 416.)

FOR seventeen years after the publication of Leonard and Gertrude, Pestalozzi continued to drag on his needy and depressed existence at Neuhof, where he spent altogether thirty years. Of his outward life during those seventeen years, we learn little else, besides the general fact just stated. It is worthy of mention, that in this period he entered the order of Illuminati, an order which was characterized by infidelity, exaggerated ideas of enlightenment, and destructive but not reconstructive principles, and that he even became eventually the head of the order in Switzerland. He soon discovered his mistake, however, and withdrew from it. "That which is undertaken by associations," he says, "usually falls into the hands of intriguers."

In this period he wrote several books.

In the year 1782, he published "Christopher and Alice." He himself relates the origin of this work. People had imbibed from Leonard and Gertrude the idea, that all the depravity among the common people proceeded from the subordinate functionaries in the villages. "In Christopher and Alice," says Pestalozzi, "I wished to make apparent to the educated public the connection of those causes of popular depravity which are to be found higher in the social scale, but which on this account are also more disguised and concealed, with the naked, undisguised, and unconcealed causes of it, as they are manifested in the villages in the persons of the unworthy functionaries. For this purpose, I made a peasant family read together Leonard and Gertrude, and say things about the story of that work, and the persons introduced in it, which I thought might not occur of themselves to everybody's mind."

So says Pestalozzi in the year 1826; but he spoke otherwise in the preface to the book when it first appeared, in 1782. "Reader!" he says, "this book which thou takest into thy hand is an attempt to produce a manual of instruction for the use of the universal school of humanity, the parlor. I wish it to be read in every cottage."

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This wish was not accomplished, as we learn from the preface to the second edition, (1824,) which commences thus, "This book has not found its way at all into the hands of the people. In my native land, even in the canton of my native town, and in the very village in which I once lived, it has remained as strange and unknown, as if it had not been in existence."

In the same year, 1782, and the one following, Pestalozzi edited "A Swiss Journal," of which a number appeared every week. In this Journal, he communicated, among other things, memoirs of deceased friends. Thus he wrote the memoirs of Frölich, the pastor of Birr, who had died young. Pestalozzi says of him, "he dedicated himself to the work of the great divine calling, but eternal love dedicated him to the liberty of eternal life." The way in which he speaks of the excellent Iselin, who had died in 1782, is particularly affecting. "I should have perished in the depths into which I had fallen," he says, "if Iselin had not raised me up. Iselin made me feel that I had done something, even in the poor school."

The discourse "on Legislation and Infanticide" also appeared in 1782.

About 1783, Pestalozzi contemplated the establishment of a lunatic asylum and a reformatory institution, and wrote upon the subject; the manuscript, however, was lost.

In the years between 1780 and 1790, in the days of the approaching French revolution, and in the first symptoms of the dangers which its influence on Switzerland might entail,* he wrote "The Figures to my ABC-Book; they were not published, however, till 1795: a new edition, under the title of "Fables," came out in 1805. They relate principally to the condition of Switzerland at that time.

In the summer of 1792, he went to Germany, at the invitation of his sister in Leipzig, and became acquainted with Göthe, Herder, Wieland, Klopstock, and Jacobi; he also visited several normal schools.

In 1798 appeared Pestalozzi's "Researches into the Course of Nature in the Development of the Human Race." He says himself, speaking of this book, "I wrought at it for three long years with incredible toil, chiefly with the view of clearing up my own mind upon the tendency of my favorite notions, and of bringing my natural feelings into harmony with my ideas of civil rights and morality. But this work too is, to me, only another evidence of my inward helplessness, the mere play of my powers of research; my views were

*Pestalozzi's words in the preface to the "Figures."

altogether one-sided, while I was without a proportionate degree of control over myself in regard to them, and the work was left void of any adequate effort after practical excellence, which was so necessary for my purpose. The disproportion between my ability and my views only increased the more. The effect of my book upon those by whom I was surrounded was like the effect of all that I did; scarcely any one understood me, and I did not find in my vicinity two men who did not half give me to understand that they looked upon the entire book as so much balderdash."

Pestalozzi here assumes three states of man: an original, instinct-like, innocent, *animal* state of nature, out of which he passes into the social state, (this reminds us of Rosseau;) he works himself out of the social state and raises himself to the moral. The social man is in an unhappy middle condition between animal propensities and moral elevation.

The original animal state of nature can not be pointed to in any one individual man; the innocence of that state ceases with the first cry of the new-born child, and "animal depravity arises from whatever stands opposed to the normal condition of our animal existence." Against this depravity, man seeks for aid in the social state, but finds it not; it is only the moral will that can save him, "the force of which he opposes to the force of his nature. He *will* fear a God, in order that the animal instincts of his nature shall not degrade him in his inmost soul. He feels what he can do in this respect, and then he makes what he can do the law to himself of what he ought to do. Subjected to this law, *which he imposes upon himself*, he is distinguished from all other creatures with which we are acquainted."

Where and when, for example, did Pestalozzi's man of nature ever exist—an innocent *animal* man, endowed with instinct? * This character does not apply to Adam in Paradise, who was not an animal, but a lord of the animals, and still less does it apply to any child of Adam. In how simple and sublime a manner, on the

* Voltaire wrote the following characteristic letter to Rosseau about his discourse, prepared and offered for the prize proposed by the Academy of Dixon, on the origin of the inequality among men, and published in 1775:—"I have received your new book against the human race, and thank you for it. You will please men, to whom you speak the truth, but not make them better. No one could paint in stronger colors the horrors of human society, from which our ignorance and weakness promise themselves so many delights. Never has any one employed so much genius to make us into beasts; when one reads your book, one is seized with a desire to go down on all fours. Nevertheless, as I have left off this habit already more than sixty years, I feel, unfortunately, that it is impossible for me to take to it again, and I leave this natural mode of walking to others who are more worthy of it than you and I. Neither can I take ship, in order to visit the savages of Canada, firstly, because the maladies to which I am condemned, render a European physician necessary to me; then again, because there is at present war in that country, and the examples of our nations has made the savages almost as bad as we are ourselves. I am content to live as a peaceful savage in the lonely district adjoining your native land, &c."

contrary, do the Holy Scriptures comprehend and characterize the whole human race.

Thus we see Pestalozzi but little or not at all engaged in educational undertakings during the eighteen years from 1780 to 1798; his writings too, during this time are mainly of a philosophical and political character, and relate only indirectly to education. But the French revolution introduced a new epoch, for Pestalozzi, as well as for Switzerland.

The revolutionary armies of France pressed into the country, old forms were destroyed, the whole of Switzerland was consolidated into an "inseparable republic," at the head of which stood five directors, after the model of the French directional government of that time. Among these was Legrand, a man of a class that is always becoming more rare. I visited the amiable octogenarian in Steinthal, where formerly, with his friend Oberlin, he had labored for the welfare of the communes. When the conversation turned on the happiness or the education of the people, or on the education of youth generally, the old man became animated with youthful enthusiasm, and tears started to his eyes.

Legrand was a friend of Pestalozzi's; no wonder, seeing that the two men very nearly resembled each other in their way of thinking, as well as in their enthusiastic activity and their unbounded hopefulness. Pestalozzi joined the new republic, while, at the same time, he did all in his power to subdue the jacobinical element in it. He wrote a paper "On the Present Condition and Disposition of Mankind." In this paper, as also in the "Swiss People's Journal," which he edited at the instigation of the government, he pressed upon the attention of the people the necessity of a return to the integrity and piety of their ancestors; the instruction and education of youth, he represented, were the means for attaining this object.

Although, in pointing to an ennobling education of youth, and especially the youth of the people and the poor, as the securest guarantee of a lawfully ordered political condition, he only did that which he could not leave undone; still most people believed that he was speaking and writing thus industriously, merely with the view of procuring for himself an office under the new government, when an opportunity should arise. The government on whom he urged with far too much vehemence the importance of order, justice, and law, actually offered him an appointment, in the hope that he would then be quiet. But what was their astonishment, when, in reply to their inquiry as to what office he would be willing to accept, he said, "I WILL BE A SCHOOLMASTER." But few understood him, only those who,

like himself, were earnestly desirous for the foundation of a truly equitable political condition.

Legrand entered into the idea; and Pestalozzi was already about to open an educational institution in the canton of Argovia, when one of the misfortunes of war intervened. On the 9th of September, 1798, Stanz in Unterwalden was burnt by the French, the entire canton was laid waste, and a multitude of fatherless and motherless children were wandering about destitute and without a shelter. Legrand now called upon Pestalozzi to go to Stanz and undertake the care of the destitute children.

Pestalozzi went; what he experienced he has himself told us.

The convent of the Ursulines there was given up to him; he took up his abode in it, accompanied only by a housekeeper, before it was even put into a fit condition for the reception of children. Gradually he gathered around him as many as eighty poor children, from four to ten years old, some of them orphans, horribly neglected, infected with the itch and scurvy, and covered with vermin. Among ten of them, scarcely one could say the alphabet. He describes the educational experiments which he made with such children, and speaks of these experiments as "a sort of feeler of the pulse of the science which he sought to improve, a venturesome effort." "A person with the use of his eyes," he adds, "would certainly not have ventured it; fortunately, I was blind."

For example, under the most difficult circumstances, he wanted to prove, by actual experiment, that those things in which domestic education possesses advantages must be imitated in public education.

He gave the children no set lessons on religion; being suspected by the Roman Catholic parents, as a Protestant, and at the same time as an adherent of the new government, he did not dare; but whenever the occurrence of daily life presented an opportunity, he would make them the groundwork of inculcating some religious or moral lesson. As he had formerly done at Neuhof, he sought to combine intellectual instruction with manual labor, the establishment for instruction with that for industrial occupations, and to fuse the two into each other. But it became clear to him, that the first stages of intellectual training must be separated from those of industrial training and precede the fusion of the two. It was here in Stanz also that Pestalozzi, for want of other assistants, set children to instruct children, a plan which Lancaster was similarly led to adopt in consequence of the inability of the teacher to instruct the large numbers of children who were placed under his charge.* Pestalozzi remarks,

* Lancaster's monitors, *i. e.* children, set to teach and superintend other children. "At that time, (1798)," says Pestalozzi, "nobody had begun to speak of mutual instruction."

without disapprobation, that a feeling of honor was by this means, awakened in the children; a remark which directly contradicts his opinion, that the performance of the duties of the monitor proceeded from a disposition similar to brotherly love.

Another plan, which is now imitated in countless elementary schools, was likewise tried by Pestalozzi at Stanz, namely, that of making a number of children pronounce the same sentences simultaneously, syllable for syllable.* "The confusion arising from a number of children repeating after me at once," he says, "led me to see the necessity of a measured pace in speaking, and this measured pace heightened the effect of the lesson."

Pestalozzi repeats, in his account of the Stanz institution, what he had brought forward in Leonard and Gertrude. "My aim," he says, "was to carry the simplification of the means of teaching so far, that all the common people might easily be brought to teach their children, and gradually to render the schools almost superfluous for the first elements of instruction. As the mother is the first to nourish her child physically, so also, by the appointment of God, she must be the first to give it spiritual nourishment; I reckon that very great evils have been engendered by sending children too early to school, and by all the artificial means of educating them away from home. The time will come, so soon as we shall have simplified instruction, when every mother will be able to teach, without the help of others, and thereby, at the same time, to go on herself always learning."

I refer the reader to Pestalozzi's own description of his singularly active labors in Stanz, where he was not only the teacher and trainer of eighty children, but, as he says, paymaster, manservant, and almost housemaid, at the same time. In addition to this, sickness broke out among the children, and the parents showed themselves shamelessly ungrateful.

Pestalozzi would have sunk under these efforts had he not been liberated on the 8th of June, 1799, by the French, who, being hard pressed by the Austrians, came to Stanz, and converted one wing of the convent into a military hospital. This induced him to let the children return to their friends, and he went himself up the Gurnigel mountains, to a medicinal spring. Only twenty-two children remained; these, says Mr. Heussler, "were attended to, taught, and trained, if not in Pestalozzi's spirit, still with care and with more order and cleanliness, under the guidance of the reverend Mr. Businger."

* The plan of simultaneous reading and speaking had been introduced into the Austrian schools at an earlier period.

"On the Gurnigel," says Pestalozzi, "I enjoyed days of recreation. I required them; it is a wonder that I am still alive. I shall not forget those days, as long as I live: they saved me, but I could not live without my work."

Pestalozzi was much blamed for giving up the Stanz institution, although necessity had compelled him to do so. "People said to my face," he says, "that it was a piece of folly, to believe that, because a man had written something sensible in his thirtieth year, he would therefore be capable of doing something sensible in his fiftieth year. I was said to be brooding over a beautiful dream."

Pestalozzi came down from the Gurnigel; at the advice of Chief Justice Schnell, he went to Burgdorf, the second town in the canton of Bern, where through the influence of well-wishers, Pestalozzi obtained leave to give instruction in the primary schools.* He had many enemies. The head master of the schools imagined that Pestalozzi wanted to supplant him in his appointment: the report spread that the Heidelberg catechism was in danger: "it was whispered," says Pestalozzi, "that I myself could not write, nor work accounts, nor even read properly. Popular reports are not always entirely destitute of truth," he adds; "it is true that I could not write, nor read, nor work accounts well.

As far as the regulations of the school would allow, Pestalozzi prosecuted here the experiments in elementary instruction which he had begun at Stanz. M. Glayre, a member of the executive council of the canton, to whom he endeavored to explain the tendency of these experiments, made the ominous remark, "You want to render education mechanical." "He hit the nail on the head," says Pestalozzi, "and supplied me with the very expression that indicated the object of my endeavors, and of the means which I employed for attaining it."

Pestalozzi had not been schoolmaster at Burgdorf, quite a year, when he had a pulmonary attack; in consequence of this he gave up the appointment, and a new epoch of his life commenced. M. Fischer, secretary to the Helvetic minister of public instruction, had entertained the idea of founding a normal school in the castle of Burgdorf, but had died before carrying it into execution. With this end in view, he had induced M. Krüsi to come to Burgdorf. Krüsi was a native of Gaiss, in the canton of Appenzell, was schoolmaster there at the early age of eighteen, and had migrated thence in the year 1799, taking with him 28 children. Pestalozzi now proposed

* In a school in which children from four to eight years old received instructions in reading and writing, under the general superintendence of a female teacher.

to Krüsi to join him in establishing an educational institution: Krüsi willingly agreed, and through him the coöperation of M. Tobler, who had been for the last five years tutor in a family in Basel, was obtained; through Tobler, that of M. Buss, of Tübingen. With these three assistants, Pestalozzi opened the institution in the winter of 1800.

It was in Burgdorf that Pestalozzi commenced a work which, with the "Evening Hour," and "Leonard and Gertrude," stands out conspicuously amongst his writings. It was commenced on the 1st of January, 1801.

It bears the queer title, "How Gertrude teaches her children: an attempt to give Directions to Mothers how to instruct their own Children." The reader must not be misled by the title; the book contains any thing but directions for mothers."

There are numerous contradictions throughout the book, as well as on the title page; and it is therefore a most difficult task to give a condensed view of it. Almost the only way to accomplish this will be to resolve it into its elements.

Nothing can be more touching than the passage in which the author speaks of the desire of his whole life to alleviate the condition of the suffering people—of his inability to satisfy this desire—of his many blunders—and of his despair of himself; and then humbly thanks God, who had preserved him, when he had cast himself away, and who graciously permitted him, even in old age, to look forward to a brighter future. It is impossible to read any thing more affecting.

The second element of this book is a fierce and fulminating battle against the sins and faults of his time. He advances to the assault at storm-pace, and clears every thing before him with the irresistible force of truth. He directs his attack principally against the hollow education of our time, particularly in the higher ranks of society. He calls the members of the aristocracy "miserable creatures of mere words, who by the artificialities of their mode of life are rendered incapable of feeling that they themselves stand on stilts, and that they must come down off their wretched wooden legs, in order to stand on God's earth with even the same amount of firmness as the people."

In another part of the book, Pestalozzi declaims warmly against all the education of the present age. "It sacrifices, (he says,) the substance of all instruction to the nonsense about particular isolated system of instruction, and by filling the mind with fragments of truth, it quenches the spirit of truth itself, and deprives mankind of the power of independence which is based thereon. I have found, what

was very obvious, that this system of instruction, does not base the use of particular means either on elementary principles or elementary forms. The state of popular instruction rendered it inevitable that Europe should sink into error, or rather madness, and into this it really did sink. On the one hand, it raised itself into a gigantic height in particular arts; on the other, it lost for the whole of its people all the stability and support which are to be obtained by resting on the guidance of nature. On the one side, no quarter of the globe ever stood so high; but on the other, no quarter of the globe has ever sunk so low. With the golden head of its particular arts, it touches the clouds, like the image of the prophet; but popular instruction, which ought to be the basis and support of this golden head, is every where, on the contrary, the most wretched, fragile, good-for-nothing clay, like the feet of that gigantic image."

For this incongruity in our intellectual culture, he blames chiefly *the art of printing*, through which, he says, the eyes have become book-eyes—men have become book-men.

Throughout the work, he speaks against the senseless use of the tongue—against the habit of talking without any real purpose. "The babbling disposition of our time, (he says,) is so much bound up with the struggle of tens of thousands and hundreds of thousands for their daily bread, and with their slavish adherence to custom, that it will be long, very long, before this temporizing race shall gladly receive into their hearts truths so much opposed to their sensual depravity. Wherever the fundamental faculties of the human mind are allowed to lie dormant, and on those dormant faculties empty words are propt up, there you are making dreamers, whose visions are all the more visionary because the words that were propt up on their miserable yawning existence, were high-sounding, and full of pretensions. As a matter of course, such pupils will dream any and every thing before they will dream *that they are sleeping and dreaming*; but all those about them who are awake, perceive their presumption, and, (when it suits,) put them down as somnambulists.

"The meaningless declamation of this superficial knowledge produces men who fancy that they have reached the goal in all branches of study, just because their whole life is a belabored prating about that goal; but they never accomplish so much as to make an effort to reach it, because through their life it never had that alluring charm in their eyes which any object must possess to induce a man to make an effort to attain it. The present age abounds in men of this class, and is diseased by a kind of wisdom which carries us forward *pro formâ*, as cripples are borne along a race-course, to the goal of knowl-

edge, when, at the same time, it could never enable us to advance toward this goal by our own efforts, before our feet had been healed."

In other parts of the book he attacks governments as indifferent to the welfare of the people. "The lower classes of Europe, (he says,) are neglected and wretched: most of those who stand sufficiently near to be able to help them, have no time for thinking what may be for their welfare—they have always something to do quite different from this."

From this, the second and polemical element of the book, I pass to the third and positive one, namely, the kind of education by which Pestalozzi proposes to replace the false education of our time. This might in some measure be anticipated from the polemical passages which have been cited.

He thus enunciates the problem which he proposed to himself to solve: "In the empirical researches which I made in reference to my subject, I did not start from any positive system; I was not acquainted with any one; I simply put to myself the question, What would you do, if you wanted to give a single child all the theoretical knowledge and practical skill which he requires in order to be able to attend properly to the great concerns of life, and so attain to inward contentment?"

Theoretical knowledge and practical skill constitute, accordingly, the most important subjects of the work. They are treated with a special relation to the two questions,—What knowledge and skill do children require? and, How are these best imparted to them? The aim is to point out the proper object of education, and the way to attain that object.

Of practical skill, however, there is comparatively very little said, notwithstanding that Pestalozzi sets so high a value upon it. "Knowledge without skill, (he says,) is perhaps the most fatal gift which an evil genius has bestowed upon the present age." But Pestalozzi's ideas in relation to practical skill, and the method of attaining it, seem to have been still indistinct.

On the other hand, he is quite at home in the region of theoretical knowledge: to show the starting-point, the road, and the destination, in the journey through this region, is the main design of his work.

His polemic against senseless talking shows that he had sought and found the real root of the tree of which words are the spiritual blossoms.

The beginning of all knowledge, according to Pestalozzi, is *observation*; the last point to be attained, *a clear notion*. He says: "If I look back and ask myself what I really have done toward the

improvement of the methods of elementary instruction, I find that, in recognizing observation as the absolute basis of all knowledge, I have established the first and most important principle of instruction, and that, setting aside all particular systems of instructions, I have endeavored to discover what ought to be the character of the instruction itself, and what are the fundamental laws according to which the education of the human race must be determined by nature." In another place, he requires it to be acknowledged, "that observation is the absolute basis of all knowledge, in other words, that all knowledge must proceed from observation and must admit of being retraced to that source."

But what does Pestalozzi understand by observation? "It is, (he says,) simply directing the senses to outward objects, and exciting consciousness of the impression produced on them by those objects." He refers, of course, principally to the sense of sight. But the ear is not to be neglected. "When sounds are produced so as to be heard by the child, and its consciousness of the impression which these sounds make on its mind through the sense of hearing is aroused, this, to the child, is just as much observation, as when objects are placed before its eyes, and consciousness is awakened by the impression which the objects make on the sense of sight. By the aid of his spelling book, therefore, the child's ear is to be familiarized with the series of elementary sounds which constitutes the foundation of a knowledge of language, just as it is to be made acquainted with visible objects by the aid of his Book for Mothers.

According to this, observation would mean every impression which the mind receives through the eye and the ear.

Does Pestalozzi exclude the remaining senses? No; for he frequently speaks of the impressions of the *five* senses, and he says that the understanding collects the impressions which the senses receive from external nature into a whole, or into a notion, and then develops this idea until it attains clearness. And elsewhere he says that the mechanical form of all instruction should be regulated by the eternal laws according to which the human mind rises from the perceptions of sense to clear notions.

Pestalozzi repeatedly dwells upon this process of intellectual development.

Above every thing, he will have attention given to the first step in the process, namely observation. Care is to be taken that the objects are seen separately by the children, not dimly at a distance, but close at hand and distinctly; then also that there shall be placed before the children, not abnormal, but characteristic specimens of any class

of objects—such as will convey a correct idea of the thing and of its most important properties. Thus, for example, a lame, one-eyed, or six-fingered man, he says, would not be proper to convey the idea of the human form.

Out of the observation of an object, the first thing that arises, he says, is the necessity of naming it; from naming it, we pass on to determining its properties, that is to description; out of a clear description is finally developed the definition—the distinct idea of the object. The full maturity of this, the last fruit of all instruction, depends materially on the vigorous germination of the seed sown in the first instance—on the amount of wisdom exercised in guiding the children to habits of observation. Definitions not founded on observations, he says, produce a superficial and unprofitable kind of knowledge.

Just when we begin to think that we understand Pestalozzi's views, he again leads us into uncertainty as to the idea which he attaches to observation.

He says the idea had only lately struck him, "that all our knowledge arises out of number, form, and words." On this triple basis, he says, education must proceed; and—

“1. It must teach the children to look attentively at every object which they are made to perceive as unity, that is, as separated from those other objects with which it appears in connection.

2. It must make them acquainted with the form of every object, that is, its size and proportion.

3. It must teach them as early as possible the names and words applicable to all the objects with which they are acquainted.”

Pestalozzi found it difficult, however, to answer the question, "Why are not all the other properties which the five senses enable us to perceive in objects, just as much elements of our knowledge, as number, form, and name?" His answer is, "All possible objects have necessarily number, form, and name; but the remaining properties which the senses enable us to perceive are not possessed by any object in common with all others, but this property is shared with one object, and that with another."

When Pestalozzi made form a category to embrace all and every thing, he only thought of the visible, as is evidenced by the further development of his instruction in form, which deals chiefly with the measuring of visible objects.

But there are innumerable observations which have nothing whatever to do with form and number; for example, tasting honey, smelling roses, &c.

The prominence which Pestalozzi gave to form and number caused him to undertake a new treatment of the subjects of geometry and arithmetic. Subsequently he divided geometry into instruction in form and instruction in spaces, for the reason that we perceive shape and size, (mathematical quality and quantity,) independently of each other; drawing he made a part of the instruction in form—writing a part of drawing.

But what became of Pestalozzi's principle, that observation is the foundation of all intelligence, when he thus gave an undue prominence to form and number, and neglected all other properties? Suppose that we put a glass cube into the hands of a child and he observes in respect to it nothing else, but that it has the cubic form, and, over and above this, that it is *one* cube,—so far this glass cube is in no way distinguished from a wooden one. But if I require to take notice of other properties, such as color, transparency, weight, &c., in order that I may form a correct idea of the glass cube, as a separate object, and so describe it that it shall be distinguished with certainty from every other cube,—then I must fix my attention, not only on form and number, but on all apparent properties, as elements in a complete observation.

Lastly, language itself has nothing to do with observation. Why should I not be able to form a perfectly correct notion of an object that has no name—for instance a newly-discovered plant? Language only gives us the expression for the impressions of the senses; in it is reflected the whole world of our perceptions. "It is," as Pestalozzi rightly observes, "the reflex of all the impressions which nature's entire domain has made on the human race." But what does he go on to say? "Therefore I make use of it, and endeavor, by the guidance of its uttered sounds, to reproduce in the child the self-same impressions which, in the human race, have occasioned and formed these sounds. Great is the gift of language. It gives to the child in one moment what nature required thousands of years to give man."

In that case, every child would be a rich heir of antiquity, without the trouble of acquisition; words would be current notes for the things which they designate. But both nature and history protest against payment in such currency, and give only to him that hath. Does not Pestalozzi himself repeatedly protest against this very thing? "The christian people of our quarter of the world, (he says,) have sunk into these depths, because in their lower school establishments the mind has been loaded with a burden of empty words, which has not only effaced the *impressions of nature*, but has even destroyed the inward susceptibility for such impressions."

Pestalozzi's further treatment of the instruction in language clearly proves that, contrary to his own principles, he really ascribed a magical power to words—that he put them more or less in the place of observation—and, (to speak with a figure,) that he made the reflected image of a thing equal to the thing itself.

As this error of Pestalozzi's is of the greatest consequence, I will examine it more closely. In the instruction in language, he begins with lessons on sounds; these are followed by lessons on words; and these again by lessons on language.

I. LESSONS ON SOUNDS.—“The spelling book, (says Pestalozzi,) must contain the entire range of sounds of which the language consists, and portions of it should be repeated daily in every family, not only by the child that is going through the exercises to learn how to spell, but also by mothers, within hearing of the child in the cradle, in order that these sounds may, by frequent repetition, be so deeply impressed upon the memory of the child, even while it is yet unable to pronounce a single one of them, that they shall never be forgotten. No one imagines to what a degree the attention of infants is aroused by the repetition of such simple sounds as ba, ba, ba, da, da, da, ma, ma, ma, la, la, la, &c., or what a charm such repetition has for them.”

And so the child in the cradle is to have no rest from elementary teaching; the cradle songs sung to it are to consist of such delightful bawling and bleating as ba, ba, ba, &c., which might well scare away the child's guardian angels.

As soon as the child begins to talk, it is to “repeat some sequences of these sounds every day;” then follow exercises in spelling.

II. “LESSONS IN WORDS, or rather, LESSONS IN NAMES.”—According to Pestalozzi, “all the most important objects in the world are brought under the notice of the child in the Book for Mothers.”

“Lessons in names consist in giving the children lists of the names of the most important objects in all three kingdoms of nature, in history, in geography, and in the pursuits and relations of mankind. These lists of words are placed in the hands of the child, merely as exercises in learning to read, immediately after he has gone through his spelling book; and experience has shown me that it is possible to make the children so thoroughly acquainted with these lists of words, that they shall be able to repeat them from memory, merely in the time that is required to perfect them in reading: the gain of what at this age is so complete a knowledge of lists of names so various and comprehensive, is immeasurable, in facilitating the subsequent instruction of the children.”

Here again it is not even remotely hinted that the children ought to know the things named; words, mere words, are put in the place of observation.

3. LESSONS IN LANGUAGE.—The highest aim of language, according to Pestalozzi's idea, is to lead us from dim perceptions to clear notions, and that by the following process:—

1. "We acquire a general knowledge of an object, and name it as unity, as an object.

2. We gradually become conscious of its distinguishing qualities, and learn how to name them.

3. We receive through language the power of designating these qualities of the objects more precisely by means of verbs and adverbs."

The first step in this process is, as we have seen, the object of the Pestalozzian lessons in names; but, when viewed more closely, the lessons are found to consist, not in the naming of objects arising out of knowing them, but in the names for their own sake.

In reference to the second operation, when Pestalozzi writes on the black-board the word "eel," and adds the qualities, "slippery, worm-shaped, thick-skinned," the children by no means become conscious of the distinguishing qualities of an eel, and learn to name them, through observing an eel; they rather get adjectives to the noun "eel." Of the process by which these adjectives arise from the observation of the qualities which they express, there is again nothing said.

This neglect of observation is still more striking, when Pestalozzi, further on, classifies what is to be learned under the following heads:

- | | | |
|---------------|---------------------|----------------|
| 1. Geography. | 3. Physics. | 5. Physiology. |
| 2. History. | 4. Natural History. | |

Each of these five heads he divides again into forty subdivisions, so that he makes two hundred subdivisions. He now proceeds to give lists of words in all these subjects in alphabetical order, which lists are to be impressed upon the childrens' memories, "till it is impossible they should be forgotten." Afterward, this alphabetical nomenclature is to be transformed into a "scientific" one. "I do not know, (says Pestalozzi,) whether it is necessary to illustrate the matter further by an example; it appears to me almost superfluous: nevertheless, I will do so, on account of the novelty of form. *E. G.* One of the subdivisions of Europe is Germany: the child is first of all made well acquainted with the division of Germany into ten circles, so that he shall not be able to forget it; then the names of the towns of Germany are placed before him, at first in mere alphabetical order for him to read, but each of these towns is previously marked with

the number of the circle in which it lies. As soon as the child can read the names of the towns fluently, he is taught the connection of the numbers with the subdivisions of the main heads, and in a few hours he is able to determine the place of the entire number of German towns in these subdivisions. For example, suppose the names of the following places in Germany are set before him, marked by numbers :—

Aachen, (Aix-la-Chapelle,) 8.	Allenbach, 5.	Altensalza, 10.
Aalen, 3.	Allendorf, 5.	Altkirchen, 8.
Abenberg, 4.	Allersperg, 2.	Altona, 10.
Aberthan, 11.	Alschauhen, 3.	Altorf, 1.
Acken, 10.	Alsleben, 10.	Altranstädt, 9.
Adersbach, 11.	Altbunzlau, 11.	Altwasser, 13.
Agler, 1.	Altena, 8.	Alkerdissen, 8.
Ahrbergen, 10.	Altenau, 10.	Amberg, 2.
Aigremont, 8.	Altenberg, 9.	Ambras, 1.
Ala, 1.	Altenburg, 9.	Amöneburg, 6.
		Andernach, 6.

He reads them all in the following manner :—

Aachen lies in the Westphalian circle ;

Abenberg in the Franconian circle ;

Acken in the Lower Saxony circle ; and so on.

In this manner the child is evidently enabled, at first sight of the number or mark referring to the subdivisions of the main head, to determine the place of each word of the list in the scientific classification of the subject, and thus, as I before said, to change the alphabetical into a scientific nomenclature.”

It is quite unnecessary to give a refutation of these views.*

Further on in the book, there follow some directions “how to explain more fully to the pupil the nature, qualities, and functions of all the objects with which the lessons in names have made him acquainted, and which have already been explained to him, to a certain extent, by placing their qualities side by side with their names.” For this purpose, the mother is to read to the child certain sentences, and the child is to repeat them after her. Many of these sentences would be quite unintelligible to a child ; for instance, “The creditor desires payment,” “The right must be maintained.” They are mere exercises in reading, not based in the slightest degree on observation.

We have seen that Pestalozzi fixed his attention chiefly on the principle that instruction must be based on observation, out of which the clear idea is at last developed. He says that we are dazzled by the charm of a language, “which we speak without having any real

* Observe, too, how Pestalozzi has taken the names of any obscure places that occurred to him at the moment, such as *Aberthan*, *Ala*, &c. Out of the 31 places whose names are given, five at most would deserve to be included in a school geography. Not a word is said about maps.

knowledge of the ideas conveyed by the words which we allow to run through our mouths." He combats "all scientific teaching which is analyzed, explained, and dictated by men who have not learnt to think and speak in harmony with the laws of nature," whose "definitions must be conjured into the soul like a *deus ex machinâ*, or must be blown into the ears as by stage-prompters;" the effect of which is that men "sink into a miserable mode of education, fit only for forming play-actors." He speaks with great warmth against "definitions not founded on observation." "A definition, (he says,) is the simplest expression of clear ideas, but for the child it contains truth only in so far as he has a clear and comprehensive view of the groundwork of observation on which these ideas are based; whenever he is left without the greatest clearness in the observation of a natural object which has been defined to him, he only learns to play with words like so many counters, deceives himself, and places a blind belief in sounds which will convey to him no idea, nor give rise to any other thought, except just this, that he has uttered certain sounds.*

Hinc illæ lacrymæ.

These excellent principles can not receive too much attention; but if Pestalozzi's own method of instruction be squared by them, it will be found to run quite counter to them. He begins, not with observations, but with words; with him, substantives stand in the place of the observation of objects, adjectives in the place of the observation of the properties of objects. His polemic against empty word-wisdom hits therefore his own method of instruction. Fichte says very truly in regard to Pestalozzi's idea: "In the field of objective knowledge, which relates to external objects, the acquaintance with the literal sign that represents the clearness and definiteness of the knowledge, adds nothing whatever for the student himself; it only heightens the value of the knowledge with reference, to its communication to others, which is a totally different matter. The clearness of such knowledge can result only from observation, and that which we can at pleasure reproduce in all its parts, just as it really is, in the imagination, is perfectly known, whether we have a word for it or not.

We are even of the opinion that this perfection of observation

* Pestalozzi also shows briefly and truly that none but those who have a thorough knowledge of a subject can possibly give a real explanation of it in words. "If I have not a clear perception of a thing," he says, "I can not say with certainty what its attributes are, much less what it is; I can not even describe it, much less define it. If then a third person puts into my mouth the words by means of which some other person, who had a clear conception of the thing, makes it intelligible to people of his own stamp, it is not on this account any clearer to me; but it is clear to the other person and not to me so long as the words of this person are not for me what they are for him; the definite expression of the full clearness of an idea."

should precede the acquaintance with the literal sign, and that the opposite way leads directly to that world of fog and shadows, and to that early use of the tongue, both of which are so justly hateful to Pestalozzi; nay even, that he who is only concerned to know the word at the earliest possible moment, and who deems his knowledge complete so soon as he knows it, lives precisely in that world of fog, and is only concerned for its extension."

We should have expected from Pestalozzi some directions, first, how to exercise the senses of children, and cultivate in them the power of rapidly arriving at clear conceptions of objects; second, how we should teach them to express in language the impressions of their senses—to translate their mute observations into words.

But Pestalozzi does give some hints, particularly as to the method in which instruction in natural history should be imparted. We must not allow the child to go into the woods and meadows, in order to become acquainted with trees and plants. "Trees and plants, (he says,) do not there stand in the order best adapted to make the character of each class apparent, and to prepare the mind by the first impressions of the objects for a general acquaintance with this department of science. It would make me too far away from my purpose, were I to refute this excessive pedantry of method, (with the best will in the world, I can find no better word for it,) against which every mind that has any degree of freshness, and is alive to the beauties of nature, will at once rise up in condemnation.

But, though nothing further is said, in the work before us, on the education of the senses, and the instruction in language connected therewith, Pestalozzi refers us to his "Book for Mothers," for more on these points. His principle, that the learning of a child must commence with what lies near to it, appears to have led him to the idea, that no natural object lay nearer to a child than its own body, and that therefore it should commence by observing that. The Book for Mothers describes the body, with all its limbs and parts of limbs, down to the minutest joints. Few persons, (I do not speak of surgeons,) are so well acquainted with the structure of the body as the child is to be made. Few people will understand, for instance, the following description: "The middle bones of the index finger are placed outside, on the middle joints of the index finger, between the back and middle members of the index finger," &c. The mother is to go through the book, word for word, with the child, making constant reference to the child's own body.

It was a great mistake on the part of Pestalozzi, to select the child's body as the first object on which it should exercise its faculties

of sight and speech, and, generally, the so-called exercises in observation employed by Pestalozzi and his school, ought properly to be regarded as exercises in reading, in which the object is far more to make the children acquainted with words and sentences than to give them distinct and lasting impressions, and a real knowledge of the thing spoken of. He who yesterday saw a man, with whose image he was so strongly impressed that he can to-day depict it from his inward conception—he who to-day can correctly sing from memory a melody which he heard yesterday—he who yesterday smelt vinegar, and to-day feels the water gather in his mouth at the recollection of the smell—gives proof of his observation by the conception which he has formed, even though he does not translate that conception into words. The generality of the exercises of Pestalozzi and his followers never produced such an imagination of perceptions as this.

Toward the conclusion of the work, Pestalozzi asks himself: "How does the question of religion stand with relation to the principles which I have adopted as true in regard to the development of the human race in general?"

It is difficult to follow him in his answer to this question. Every thing that is lofty in man is founded, according to him, in the relationship which subsists between the infant and its mother. The feelings of gratitude, confidence and love in the child toward the mother gradually unfold themselves, and are, at a later period, transferred by the child, on the admonition of the mother, to God. This, with Pestalozzi, is the *only* way of training the child in religion. It presupposes a mother pure as an angel, and a child originally quite innocent. The mother is also, like a saint, to take the child under her wings, when it grows up and is enticed to evil by the world, which is not innocent, "as God first created it." According to this view, motherless orphans must remain entirely without religious training. There is scarcely a word about the father; just once he is mentioned, and then it is said that he is "tied to his workshop," and can not give up his time to the child.

In short, the mother is represented as the mediator between God and the child. But not once is it mentioned that she herself needs a mediator; not once in the whole book does the name of Christ occur. It is nowhere said that the mother is a christian mother, a member of the church, and that she teaches the child what she, as a member of the church, has learnt. Holy writ is ignored; the mother draws her theology out of her own heart. There pervades this work therefore a decided alienation from Christ. But we shall afterward see

that it would be unjust to measure Pestalozzi's ideas on religious instruction by the untenable theory brought forward in the last chapters of this work.

Having thus considered the contents of this book, which was written and had its origin in Burgdorf, which contains fundamental educational principles of the highest value and importance, side by side with the most glaring educational blunders and absurdities, it will be of the greatest interest to hear how Pestalozzi performed his work as a teacher, and as the director of his institution, in Burgdorf. We shall obtain information on this point from a small but in many respects highly interesting and valuable pamphlet, entitled "A Short Sketch of my Educational Life, by John Ramsauer."* The writer, who was the son of a tradesman, and was born in 1790 at Herissu in the Swiss canton of Appenzell, migrated thence in 1800, along with forty-four other children from ten to fourteen years of age, at a time when several cantons, Appenzell among the rest, had been totally desolated in consequence of the French revolution; and he came thus to Schleumen, not far from Burgdorf. While at Schleumen, he attended the lower burgh school of Burgdorf, in which, as already stated, Pestalozzi taught. He gives the following account of Pestalozzi's teaching:—

"I got about as much regular schooling as the other scholars, namely, none at all; but his, (Pestalozzi's,) sacred zeal, his devoted love, which caused him to be entirely unmindful of himself, his serious and depressed state of mind, which struck even the children, made the deepest impression on me, and knit my childlike and grateful heart to his forever.

It is impossible to give a clear picture of this school as a whole; all that I can do is to sketch a few partial views.

Pestalozzi's intention was that all the instruction given in this school should start from form, number, and language, and should have a constant reference to these elements. There was no regular plan in existence, neither was there a time-table, for which reason Pestalozzi did not tie himself down to any particular hours, but generally went on with the same subject for two or three hours together. There were about sixty of us, boys and girls, of ages varying from eight to fifteen years; the school-hours were from 8 till 11 in the morning, and from 2 to 4 in the afternoon. The instruction which we received was entirely limited to drawing, ciphering, and exercises in language. We neither read nor wrote, and accordingly we had neither reading nor writing books; nor were we required to commit to memory any thing secular or sacred.

For the drawing, we had neither copies to draw from nor directions what to draw, but only crayons and boards; and we were told to draw "what we liked" during the time that Pestalozzi was reading aloud sentences about natural history, (as exercises in language.) But we did not know what to draw, and so it happened that some drew men and women, some houses, and others strings, knots, arabesques, or whatever else came into their heads. Pestalozzi never looked to see *what* we had drawn, or rather scribbled; but the clothes of all the scholars, especially the sleeves and elbows, gave unmistakable evidence that they had been making due use of their crayons.

For the ciphering, we had between every two scholars a small table

* When Pestalozzi himself speaks of his teaching, he is too apt to mix up what he intended with what he really effected.

pasted on mill-board, on which in quadrangular fields were marked dots, which we had to count, to add together, to subtract, to multiply, and divide by one another. It was out of these exercises that Krüsi and Buss constructed, first, the Unity Table, and afterward the Fraction Tables. But, as Pestalozzi only allowed the scholars to go over and to repeat the exercises in their turns, and never questioned them nor set them tasks, these exercises, which were otherwise very good, remained without any great utility. He had not sufficient patience to allow things to be gone over again, or to put questions; and in his enormous zeal for the instruction of the whole school, he seemed not to concern himself in the slightest degree for the individual scholar.

The best things we had with him were the exercises in language, at least those which he gave us on the paper-hangings of the school-room, and which were real exercises in observation. These hangings were very old and a good deal torn, and before these we had frequently to stand for two or three hours together, and say what we observed in respect to the form, number, position and color of the figures painted on them, and the holes torn in them, and to express what we observed in sentences gradually increasing in length. On such occasions, he would say: "Boys, what do you see?" (He never named the girls.)

Answer. A hole, (or rent,) in the wainscoat.

Pestalozzi. Very good. Now repeat after me:—

I see a hole in the wainscoat.

I see a long hole in the wainscoat.

Through the hole I see the wall.

Through the long narrow hole I see the wall.

Pestalozzi. Repeat after me:—

I see figures on the paper-hangings.

I see black figures on the paper-hangings.

I see round black figures on the paper-hangings.

I see a square yellow figure on the paper-hangings.

Besides the square yellow figure, I see a black round figure.

The square figure is joined to the round one by a thick black stroke.

And so on.

Of less utility were those exercises in language which he took from natural history, and in which we had to repeat after him, and at the same time to draw, as I have already mentioned. He would say:—

Amphibious animals.

Crawling amphibious animals.

Creeping amphibious animals.

Monkeys.

Long-tailed monkeys.

Short-tailed monkeys.

And so on.

We did not understand a word of this, for not a word was explained, and it was all spoken in such a sing-song tone, and so rapidly and indistinctly, that it would have been a wonder if any one had understood any thing of it, and had learnt any thing from it; besides, Pestalozzi cried out so dreadfully loud and so continuously, that he could not hear us repeat after him, the less so as he never waited for us when he had read out a sentence, but went on without intermission and read off a whole page at once. What he thus read out was drawn up on a half-sheet of large-sized mill-board, and our repetition consisted for the most part in saying the last word or syllable of each phrase, thus "monkeys—monkeys," or "keys—keys." There was never any questioning or recapitulation.

As Pestalozzi in his zeal, did not tie himself to any particular time, we generally went on till eleven o'clock with whatever he had commenced at eight, and by ten o'clock he was always tired and hoarse. We knew when it was eleven by the noise of other school children in the street, and then usually we all ran out without bidding good-bye.

Although Pestalozzi had at all times strictly prohibited his assistants from using any kind of corporal punishment, yet he by no means dispensed with it himself, but very often dealt out boxes on the ears right and left. But most of the scholars rendered his life very unhappy, so much so that I felt a real sympathy for him, and kept myself all the more quiet. This he soon observed, and many a time he took me for a walk at eleven o'clock, for in fine weather he went every day to the banks of the river Emme, and for recreation and amusement looked for different kinds of stones. I had to take part in this occupation

myself, although it appeared to me a strange one, seeing that millions of stones lay there, and I did not know which to search for. He himself was acquainted with only a few kinds, but nevertheless he dragged along home from this place every day with his pocket and his pocket handkerchief full of stones, though after they were deposited at home, they were never looked at again. He retained this fancy throughout his life. It was not an easy thing to find a single entire pocket handkerchief in the whole of the institution at Burgdorf, for all of them had been torn with carrying stones.

There is one thing which, though indeed unimportant, I must not forget to mention. The first time that I was taken in to Pestalozzi's school he cordially welcomed and kissed me, then he quickly assigned me a place, and the whole morning did not speak another word to me, but kept on reading out sentences without halting for a moment. As I did not understand a bit of what was going on, when I heard the word "monkey, monkey," come every time at the end of a sentence, and as Pestalozzi, who was very ugly, ran about the room as though he was wild, without a coat and without a neck-cloth, his long shirt-sleeves hanging down over his arms and hands, which swung negligently about, I was seized with real terror, and might soon have believed that he himself was a monkey. During the first few days too, I was all the more afraid of him, as he had, on my arrival, given me a kiss with his strong, prickly beard, the first kiss which I remembered having received in my life.

Ramsauer does not relate so much about the instruction given by the other teachers. Among the fruits of their instruction were two of the three elementary works which appeared in 1803, under Pestalozzi's name: (1.) "The ABC of Observation, or Lessons on the Relations of Size," (2.) "Lessons on the Relations of Number." (3.) The third elementary work alone was written by Pestalozzi himself; it is the one already mentioned, the "Book for Mothers, or Guide for Mothers in teaching their children to observe and speak."

The institution at Burgdorf attracted more and more notice; people came from a distance to visit it, induced particularly by Pestalozzi's work, "How Gertrude teaches her children." M. Decan Ith, who was sent by the Helvetian government in 1802, to examine the institution, made a very favorable report on it, in consequence of which the government recognized it as a public institution, and granted small salaries to the teachers out of the public funds.

But that government was dissolved by Napoleon the very next year, and the constitution of the cantons restored. The Bernese government now fixed on the castle of Burgdorf, as the seat of one of the chief magistrates of the canton; and Pestalozzi had to clear out of it, on the 22d of August, 1804.

In 1802, during Pestalozzi's stay at Burgdorf, Napoleon required the Swiss people to send a deputation to him at Paris. Two districts chose Pestalozzi as a deputy. Before his departure, he published a pamphlet, entitled "Views on the Objects to which the Legislature of Helvetia has to direct its attention." He put a memorandum on the wants of Switzerland into the hands of the First Consul, who paid as little attention to it as he did to Pestalozzi's educational efforts, declaring that he could not mix himself up with the teaching of the ABC.

The Bernese government gave up the monastery of Buchsee to Pestalozzi for his institution, and had the building properly arranged for him. Close by Buchsee lies the estate of Hofwyl, where Fellenberg resided, and to whom the teachers gave the principal direction of the institution, "not without my consent," says Pestalozzi, "but to my profound mortification."

Notwithstanding, Pestalozzi allows Fellenberg to have possessed in a high degree the talent of governing. In Fellenberg the intellect predominated, as in Pestalozzi the feelings; in the institution at Buchsee, therefore, "that love and warmth was missing which, inspiring all who came within its influence, rendered every one at Burgdorf so happy and cheerful: at Buchsee every thing was, in this respect, totally different. Still Buchsee had this advantage, that in it more order prevailed, and more was learned than at Burgdorf."

Pestalozzi perceived that his institution would not become independent of Fellenberg, so long as it should remain at Buchsee, and he gladly accepted, therefore, a highly advantageous proposal on the part of the inhabitants of Yverdon, that he should remove his institution to their town. He repaired thither, with some of his teachers and eight pupils; half a year later, the remaining teachers followed, having, as Pestalozzi remarks, soon found the government of Fellenberg far more distasteful than the want of government, under him, had ever been to them.

We now enter on a period when Pestalozzi and his institution acquired a European reputation, when Pestalozzian teachers had schools in Madrid, Naples, and St. Petersburg, when the emperor of Russia gave the venerable old man a personal proof of his favor and esteem, and when Fichte saw in Pestalozzi and his labors the commencement of a renovation of humanity.

But to write the history of this period is a task of unusual difficulty. On one side stand extravagant admirers of Pestalozzi, on the other bitter censurers; a closer examination shows us that both are right, and both wrong. A fearful dissension arises, in the institution itself, among the teachers; at the head of the two parties stand Niederer and Schmid, who abuse each other in a manner unheard of. With which party shall we side; or shall we side with neither, or with both?

If we ask to which party Pestalozzi inclined, or whether he held himself above the parties, and then go entirely according to his judgment, our embarrassment will only be increased. He pronounced a very different opinion on the same man at different times: at one time he saw in him a helping angel, before whom he humbled himself

more than was seemly, and from whom he expected every benefit to his institution; at another time, he saw in him an almost fiendish being, who was only bent on ruining the institution.

If any fancy that they have a sure source of information in the account drawn up by Pestalozzi and Nieder, and published in 1807, namely, the "Report on the State of the Pestalozzian Institution, addressed to the Parents of the Pupils and to the Public;" they will be undeceived by some remarks which Pestalozzi himself added to that report at a later period, in the collected edition of his works, but still more so in, "The Fortunes of my Life." This work is altogether at variance with those which give a high degree of praise to the Pestalozzian Institution, in its former condition. From the year in which the dispute between Niederer and Schmid, broke out, (1810,) most of those who give any information on the subject range themselves on Niederer's side; while Pestalozzi himself, from the year 1815 till his death, holds unchangeably with Schmid.

I should despair of ever being able to thread my way in this labyrinth with any degree of certainty, were it not for the fact that I resided some time in the institution, namely, from October, 1809, till May, 1810, and there became more intimately acquainted with persons and circumstances than I could otherwise have been.

A friend, (Rudolph von Przystanowski,) accompanied me to Yverdun, where we arrived toward the end of October. It was in the evening of a cold rainy day that we alighted at the hotel called the Red House. The next morning we went to the old castle, built by Charles the Bold, which with its four great round towers incloses a courtyard. Here we met a multitude of boys; we were conducted to Pestalozzi. He was dressed in the most negligent manner: he had on an old grey overcoat, no waistcoat, a pair of breeches, and stockings hanging down over his slippers; his coarse bushy black hair uncombed and frightful. His brow was deeply furrowed, his dark brown eyes were now soft and mild, now full of fire. You hardly noticed that the old man, so full of geniality, was ugly; you read in his singular features long continued suffering and great hopes.

Soon after, we saw Niederer,* who gave me the impression of a young Roman Catholic priest; Krüsi,* who was somewhat corpulent, fair, blue-eyed, mild and benevolent; and Schmid,* who was, if possible, more cynical in his dress than Pestalozzi, with sharp features and eyes like those of a bird of prey.

At that time 137 pupils, of ages varying from six to seventeen

* A biographical sketch of Niederer, Krüsi, and Schmid, will be given at the close of the life of Pestalozzi.—ED.

years, lived in the institution ; 28 lodged in the town, but dined in the institution. There were in all, therefore, 165 pupils. Among them there were 78 Swiss ; the rest were Germans, French, Russians, Italians, Spaniards, and Americans. Fifteen teachers resided in the institution, nine of whom were Swiss teachers, who had been educated there. Besides these, there were 32 persons who were studying the method : seven of them were natives of Switzerland. The interior of the building made a mournful impression on me ; but the situation was extremely beautiful. An extensive meadow separates it from the southern end of the glorious lake of Neuchâtel, on the west side of which rises the Jura range of mountains, covered with vineyards. From the heights of the Jura, above the village of Granson, rendered famous by the defeat of Charles the Bold, you survey on the one side the entire chain of the Alps, from Mount Pilatus, near Lucerne, to Mount Blanc ; on the other side you see far away into France.

A short time after my arrival, I went to live in the institution, where I took my meals, and slept along with the children. If I wanted to do any work for myself, I had to do it while standing at a writing desk in the midst of the tumult of one of the classes. None of the teachers had a sitting-room to himself. I was fully determined to devote all my energies thenceforth to the institution, and accordingly I had brought with me Freddy Reichardt, the brother of my future wife, a boy of eight years, and now placed him among the other scholars. My position was well suited to enable me to compare the reports on the institution with what I daily saw and experienced. The higher my expectations had been raised by that report, the deeper was my pain, as I was gradually undeceived ; I even thought I saw the last hopes of my native land disappear.

It is scarcely necessary for me to particularize the respects in which I was undeceived ; they may be learnt from Pestalozzi's notes to the latter copy of his report, but especially from his work, "The Fortunes of my Life." Nevertheless I will advert to one or two principal points.

I will particularly advert to what is said in the report about the spirit of the institution, which is represented as being similar to that which pervades a family.

"We may with a good conscience, declare publicly, that the children in our institution are happy and cheerful ; that their innocence is preserved, their religious disposition cherished, their mind formed, their knowledge increased, their hearts elevated. The arrangements which have been adopted for attaining these objects possess a quiet inward power. They are based principally on the benevolent and amiable character which distinguishes the teachers of our house, and which is supported by a vigorous activity. There reigns throughout the entire institution the spirit of a great domestic union, in which, according to the requirements of such a union, a pure paternal and fraternal feeling every where

shines forth. The children feel themselves free, their activity finds even a powerful charm in their employments; the confidence reposed in them, and the affection shown toward them, elevate their sentiments." "The life in the house is, to a rare extent, a school for cultivating domestic affection and domestic unity." "All the teachers in common, acting as an organized whole, do for all the children what a careful mother does for the few children of her own family." The body of teachers "attains the most perfect unity of thought and action, and appears to the children as only one person."

"In general, it is to be remarked that we seek throughout to awaken and to foster the spirit of peace, of love, and of mutual brotherly fellowship. The disposition of the great body of our inmates is good. A spirit of strength, of repose, and of endeavor rests on the whole. There is much in our midst that is eminently good. Some pupils evince an angelic disposition, full of love and of a presentiment of higher thoughts and a higher existence. The bad ones do not feel themselves comfortable in the midst of our life and labor; on the other hand, every spark of good and noble feeling which still glimmers even in the bad ones encouraged and developed. The children are in general neither hardened by punishment, nor rendered vain and superficial by rewards. The mild forbearance of the most amiable household has the most undisturbed play in our midst. The children's feelings are not lightly wounded. The weak are not made to compare themselves with the strong, but with themselves. We never ask a pupil if he can do what another does. We only ask him if he can do a thing. But we always ask him if he can do it perfectly. As little of the struggle of competition takes place between one pupil and another, as between affectionate brothers and sisters who live with a loving mother in a happy condition."

"We live together united in brotherly love, free and cheerful, and are, in respect to that which we acknowledge as the one thing needful, one heart and one soul. We may also say that our pupils are one heart and one soul with us. They feel that we treat them in a fatherly manner; they feel that we serve them, and that we are glad to serve them; they feel that we do not merely instruct them; they feel that for their education we give life and motion to every thing in them that belongs to the character of man. They also hang with their whole hearts on our actions. They live in the constant consciousness of their own strength."

Must not even a sober reader of these passages be led to believe that a spirit of the most cordial love and concord reigned in a rare manner in the Pestalozzian institution. How much more did I believe so, who, deeply distressed by the calamities of those days, and inspired with hope by the eloquence of Fichte, perceived in Yverdun the commencement of a better time, and ardently longed to hasten its approach. Those who did not themselves live through those years of anguish, in which injustice increased and love waxed cold in the hearts of many, may perhaps smile at the enthusiasm of despair.

Pestalozzi himself says of the institution that, as early as the time when it was removed from Buchsee to Yverdun, it bore within itself "the seeds of its own internal decay, (these are his own words,) in the unequal and contradictory character of the abilities, opinions, inclinations, and claims of its members; although as yet this dissension had done any thing but declare itself general, unrestrained, and fierce." He says, that nevertheless many of the members were still desirous for peace, and that others were moderate in their views and feelings. "But the seeds of our decay had been sown, and though they were still invisible in many places, had taken deep root. Led aside by

worldly temptations and apparent good fortune from the purity, simplicity, and innocence of our first endeavors, divided among ourselves in our inmost feelings, and from the first made incapable, by the heterogeneous nature of our peculiarities of ever becoming of one mind and one heart in spirit and in truth for the attainment of our objects, we stood there outwardly united, even deceiving ourselves with respect to the real truth of our inclination to this union, and unfortunately we advanced, each one in his own manner, with firm and at one time with rapid steps along a path which, without our being really conscious of it, separated us every day further from the possibility of our ever being united.

What Ramsauer says entirely agrees with this. In Burgdorf, he says, there reigned a kindly spirit. "This ceased when the family life was transformed in the institution into a constitutional state existence. Now the individual was more easily lost in the crowd: thus there arose a desire on his part to make himself felt and noticed. Egotism made its appearance every day in more offensive forms. Envy and jealousy rankled in the breasts of many." "Much indeed was said about 'a domestic life,' which ought to prevail in an educational establishment, just as a very great deal was said and written about an 'harmonious development of all the faculties of the pupil;' but both existed more in theory than in practice. It is true, that a good deal of common interest was evinced in the general working of the institution, but the details were allowed to go on or stand still very much as they might, and the tone of the whole house was more a tone of pushing and driving than one of domestic quietude."

In the report is this passage: "In respect to the execution of the design, we may say decidedly, that the institution has stood the fiery ordeal of eight severe years."

On this passage Pestalozzi remarks as follows in 1823: "What is here said in confirmation of this view is altogether a consequence of the great delusion under which we lay at that period, namely, that all those things in regard to which we had strong intentions and some clear ideas, were really as they ought to have been, and as we should have liked to make them. But the consequences of the partial truth which in this instance had hold of our minds were, from want of sufficient knowledge, ability, and skill for carrying it out, fixed in our midst, confused, and made the seed of countless weeds, by which the good seed that lay in the ground was on all sides crowded, and here and there choked. Neither did we perceive the weeds at that time; indeed, as we then lived, thought, acted, and dreamt, it was impossible that we should perceive them."

I am fully aware that by some these later observations of Pestalozzi have been attributed partly to the weakness of old age, partly to the influence of Schmid. To this I can not assent. As early as new year's day, 1808, at the same time as the report appeared, Pestalozzi said to his teachers :

"My work was founded in love ; love vanished from our midst ; it could not but vanish. We deceived ourselves as to the strength which this love demands ; it could not but vanish. I am no longer in a position to provide any help for it. The poison which eats into the heart of our work is accumulating in our midst. Worldly honor will increase this poison. O God, grant that we may no longer be overcome by our delusion. I look upon the laurels which are strewn in our path as laurels set up over a skeleton. I see before my eyes the skeleton of my work, in so far as it is my work. I desire to place it before your eyes. I saw the skeleton which is in my house appear crowned with laurels before my eyes, and the laurels suddenly go up in flames. They can not bear the fire of affliction which must and will come upon my house ; they will disappear ; they must disappear. My work will stand. But the consequences of my faults will not pass away. I shall be vanquished by them. My deliverance is the grave. I go away, but you remain, Would that these words now stood before your eyes in flames of fire !—Friends, make yourselves better than I was, that God may finish his work through you, as he does not finish it through me. Make yourselves better than I was. Do not by your faults lay those same hindrances in your way that I have lain in mine. Do not let the appearance of success deceive you, as it deceived me. You are called to higher, to general sacrifice, or you too will fail to save my work. Enjoy the passing hour, enjoy the fullness of worldly honor, the measure of which has risen for us to its greatest height ; but remember that it vanishes like the flower of the field, which blooms for a little while, but soon passes away."

What contradictions ! Does then the same fountain send forth both sweet and bitter ? Was the report actually intended to deceive the world ?

Never ; but Pestalozzi was not entirely free from an unfortunate spirit of worldly calculation, although his calculations in most cases turned out incorrect. Ever full of the idea of spreading happiness over many lands, in a short time, by means of his methods of instruction and education, he naturally considered it all-important that people should have a good opinion of his institution. By the bulk of the public, indeed, the institution was taken as substantial evidence for or against the excellence and practicability of his educational ideas : with it they stood or fell.

The concern which Pestalozzi felt about the reputation of his establishment became especially apparent when foreigners, particularly persons of distinction, visited Yverdun.

"As many hundred times in the course of the year," says Ramsauer, "as foreigners visited the Pestalozzian Institution, so many hundred times did Pestalozzi allow himself, in his enthusiasm, to be deceived by them. On the arrival of every fresh visitor, he would go to the teachers in whom he placed most confidence and say to them : 'This is an important personage, who wants to become acquainted with all we are doing. Take your best pupils and their analysis-books, (copy-books in which the lessons were written out,) and show him what we can do and what we wish to do.' Hundreds and hundreds of times there came to the institution, silly, curious, and often totally uneducated persons, who came because it was the 'the fashion.' On their account, we

usually had to interrupt the class instruction and hold a kind of examination. In 1814, the aged Prince Esterhazy came. Pestalozzi ran all over the house, calling out: 'Ramsauer, Ramsauer, where are you? Come directly with your best pupils to the Red House, (the hotel at which the Prince had alighted.) He is a person of the highest importance and of infinite wealth; he has thousands of bond-slaves in Hungary and Austria. He is certain to build schools and set free his slaves, if he is made to take an interest in the matter.' I took about fifteen pupils to the hotel. Pestalozzi presented me to the Prince with these words: 'This is the teacher of these scholars, a young man who fifteen years ago migrated with other poor children from the canton of Appenzell and came to me. But he received an elementary education, according to his individual aptitudes, without let or hindrance. Now he is himself a teacher. Thus you see that there is as much ability in the poor as in the richest, frequently more; but in the former it is seldom developed, and even then, not methodically. It is for this reason that the improvement of the popular schools is so highly important. But he will show you every thing that we do better than I could. I will, therefore, leave him with you for the present.' I now examined the pupils, taught, explained, and bawled, in my zeal, till I was quite hoarse, believing that the Prince was thoroughly convinced about every thing. At the end of an hour, Pestalozzi returned. The Prince expressed his pleasure at what he had seen. He then took leave, and Pestalozzi, standing on the steps of the hotel, said: 'He is quite convinced, quite convinced, and will certainly establish schools on his Hungarian estates.' When we had descended the stairs, Pestalozzi said: 'Whatever ails my arm? It is so painful. Why, sec, it is quite swollen, I can't bend it.' And in truth his wide sleeve was now too small for his arm. I looked at the key of the house-door of the *maison rouge* and said to Pestalozzi; 'Look here, you struck yourself against this key when we were going to the Prince an hour ago.' On closer observation it appeared that Pestalozzi had actually bent the key by hitting his elbow against it. In the first hour afterward he had not noticed the pain, for the excess of his zeal and his joy. So ardent and zealous was the good old man, already numbering seventy years, when he thought he had an opportunity of doing good. I could adduce many such instances. It was nothing rare in summer for strangers to come to the castle four or five times in the same day, and for us to have to interrupt the instruction on their account two, three or four times."

After this highly characteristic account, I ask the reader whether he will cast a stone at the amiable and enthusiastic old man? I certainly will not, though I could heartily have wished that, faithful in small things and mindful of the grain of mustard seed, he had planted his work in stillness, and that it had been slow and sound in its growth, even if it had been observed by only a few.

The source of the internal contradiction which runs through the life of Pestalozzi, was, as we saw from his own confessions, the fact that, in spite of his grand ideal, which comprehended the whole human race, he did not possess the ability and skill requisite for conducting even the smallest village school. His highly active imagination led him to consider and describe as actually existing in the institution whatever he hoped sooner or later to see realized. His hopeful spirit foresaw future development in what was already accomplished, and expected that others would benevolently do the same. This bold assumption has an effect on many, especially on the teachers of the institution. This appears to explain how, in the report on the institution, so much could be said *bonâ fide* which a sober spectator was forced to pronounce untrue.

But this self-delusion is never of long duration ; the period of overstrung enthusiasm is followed by one of hopelessness and dejection. The heart of man is indeed an alternately proud and dejected thing ! Such an ebb and flow of lofty enthusiasm and utter despair pervades the entire life of Pestalozzi. The address which he delivered to his teachers in 1808 appears almost as the *caput mortuum* of the report : the truth at last makes itself heard in tones of bitter remorse. Pestalozzi makes a more tranquil confession concerning the early times of Yverdun, at a later period of his life, in his autobiography. More than sixteen years had elapsed, and passion had cooled down. He states soberly what he had enthusiastically wished to accomplish in those earlier days ; he acknowledges that he had deceived himself and he can now therefore relate the history of the institution clearly and truthfully. But the times less removed from him are still too present to his feelings, too near to his impassioned gaze, for him to be able to delineate them with the same historical clearness in that work.

The report speaks of the instruction imparted in the institution in a way which can not have failed to give offense to persons who were not enthusiastically prejudiced in favor of Pestalozzi. Listen to these remarks :—

“With regard to the subjects of the instruction generally, the following is what may be stated. The child learns to know and exercise himself, that is, his physical, intellectual, moral, and religious faculties. With this instruction to the child about himself, instruction about nature keeps pace. Commencing with the child in his domestic relations, the latter instruction gradually embraces human nature in all the above mentioned aspects. And in the same way, commencing with the circle of the child’s observation, it gradually embraces the whole of external nature. From the first starting point, the child is led to an insight into the essential relations of mankind and society ; from the second to an insight into the relations in which the human race stands to external nature, and external nature to the human race. Man and nature, and their mutual relation, constitute, therefore, the primary matter of the instruction ; and from these subjects the knowledge of all separate branches of study is developed. It must here be remarked, however, that the aim of the instruction is not to make the pupils comprehend man and nature merely externally, that is, merely in so far as they present isolated imperical characteristics, capable of being arranged either in a logical sequence of separate units, or in any other order that may be convenient. The aim is rather to make the pupils observe things as a living and organic whole, harmoniously bound together by necessary and eternal laws, and developing itself from something simple and original, so that we may thus bring them to see how one thing is linked in another. The instruction, as a whole, does not proceed from any theory, but from the very life and substance of nature ; and every theory appears only as the expression and representation of this observed life and substance.”

I am relieved from the necessity of offering any criticism on this passage by a note which Pestalozzi added to it fifteen years later. “In this and several other passages,” says the venerable old man, “I express, not so much my own peculiar views on education in their original simplicity, as certain immature philosophical views, with

which, at that time, notwithstanding all our good intentions, most of the inmates of our house, myself among the rest, must needs perplex our heads, and which brought me personally to a standstill in my endeavors. These views caused the house and the institution, both of which attained at this period a seeming flourishing condition, to go rotten at the roots; and they are to be looked upon as the hidden source of all the misfortunes which have since come upon me."

It would take too long to follow the report in the accounts which it gives of the instruction in the separate branches of knowledge. In every thing Pestalozzi wants to be entirely novel, and just for this reason he falls into mistakes. Take, as a specimen, the following on the instruction in geography:—

"The instruction in this subject begins with the observation of the district in which we live, as a type of what the surface of the earth presents. It is then separated into elementary instruction, which includes physical, mathematical, and political geography, and (2.) the topographical part, in which each of the departments of the subject suggested by the observation of the surrounding district is prosecuted in a graduated course, and their reciprocal bearings brought out. By this foundation, the pupils are prepared for forming a clear and comprehensive view of the earth and man, and their mutual influence on each other, of the condition of states and peoples, of the progress of the human race in intellectual culture, and lastly of physical science in its broader outlines and more general relations. The children are made acquainted with the statistical portion of the subject, that is, the natural productions, the number of inhabitants, form of government, &c., by means of tabular views."

After this, need we wonder when we find Pestalozzi, in his memoirs, speaking of the earlier days of Yverdon in the following manner? "The desire of governing, in itself unnatural, was called forth among us at this period, on the one hand, by the reputation of our modes of instruction, which continued to increase after our return to Yverdon, and the intoxicating good fortune that streamed to nearly every fool who hung out the sign-board of an elementary method which, in reality, did not as yet exist; on the other, by the audacity of our behavior toward the whole world, and toward every thing that was done in education and was not cast in our mould. The thing is melancholy; but it is true. We poor weak birds presumed to take our little nestlings, ere they were fairly out of their shells, on flights which even the strongest birds do not attempt until their young ones have gained strength in many previous trials. We announced publicly things which we had neither the strength nor the means to accomplish. There are hundreds and hundreds of these vain boastings of which I do not like to speak."

No wonder that, in this state of things, there arose a determined opposition to the institution. In Switzerland especially, Pestalozzi says, the public journals began "to speak decidedly against our pretensions, asserting that what we did was by no means what we

considered and represented ourselves to be doing. But, (he continues,) instead of penitently returning to modesty, we sturdily resisted this opposition. While participating in this temerity, which is now incomprehensible to me, I began to be sensible that we were treading in paths which might lead us astray, and that, in truth, many things in the midst of us were not as they should have been, and as we endeavored to make them appear in the eyes of the world."

Other members of the institution thought quite differently; full of self-confidence, they pressed for a formal examination; and in the month of May, 1809, an application to that effect was made to the Swiss Diet, then assembled at Freiburg. The request was granted, and Merian, member of the executive council of Basel; Trechsel, professor of mathematics, at Bern; and Père Girard, of Freiburg, were commissioned by Governor D'Affry to examine the institution.

In November, 1809, just after I had arrived in Yverdon, this commission of inquiry came down and remained five days. They were five sultry days for Pestalozzi and his teachers; it was felt that the commission, which confined itself strictly to actual results, would make no very enthusiastic report. Père Gerard wrote the report in French, Professor Trechsel translated it into German; on the 12th of May, 1810, it was presented to the Diet, then assembled at Solothurn. In the following year, the thanks of the country were accorded to Pestalozzi, by the Diet; and there the matter was allowed to rest.

I believe that the commission pronounced an impartial judgment; the conclusion of the report speaks for the whole. "The educational methods of the institution, (say the commissioners,) stand only in very imperfect connection with our establishments for public instruction. The institution has in no way aimed at coming into harmony with these public schools. Determined at any price to interest all the faculties of children, in order to guide their development according to its own principles, it has taken counsel of its own views only, and betrays an irresistible desire to open for itself new paths, even at the cost of never treading in those which usage has now established. This was perhaps the right means for arriving at useful discoveries, but it was also a design which rendered harmony impossible. The institution pursues its own way; the public institutions pursue theirs; and there is no probability that both ways will very soon meet. It is a pity that the force of circumstances has always driven Mr. Pestalozzi beyond the career which his pure zeal and his fervent charity had marked out for him. A good intention, noble endeavors, indefatigable perseverance, should and will always meet with justice. Let us profit by the excellent ideas which lie at the foundation of the whole

undertaking; let us follow its instructive examples; but let us also lament that an adverse fate must hang over a man, who, by the force of circumstances, is constantly hindered from doing what he would wish to do."

After the publication of the report, there arose a long and violent literary warfare, which did any thing but add to the credit of the institution.* With this war against external foes, was unfortunately associated an internal feud, which ended in the departure of Schmid and others of the teachers.

One of Pestalozzi's biographers states, that Schmid's pride and pretensions had grown to such an extent, that he had acted with the greatest harshness toward Pestalozzi, Niederer, and Krüsi. "This was caused," continues the biographer, "by some ideas which he had partially caught up from two scientific men who were then stopping with Pestalozzi, (one of them is now a man of note in Silesia.) Perhaps at that time these ideas were not very clearly defined in the minds of those men themselves."†

The biographer means me and my friend; I shall therefore not be misunderstood, if I relate briefly the matter to which he refers.

I had come to learn and to render service. On this account, I took up my quarters entirely in the old building of the institution, slept in one of the large dormitories, took my meals with the children, attended the lessons, morning and evening prayers, and the conferences of the teachers. I listened and observed attentively in silence; but I was far from thinking of commencing myself to teach. My opinion upon all the things that I saw and heard was formed very much with reference to the boy of eight years intrusted to my care, accordingly as they contributed to his comfort or otherwise. Several weeks had passed on in this way, when I was one evening with Pestalozzi and the rest of the teachers at the hotel of the Wild Man, where they used to meet I think once a fortnight. After supper, Pestalozzi called me into an adjoining room; we were quite alone. "My teachers are afraid of you," he said, "because you only listen and look on in silence; why do you not teach?" I answered that before teaching, I wished to learn—to learn in silence. After the

* The well-known K. L. von Haller noticed the report of the commission in terms of high praise, in the *Göttingen Literary Advertiser*, of the 13th of April, 1811, and at the same time accused the Pestalozzian Institution of inspiring its pupils with an aversion from religion, the constituted authorities, and the aristocracy. In reply to this, Niederer wrote "The Pestalozzian Institution to the Public." This pamphlet appeared in a new form in 1812, under the title, "Pestalozzi's Educational Undertaking in relation to the Civilization of the Present Time." Bremi, of Zurich, wrote in reply to the former pamphlet: Pestalozzi and Niederer wrote again in reply to Bremi. Niederer professes to have convicted Bremi of ninety-two lies, thirty-six falsifications, and twenty calumnies.

† Henning, in the *Schulrath*. (an educational periodical)
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conversation had touched on one thing and another, he frankly told me things about several of his teachers which put me into a state of astonishment, and which stood in direct contradiction with what I had read in the report, but not with what I had myself already observed or expected. Pestalozzi followed up these disclosures with the proposal, that I and my friend, in company with Schmid, whom he highly praised, especially for his practical ability and his activity, should set to work to renovate the institution.

The proposal came upon me so unexpectedly, that I begged for time to think of it, and discussed the matter with my friend, who was just as much surprised as I was. We were both naturally brought by this means into a closer relation with Schmid, became in a short time acquainted with the *arcana imperii*, and honestly considered what obstacles stood in the way of the prosperity of the institution, and what could be done to remove them.

Foremost of these was the intermixture of German and French boys, which doubly pained me, as I had come from Paris. The parents thought otherwise: they perceived in this very intermixture a fortunate means of training their children in the easiest way to speak both languages: whereas the result was, that the children could speak neither. With such a medley of children, the institution was devoid of a predominant mother-tongue, and assumed the mongrel character of border-provinces. Pestalozzi read the prayers every morning and evening, first in German, then in French! At the lessons in the German language, intended for German children, I found French children who did not understand the most common German word. This, and much more that was to be said against this intermixture, was now discussed with Pestalozzi, and the proposal was made to him, to separate the institution into two departments, one for German, the other for French children. Only in this way, it was represented to him, could the education of each class of children be successfully conducted.

The proposal was not accepted, chiefly on account of external obstacles, which might however have been overcome. A passage in Pestalozzi's "Fortunes" shows that he afterward thoroughly agreed with us. In this passage he calls it an unnatural circumstance, that the institution was transplanted from Burgdorf to Yverdun, "from German to French soil." "When we first come here," he continues, "our pupils were nearly all Germans; but there was very soon added to them an almost equal number of French children. Most of the German children were now intrusted to us, not with any particular reference to any elementary or other education, but simply in order

that they might learn to speak French in a German house, and this was the very thing that we were least able to teach them; so also most of the French parents intrusted their children to us, in order that they might learn German in our German house: and here we stood between these two claims, equally unable to satisfy either the one or the other. At the same time, the persons on either side, who committed their children to our care, saw with as little distinctness what they really wished of us, as we did the extent of our inability to satisfy their real wishes. But it had now become the fashion to send us children from all sides; and so, in respect to pecuniary resources and eulogistic prattle, things went on for a considerable time in their old glittering but deceptive path."

The second evil was this. Much as is said in the report about the life in the institution having quite the character of that in a family, and even excelling it in many respects, still nothing could be less domestic than this life was. Leaving out of consideration Pestalozzi's residence, there were indeed in the old castle class rooms, dining rooms, and bed rooms, but the parlor, so justly esteemed by Pestalozzi, was altogether wanting. Older boys who, as the expression is, had arrived at years of indiscretion, may have felt this want less; but so much the more was it felt by the youngest—by children of six to ten years. I felt deeply on this account for my little Freddy, who, until he came to the institution, had grown up under the care of a tender mother in a lovely family circle. His present uncomfortable and even desolate existence grieved me much, and troubled my conscience. For his sake, and at the same time, for the sake of the rest of the little boys, we begged Pestalozzi to rent a beautiful dwelling house in the vicinity of Yverdon, where the children might find a friendly compensation for the life of the family circle which they had lost. We offered to take up our abode with them.

This proposal also was declined. It may easily be supposed that in the consultation upon it, the weak side of the institution, the want of a parlor, and the impossibility even of supplying the place of the family life, was very fully discussed.*

Many of the conversations I had with Pestalozzi I shall never forget. One of them concerned the teachers of the institution, in particular the under-teachers. I saw that many of them labored with the greatest fidelity and conscientiousness, even sacrificing themselves

* We made a third proposal, because it appeared to us to be impossible that Pestalozzi's ideas could be realized in Yverdon under the then existing circumstances. We asked him to establish in the canton of Argovia the long promised poor school, and offered to engage in the work ourselves to the best of our ability. As he declined this proposal also, I thought it my duty, especially on account of the boy confided to me, to leave the institution.

for the good of the institution. I need only refer the reader to the autobiography of honest, manful Ramsauer, for evidence of this fact. But still there was something wanting in most of the teachers; this Pestalozzi himself could not help feeling. In his new year's address of 1811, he said to them: "Do not attach a higher value to the ability to teach well, than that which it really has in relation to education as a whole. You have, perhaps, too early in your lives had to bear burdens which may have diminished somewhat the lovely bloom of your youth; but to you as educators, that bloom is indispensable. You must seek to restore it. I am not ignorant of your ability, your worth; but just because I know them, I would wish to set upon them the crown of an amiable disposition, which will increase your worth and make even your ability a blessing."

In what then were the teachers deficient? Pestalozzi points out one thing: many who had grown up in the institution had too early borne burdens, and had been kept in uninterrupted exertion. "Those teachers who had been pupils of Pestalozzi," says Ramsauer, "were particularly hard worked, for he at all times required much more from them, than he did from the other teachers; he expected them to live entirely for the house,—to be day and night concerned for the welfare of the house and the pupils. They were to help to bear every burden, every unpleasantness, every domestic care, and to be responsible for every thing. Thus, for example, in their leisure hours, (that is when they had no lessons to give,) they were required at one time to work some hours every day in the garden, at another to chop wood for the fires, and, for some time, even to light them early in the morning, or transcribe, &c. There were some years in which no one of us were found in bed after three o'clock in the morning; and we had to work summer and winter, from three in the morning till six in the evening."* Nearly all the work consisted in the direct performance of school duties; the teachers had no time to think of their own improvement.

There was another thing. Most of the teachers of the institution might be regarded as so many separate and independent teachers, who had indeed received their first instruction there, but who had passed much too soon from learning to teaching, and wished to see how they could fight their way through. There was never any such thing as a real pedagogical lecture. Under such a course of training, it could not happen otherwise than that some of the teachers should strike into peculiar paths: of this Schmid gave an example. But it was an

* Ramsauer's time-table shows that, from two or three o'clock in the morning till nine in the evening, he was almost constantly occupied with official duties.

equally necessary consequence, that the usual characteristic of such teachers should make itself apparent : namely, a great want of self-knowledge and of a proper modest estimate of their own labors.

“Man only learns to know himself in man.”

I must know what others have done in my department of science, in order that I may assign the proper place and rank to my own labors. It is incredible, how many of the mistaken views and practices of Pestalozzi and his teachers sprang from this source.

But there was a third thing that I brought against Pestalozzi : his view of the teachers, and their relation to the methods and the methodical compendiums. As already mentioned, the compendiums were to render all peculiar talent and skill in teaching as good as unnecessary. These methodical compendiums were like dressing machines, which did not, unfortunately, quite supply the place of the teachers, but still left the services of a man necessary ; just as in the most perfect printing presses, a man must always be appointed, though indeed he scarcely requires the most ordinary degree of intelligence.

Pestalozzi's idea of a teacher was not much better than this ; according to his views, such a one had nothing to do, but to take his scholars through the compendium, with pedantic accuracy, according to the directions how to use it, without adding thereto, or diminishing therefrom. He was never required to be more than just a step in advance of the scholars. Just as if a guide with a lantern were to be given to a man traveling in the night, and the guide had not only to light the traveler, but first to find out the way himself with the aid of the lantern. The real teacher must have the destination and the road to it so clear before his mind, that he shall be able to guide the scholars without a lantern—without a book of method. He must be able to say, *La méthode c'est moi*.*

But can any one imagine a more miserable piece of slave-work than that of a teacher who is strictly tied to a Pestalozzian compendium ? Is not all peculiar teaching power thereby fettered,—all disposition to sprightliness and decision in teaching and acting kept down,—all affectionate relation between teacher and scholar rendered impossible ?†

At that time the institution appeared to me, in moments of sadness, as a great noisy education factory ; many mistook the dull noise

* “Every teacher,” says Herder, “must have his own method ; he must have created it with intelligence for himself, otherwise he will not be successful.”

† On leaving Yverdon in 1810 and going to Berlin, I attended an examination at Plamann's institution. How the free, independent, and untrammelled teaching of Friesen and Harnisch contrasted with the cold, methodical, and constrained teaching of many Pestalozzian teachers !

of the machines for an expression of youthful joyousness on the part of the pupils, while engaged in learning.

Pestalozzi's view of the task of the teachers was too intimately connected with his general views on education, and had been too much realized in the institution to allow me to entertain the idea of his changing it, although the good old man bitterly felt that my observation was not without foundation.

At a later period, when the brilliancy of the reputation of the institution was decreasing more and more, Pestalozzi saw his under-teachers in the year 1817, as he relates, "suddenly combine, like English factory work-people, desist by common consent from the performance of their duties, and declare in a body that they would give no more lessons, but would remain in a state of complete strike-idleness, until the salary of every one of them should be doubled."

Pestalozzi pressed me to teach mineralogy, and in doing so to make use of a small collection of minerals which the institution possessed. I replied that, if I did do so, I must entirely depart from the methods of instruction pursued in the institution. How so? asked Pestalozzi. According to that method, I replied, I should have to do nothing but to hold up before the boys one specimen of the collection after another, to give the name of each, for example, "that is chalk," and thereupon to make the class repeat in unison three times, "that is chalk." It was thought that in this way the observation of actual objects and instruction in language were provided for at the same time.

I endeavored to explain that such a mode of instruction made a mere show, giving the children words before they had formed an idea of the images of the minerals; that moreover this process of perception and conception was only disturbed by the talking of the teacher and the repetition of the scholars, and was therefore best done in silence. On Pestalozzi's opposing this view, I asked him why children are born speechless, and do not begin to learn to speak until they are about three years old; why we should in vain hold a light before a child eight days old, and say "light" three times, or even a hundred times, as the child would certainly not try to repeat the word; whether this was not an indication to us from a higher hand, that time is necessary for the external perception of the senses to become internally appropriated, so that the word shall only come forth as the matured fruit of the inward conception now fully formed. What I said about the silence of children struck Pestalozzi.

As far as my recollection extends, I have now related the most important matters that were discussed between Pestalozzi, Schmid, and

myself. I should at the present day still uphold the views which I entertained at that time ; but, taught by so much experience, I should perhaps be able to do so with greater "clearness" than I could then have done.

But here I will by no means represent myself as blameless, and accuse others. Although I believe that my opinions were right, I know that my conduct was wrong in several respects ; but this the unhappy circumstances of the institution will perhaps in some measure excuse. I will only mention one thing. Unfortunately, Niederer and Schmid were already placed in complete opposition to each other by their different capabilities, labors, and aims ; in spite of my best endeavors, I found it impossible to effect a mediation between them, there was nothing left me but to side with the one or the other. Pestalozzi himself allied me with Schmid, whose resolute and restless activity was a pledge to me that he would render powerful assistance in introducing reforms. I was thus brought almost involuntarily into opposition with Niederer. Even though I did not altogether agree with his views, I ought to have emphatically acknowledged his self-sacrificing enthusiasm. I felt myself drawn to Krüsi by his mild disposition, but he too was against Schmid.

My silent observation was distasteful to the younger teachers ; can I blame them for it ? While they were toiling with unheard of exertion from morning till night, and had been toiling in the same manner for years previously, I looked on at their toilsome life with a critical eye. I appeared to them as a strange, quizzing, inactive intruder, and it was inevitable that I should so appear to them. They did not know that I had come with so high an opinion of the institution, that I wished at first only to look on, only to learn, in order to be able afterward to teach and to assist wherever I could.

That high opinion I had imbibed chiefly from the report. The report led me to form an over-estimate of the excellence of the institution before I went to Yverdun, and this over-estimate led me when there to think too lightly of its labors. I ought to have acknowledged *then*, the honest, conscientious, toilsome industry of several of the teachers, for instance, Ramsauer, even though they did not always bring to light discoveries that were entirely new ; misled by the report, I had hoped, it is true, to find there nothing else but new discoveries.

But, notwithstanding all these evils, I should certainly have remained longer at Yverdun, and should have wrought in patient and persevering hope, had I not held it to be my duty to take away the boy intrusted to my care. I quitted Yverdun with him in May, 1810.

Soon after my departure, the long restrained enmity there broke out into an open feud. Schmid left the institution, and wrote against it.

In the summer of 1811, Monsieur Jullien, Napoleon's companion in arms in Egypt, and Chevalier of the Legion of Honor, visited Yverdun. He remained in the institution six weeks; his observations were embodied in two works.*

During the war of 1814, the hospital department of the Austrian army required that the buildings of the institution should be given up for a hospital. Fortunately, the Emperor Alexander was then at Basel: Pestalozzi immediately went to him, and was received in the most friendly manner; in consequence of the interposition of the emperor, the hospital was not established at Yverdun at all, and in November of the same year Pestalozzi received the order of St. Vladimir, fourth class.

Schmid's departure from the institution caused a very sensible void, the existence of which was painfully felt. Letters which Pestalozzi wrote to Niederer at that time, bear witness to the evil plight in which the institution was placed. "O Niederer," he writes, "without strength and purity of purpose in those who surround us, all our endeavors after what is great and high are lost; the sublime and good can not easily unfold themselves where weakness and worthlessness peer forth from all corners—our greatest enemies are under our own roof, and eat from the same dish with us—it is better to be alone than to accept delusive aid from baseness."

In a second letter, Pestalozzi writes: "The internal weakness of our house has opened the mouth of the weakest among us, for them to give us monkey's advice and hold public conferences about us among themselves. The great evil of our house comes from boys who here play the part of men, but who at every other place would be schoolboys."

In this period falls also the visit of the Prussian Chancellor of State, von Beyme, who entered the institution "with a great predisposition in favor of Pestalozzi," and before he left it expressed himself to the effect, that if the institution held together for another year, he should look upon it as the greatest wonder, for that, in the instruction which he had seen given there, things were wanting which teachers in the lowest village schools would be ashamed to have neglected.

Niederer felt more than any one else the void created by the departure of Schmid. As early as the end of the year 1813, he wrote to Schmid in the most conciliatory manner, and writing on the 10th

* *Précis sur l'institut d'Yverdun en Suisse*, 1812; and *Esprit de la méthode d'éducation de M. Pestalozzi*.

of February, 1815, he says: "With Pestalozzi, I stake every thing I have upon bringing you back. Alone I can do nothing. You know wherein I am deficient, but with you and a few other distinguished and noble minded men, I do not doubt of the realization of an educational heaven on earth."

Pestalozzi adduces these passages as certain proofs of Schmid's ability, and the high value of his services to the institution: but they also testify to an honorable mind on the part of Niederer, who did not attempt to conceal his own practical incompetency, and who repressed a deep-seated antipathy to Schmid, in order to realize his educational ideal.

Schmid was then at the head of a school in Bregenz. At Niederer's pressing invitation, he returned to Yverdon in the Easter of 1815, and now commenced a comprehensive reform of the institution, especially in an economical point of view. There soon arose a silent but general antipathy to him.

On the 11th of the following December, Madame Pestalozzi died, aged nearly eighty years, having been the faithful and patient partner of her husband during forty-five years, through times of severe suffering. At her funeral, after a hymn had been sung, Pestalozzi, turning toward the coffin, said: "We were shunned and contemned by all, sickness and poverty bowed us down, and we ate dry bread with tears; what was it that, in those days of severe trial, gave you and me strength to persevere and not cast away our hope?" Thereupon he took up a Bible, which was lying near at hand, pressed it on the breast of the corpse, and said: "From this source you and I drew courage, and strength, and peace." Her grave is under two tall walnut trees in the garden of the castle.

On this sorrowful day, the antipathy of many of the teachers toward Schmid first broke out into open enmity, which was never again appeased, and which positively poisoned the last twelve years of the poor old man's life. From that time every blessing seemed to forsake the institution, and every new undertaking in which Pestalozzi engaged.

Most of the teachers were against Schmid. Blochmann, for many years director of a flourishing educational establishment at Dresden, drew up a formal complaint against him, which was signed by Krüsi, Ramsauer, Stern, Ackermann, and others, in all twelve teachers.

In the year 1816, these men left the institution, among them even Krüsi, so many years the fellow-laborer of Pestalozzi. "Father," he wrote to Pestalozzi, "my time of enjoying your presence is past. I must leave your institution, as it is now conducted, if I am not

forever to lose my courage and strength to live for you and your work. For all that you were to me, and all that I was able to be to you, I thank God; for all my shortcomings, I pray God and yourself to forgive me.

At length, in 1817, Niederer also separated from the institution; Pestalozzi tried in vain the following year to reconcile him with Schmid. Both of them acknowledged Pestalozzi as their master, and yet the reconciliation was impossible. They were too much opposed to each other, not merely in natural endowments, but in their aim and object, in the educational idea which each endeavored to realize in the institution.

Niederer saw in Pestalozzi a man who had grasped with instinctive profundity the subject of human culture, but had given only a fragmentary view of it, and who could not control the ideas which, as it were, possessed him. Niederer felt himself called to control them philosophically—to build up out of those mighty educational fragments a complete systematic theory.

At first, Pestalozzi could not comprehend him, not understanding his philosophical language. At a later period, Pestalozzi saw in him the one man in the institution, who, standing on the pinnacle of German culture, was fitted to assign to the new method its proper place in the region of human culture generally. Only by such a man, he thought, could the educated world, especially Germany, be won over to his educational plans; by such a man must his Swiss idiom be translated into an intelligible *high* German. Nay, for some time he even thought that Niederer understood him better than he understood himself.

Niederer was deficient in the practical skill requisite for carrying out his educational theory, as he himself frequently acknowledged. His intention in the institution was more to observe the results of the practical talent at work there, and in this manner to learn what he could, but at the same time to see that all the teachers wrought together with one mind toward one and the same object—the realization of the educational theory.

No wonder that Pestalozzi, as he again and again affirmed, did not feel himself attracted by Niederer's peculiar character, even at times when the two men stood in a very friendly relation toward each other; and just as little need we wonder that the old man subsequently dissolved a connection, which had been formed by his will rather than his inclination.

But how entirely different was his relation to Schmid! "Inexplicable feelings," he says, "drew me toward him from the moment of

his appearance in our circle, as I have never felt myself drawn toward any other pupil." Pestalozzi writes characteristically: "I must trace from its origin the *strength* which alone appeared capable of holding us together in this unhappy state." This personified strength was no other than the shepherd boy Schmid, who had migrated from the Tyrolese mountains to Burgdorf. Pestalozzi says that he soon left his teachers behind him. "By his practical talent and incessant activity," continues Pestalozzi, "he soared above the influence of every other person in the house. I did not conceal that I looked upon the *strength* of this pupil, though still so young, as the main stay of my house." Pestalozzi characterizes Schmid in the same way in an address which he delivered in the year 1818. "I will not," he says, "make more of him than he is to me. I know him. He has a natural power which, in its artlessness, penetrates where much art has often before my own eyes failed to enter. Schmid threw a hard shell about the kernel of my vanishing labors, and saved me."

Niederer also acknowledged in the fullest measure, the ability and activity of Schmid. Like Pestalozzi, Niederer saw in him a most indefatigable teacher of mathematics and drawing, who, by his example, as well as by severe censure, could incite the remaining teachers to conscientious activity; he also saw in him a man who, being a pupil of Pestalozzi, was regarded as one of the fruits of the method, and who consequently impressed foreign visitors with a favorable idea of it. Thus it came that, in the year 1814, he hoped every thing from a reconciliation with Schmid. But how deceived he found himself, when Pestalozzi gave into Schmid's hands the sceptre over the entire institution.

Blochmann, too, in his complaint, acknowledges Schmid's "activity, perseverance, endurance, punctuality, administrative ability, his meritorious services in establishing greater order in the institution, his skill in teaching the elementary branches of mathematics—a rare talent." "All these were qualities which neither Pestalozzi nor Niederer possessed, and which, therefore, marked out Schmid as an indispensable member of the staff of teachers. But, if Blochmann and the other teachers who signed the complaint acknowledged this, why did they press for Schmid's removal? Because, they answer, in that document, "the source of all that Schmid does is complete selfishness, ability without humility, without love, without self-denial, sounding brass, a tinkling cymbal, and Schmid himself is wise as the serpent, but not harmless as the dove."

In a letter, (19th March, 1818,) to Pestalozzi, Niederer reproaches him with having overrated the ability of Schmid, and ability generally.

“Ruin,” he says, “entered your institution, when, dazzled and led away by individual instances of brilliant talents and results, you ceased to bestow any particular attention on that which by its nature can work only in silence, although it stands higher than talent, and alone can render the development of talent possible; when you began so to act as if you owed every thing to that with which you could make a display, and nothing to that which was not suited to this purpose. Under this fundamental error, I say more, under this fundamental injustice, the mathematical side of the method and the institution was made prominent, as if that singly and solely were the essence of the method and the salvation of humanity. Low and one-sided qualities were honored at expense of the higher ones. The qualities of good temper, fidelity, love, if they were not joined with those external qualities, were slighted and depreciated in the persons in whom they existed. In the kind of praise which you gave to the manual dexterity of utterly inexperienced youths in particular departments, you placed this dexterity above intelligence, knowledge and experience.”

Let us now return to the history of the institution.

In the Easter of 1816, M. Jullien, already mentioned, came to Yverdun, bringing twenty-four pupils with him from France; but, annoyed, it is said, by Schmid, he quitted the institution the very next year.

As already stated, Niederer separated from the institution in 1817, from which time he conducted the girls' school only, in company with his wife. In the same year, a most ignominious and lamentable lawsuit, which lasted seven years, arose concerning the pecuniary affairs of this school, between Pestalozzi and Schmid, on one side, and Niederer, on the other. “It was in July, 1817,” says Pestalozzi, “that a letter referring to that quarrel suddenly threw me into a state of inward rage, which was accompanied by an outbreak of real delirium, and placed me in danger of completely losing my reason, and sinking into utter insensibility.” Schmid took the old man to Bület, on the Jura, whose cooling heights acted wholesomely on the endangered state of his nerves. There he poured out his sufferings in poems, in which his soul, now caught in the trammels of the most painful and ignoble relations, utters with wailing, its aspirations after heavenly freedom. Here is one of those poems:—

Fair bow, that smil'st amid the storm,
 Thou tellest of the bliss of God!
 With those soft beams of many hues,
 O shine in this afflicted heart
 Amid its wild and life-long storm!

Tell me of brighter morn to come,
 O tell me of a better day,
 Fair bow, that joinest earth to heav'n!

Through all the dark and stormy days,
 The Lord hath been a rock to me,
 My soul shall praise His holy name
 Must I be call'd from this fair earth,
 Ere thou appearest in my heart,
 And bringest with thee heavenly joys
 And that long wished for better day :
 Must I drink out the bitter cup—
 The cup of fierce contending strife
 And enmity not reconciled—
 Till I have drained the deepest dregs :
 Must I from hence depart,
 Ere peace, the peace I seek, is found ?
 I own my burthen of offense,
 My many weaknesses I own,
 And with affection and with tears,
 All my offenders I forgive ;
 But death will bring me peace,
 And after death's long night of rest,
 A better day will dawn for me !
 Thou herald of that better day,
 How lovely then wilt thou appear
 Above my still and lonesome grave :
 Fair bow that shin'st like Hope through tears.

Like snow new fallen on the ground,
 Like those bright flakes of winter-tide
 Which, beaming lovely in the sun,
 Sank into that new open'd grave,
 Where lay the partner of my days :
 Fair bow, that shin'st with heaven's light,
 Thus lovely, in the hour of death,
 Do thou appear once more to me.
 Through all the dark and stormy days,
 The Lord hath been a rock to me !
 My soul shall praise his holy name !

An attempt, which Pestalozzi made in 1817, to enter into connection with Fellenberg, was unsuccessful. In 1818, Schmid made an arrangement with Cotta, (the great Leipzig publisher,) for the publication of a complete edition of Pestalozzi's works ; subscriptions to a considerable amount soon flowed in. The emperor of Russia subscribed 5,000 roubles ; the king of Prussia, 400 dollars ; the king of Bavaria, 700 guilders. Thereupon, Pestalozzi's hopes revived. In a remarkable address, already mentioned, which he delivered on his seventy-third birth-day, the 12th of January, 1818, he stated that he should appropriate to educational purposes, 50,000 French livres, which the subscription would yield.

In the same address, Pestalozzi speaks freely on the subject of his relations to Niederer and Schmid, and justifies himself for having separated from the former and joined with the latter. He hits off Niederer admirably when he says : " I am conscious of a high and

fervent love for him. Only he should not require me to value in him what I do not understand; he should ascribe it to the weakness of my head, not to the hardness of my heart, if I fail to do so, and should not on that account pronounce me ungrateful. But what shall I say? Here lies the very ground of complaint against me, namely, that I am no longer capable of following the spirit of my endeavors, and that through my incapacity, I cripple and destroy the strength of those who are further advanced in that spirit than myself. It is an old complaint, that my spirit has left me; that I have outlived myself, and that the truth and the right of my labors have passed from mine into other hands. I know well, also, and I feel it deeply, that I do not possess, in the least degree, some qualifications which are essential to the furtherance of my views; on the other hand I know just as certainly, that all those qualifications which I formerly possessed, I still feel myself to possess in some vitality, and with an impulse to apply them to use."

Of this the address affords sufficient proofs; I will quote some passages.

"Man has a conscience. The voice of God speaks in every man, and leaves no one unconvinced as to what is good, and what bad; what is right and what wrong."

"Contemplate man in the entire range of his development. See, he grows, he is educated, he is trained. He grows by the strength of his own self; he grows by the strength of his very being. He is educated by accident, by the accidental that lies in his condition, in his circumstances, and in his relations. He is trained by art and by the will of man. The growth of man and his powers is God's doing. It proceeds according to eternal and divine laws. The education of man is accidental and dependent on the varying circumstances in which a man finds himself placed. The training of man is moral. Only by the accordance of the influences of education and training with the eternal laws of human growth is man really educated and trained; by contradiction between the means of his education and training and those eternal laws, man is mis-educated and mis-trained."

Pestalozzi gives a striking delineation of the contrast between the old time and the new.

"The time in which we live, is really a time of excessive artificial refinement, in contradistinction to a high and pure sense of innocence, love, and faith, and that powerful attachment to truth and right which springs from these virtues. Who among us, if he be not an alien that neither knows the present time and its spirit, nor has searched into the time of our fathers and its spirit, but must acknowledge that the time of our fathers was a better time, their spirit a better spirit; that their sincerity of purpose had its foundations laid immeasurably deeper, in the religion of the heart, in strong earnestness in domestic and civil life, and in the daily exercise of industry in the good works of a simple and satisfying professional life, than can possibly be the case in our paralyzing refinement of the powers of body and soul. Our fathers were cheerful, reasonable, and benevolent, in all simplicity. Their circumstances were peculiarly fitted to lead them daily and hourly in all innocence, in faith, and in love, to be good-tempered, reflective, and industrious; but our artificial refinement has rendered us disgusted with our fathers' mode of life, and with the sources of their moral, domestic, and political elevation. We have almost entirely departed from their spirit and their mode of life. But it is for this reason that we have sunk so low

in respect to the education of the people. We have the semblance of faith, love, and wisdom, but not the qualities themselves; and we live in a delusion, really without the virtues of our fathers, while they, though possessing those virtues, were by no means satisfied with themselves, as we are. The good and pious foundation which our fathers had in their mode of life itself for their views, feelings, opinions, and usages generally, and particularly in respect to the training of children and the relief of the poor, has sunk under our feet through the deception of our present artificial and frivolous mode of life. We are no longer what we were, and we have even lost the feeling that we ought to become again in spirit and in truth what we were. While we praise our fathers with our mouths, we are in heart far from them, and in our doings we stand at the very antipodes of them. We have substituted for their ability to do what was necessary, and their ignorance of what was useless, a large acquaintance with what is useless and an inability to do what is necessary. Instead of their healthy spirit, well exercised in mother-wit, we have forms, not so much of thinking as of verbal expressions about what has been thought, which suck the blood out of good sense, like a marten that fixes itself upon the neck of a poor dove. We no longer know our neighbors, our fellow citizens, or even our poor relations; but we make up for it by reading the newspapers and periodicals, by learning the genealogical register of the kings of the world, the anecdotes of courts, of the theatre, and of capital cities, and we raise ourselves to a daily change in our political and religious opinions, as in our clothes, running, on one side, from infidelity to *capucinade*, and from *capucinade* to infidelity, just as, on the other side, we run from sans-cullottism to tight-lacing and leading strings. Our fathers cultivated a general, simple, and powerful intellect; but few of them troubled themselves with researches into higher truths, which are difficult to fathom: we do very little indeed toward rendering ourselves capable of cultivating a general and profound spirit of thought and research: but we all learn to talk a great deal about sublime and almost unfathomable truths, and strive very zealously to get to read the results of the profoundest thinking in the popular descriptions of almanacs and daily pamphlets, and to put them into the mouth of people generally. Among our fathers, every honest man sought to do one thing well at least, namely, the work of his calling; and every man might with honor learn every trade; now our notables are mostly born to their callings. Numberless individuals are ashamed of the rank and profession of their fathers, and believe themselves to be called to pry into and carp at the professional knowledge of all ranks; and the habit of prating about all professions and discharging one's own imperfectly is becoming more general every day, among both the notable and unnotable men of our time. All spirit of political strength has fled from amongst us. In the present state of society we no longer ask what we really are, but what we possess and what we know, and how we may set out all our possessions and knowledge for show, put them up for sale, and barter them for the means of feasting ourselves, so that we may tickle our palates with the refined enjoyments of all the five divisions of the globe, whose appetites must by such conduct be almost inevitably engendered in us. And when we have in this way succeeded in rendering ourselves powerless and degraded in body and soul, in respect to the pure claims of the humanity of our nature, and of the eternal and divine essence which lies at its foundation,—then, in the state of debility and giddiness into which the fever has thrown us, we further seek to force up the appearance of a character whose truth and purity we entirely lack. In this state, we seek to cover over the outward appearances of our debility and desolation by a violent employment of the means of adjustment and concealment, which kill heart and spirit and humanity; and verily we have sunk to the employment of such means in many matters connected with the education of the people and the relief of the poor. Thus it is that we kill, in ourselves, the very essence of the powers of the soul, those human gifts divine; and then, when a shadow of the powers which we have killed flutters in us, we ornament the works of its fluttering with golden frames, and hang them up in splendid apartments, whose shining floors are unable to bear any of the good works of the ordinary life of man."

In another place, Pestalozzi says: "The gardener plants and waters, but God giveth the increase." It is not the educator that implants

any faculty in man ; it is not the educator that gives breath and life to any faculty : he only takes care that no external influence shall fetter and disturb the natural course of the development of man's individual faculties. "The moral, the spiritual, and the artistic capabilities of our nature must grow out of themselves, and by no means out of the results produced by art, which has been mixed up with their education. Faith must be called forth again by faith, and not by the knowledge of what is believed ; thinking must be called forth again by thinking, and not by the knowledge of what is thought, or of the laws of thinking ; love must be called forth again by loving, and not by the knowledge of what is loveable or of love itself ; and art must be called forth again by ability, and not by endless talk about ability."

The reader can judge from the passages just cited whether any degree of youthful freshness still lingered in the mind and heart of the old man of seventy-three.

But his "unrivaled incapacity to govern," as he himself calls it, did not forsake him. He established a poor school in 1818 at Clindy, in the vicinity of Yverdun ; a commencement was made with twelve boys. "They were to be brought up as poor boys," says Pestalozzi, "and receive that kind of instruction and training which is suitable for the poor." But after a short time, children were admitted to board in the establishment, at a fee of twelve louis d'or per annum ; and in a few months the number of these pupils rose to thirty. It may be easily imagined that the presence of paying boarders would of itself destroy the character of the place as a school for the poor. But this result was occasioned in a still higher degree by some remarkably stupid experiments in teaching. An Englishman,* of the name of Greaves, visited Yverdun in 1819 ; he offered to teach these poor Swiss children English without remuneration, and his offer was accepted. On this step Pestalozzi himself remarks : "This created an impression, which, considering the original destination of these children, led us very far astray." To the instruction in English was added soon after instruction in French and Latin. Pestalozzi says, the poor children had made extraordinary progress in the elementary subjects. He adds, nevertheless, "I had no longer an establishment for the poor ; but, on the contrary, two scientific ones, which I could not now allow to remain separated. Thus the so-called poor school at Clindy was amalgamated with the institution at Yverdun." According to Pestalozzi's account, the poor scholars were "models

* A second Englishman entered the establishment the same year, as the religious instructor of the English pupils who had been admitted. Later, "above half a dozen poor children" were even sent from England to the school!

worthy of imitation" to the pupils of the institution, especially in their acquirements. Many of them were employed as teachers. "The instruction which was given by the pupils of our poor school, (says he,) was preferred, on account of its solid and natural character to that of the most accomplished among the elder teachers of our house." (!) They threw their strength chiefly into arithmetic and geometry. Is it to be wondered at, that these poor children soon began to place themselves on a level with the children of the institution, and liked playing with them out of school hours better than chopping wood and carting manure;—that, instructed in three foreign languages, they did not like the idea of becoming masters of poor schools, and of having learnt Latin to no purpose?

Pestalozzi acknowledged, when it was too late, "that the establishment had taken such a direction that it was no longer to be looked upon as a poor school, but as a school for imparting the elements of a scientific education." The particular reason of the failure had been "that these children were led into acquirements, habits, pretensions, dreams, and appetites, which did not suit the character of their original destination, and even tended to unfit them for it."

Pestalozzi's unhappy disputes with Niederer and others went on uninterruptedly during this time. At last a reconciliation was brought about through the noble exertions of deputy governor Du Thou. On the 31st of December, 1823, Niederer wrote an apology to Schmid in the name of Krüsi and himself, in which, at the same time, it was said that any future dispute should be settled by an arbiter.

Unfortunately, newspapers and controversial writings of those years have made the public only too well acquainted with this dispute. Pestalozzi's worst enemies could not have conceived any thing that would have been more calculated to damp the public enthusiasm for him.

Who would like to undertake the task of placing before readers the details of these unfortunate occurrences, especially when it is considered that they almost exclusively concerned private interests? On February 1st, 1823, Pestalozzi wrote to Niederer a conciliatory letter, which shines forth in the midst of this lawsuit like a brilliant gem out of the mire. I give the following passage from this letter with pleasure:—

"DEAR MR. NIEDERER,*—Call to mind what we once hoped from each other and what we were to each other. I would again hope from you what I formerly hoped, and I would again be to you what I formerly was. But we must make the way to this possible for each other; we must help each other to clear the way to it, each from the point on which he stands. Let us do this. Above all,

* In November, 1824, the lawsuit which has been mentioned was terminated by arbitration.

let us, without circumlocution and without condition, forgive each other, and unite with a pure intention in true love, in true friendship, and in an undertaking which will be for our mutual happiness. Niederer, become again as far as you can my old Niederer—such as you were twenty years ago. Madame Niederer, be also to me again something of what you were then. I will readily be to both of you again, as far as I can, what I then was. How I long for the time when our hearts shall bring us to ourselves again, and when, in the path of real self-knowledge we shall attain to love, which is equally our duty as Christians, and the pressing need of our condition. Oh! Niederer, how I long for the time when strengthened and sanctified by this renewed love, we shall be able to go once more to the Holy Sacrament, when the festival comes round, without having to fear that the entire commune in which we live, scandalized by our conduct, will shudder at our coming to the Lord's table, and will cast upon us looks of indignation as well as pity. Oh! Niederer, the path of this renewed love is the only one which will lead to true honor, as it is also the only one which will lead to the restoration of a lost semblance of honor. Oh! Niederer, think not that the tricks and chicanery of law can ever bring us to the pinnacle of honor to which we can raise ourselves by the restoration of our love. My old friend, let us make clean the inside of the platter, before we trouble ourselves about the false glitter of the outside."

These lamentable lawsuits had naturally the worst influence on the hybrid institution. Pestalozzi felt this most painfully, and thought that his poor school would succeed, if he could only transfer it from unlucky Yverdon to Neuhof, in the canton of Argovia—the same Neuhof where, many years before, he had made his first important educational experiments. He had a new house built there for the purpose.

Each of the poor children who had been admitted into the school had bound himself to remain in it five years, from 1818 till 1823. The five years ran out. Pestalozzi confidently hoped that many of these children would follow him to Neuhof, and form the nucleus of the new establishment. But not one remained. As I have already remarked, they had imbibed grander ideas from the instruction which they had enjoyed, and they sought to make their fortune in other ways. "They considered it," says Pestalozzi, "beneath their dignity to be appointed teachers in a Pestalozzian poor school at Neuhof." When at last even a favorite pupil of his rejected all his offers, and went away clandestinely from Yverdon, the old man's heart was full. "The illusion, in my mind," he says, "as to the possibility of transplanting to Neuhof an establishment in Yverdon of which not an inch was in reality any longer mine, was now entirely dispelled. To resign myself to this conviction, required me to do no less than abandon all my hopes and aims in regard to this project, as for me completely unattainable. I did so at last, and on March 17th, 1824, I announced my total inability further to fulfill the expectations and hopes which I had excited, by my projected poor school, in the hearts of so many philanthropists and friends of education."

At length, in the year 1825, Pestalozzi also broke up the institution, after it had stood for a quarter of a century; and he returned, an old man of eighty years, and tired of life, to Neuhof, where, exactly half

a century before, he had begun his first poor school. "Verily," he says, "it was as if I was putting an end to my life itself by this return, so much pain did it give me."

Pestalozzi had but one child, a son, who was born in 1770, and died at the early age of twenty-four, leaving a son himself.* This grandson of Pestalozzi was in possession of the estate of Neuhof; to him the old man went.

In these last years of his life, he wrote the "Song of the Dying Swan" and the "Fortunes of my Life." He looked back with deep pain on so many shipwrecked enterprises, and acknowledged that the blame was his, as the wreck had been brought on by his incompetency to manage the helm. He speaks, as we have seen, with equal candor of his fellow-workers.

These last writings of Pestalozzi have been regarded by many as the melancholy and languid outpourings of the heart of a dying old man. As far as concerns the old man's judgments on the institution, as it was at the time of my stay at Yverdun, I have already remarked that I consider them for the most part highly truthful, and as affording evidence that he was not deficient in manly clearness and penetration even in his old age.

In May of the year 1825, he was elected President of the Helvetic Society of Shinznach, of which he was the oldest member. The following year he delivered a lecture before the Education Society of Brugg, on, "The simplest means which art can employ to educate the child, from the cradle, to the sixth year, in the domestic circle." Thus the gentle influence of home education remained to the last the object of his love, as it had been fifty-six years before, when he wrote "Leonard and Gertrude."

On the 21st of July, 1826, Pestalozzi, in company with Schmid, visited the establishment of the excellent Zeller in Bruggen. The children received him with singing. An oak wreath was handed to him, but he did not accept it: "Not to me," he said, "but to Innocence belongs the wreath." The children sang to him the song by Goethe which he has introduced into "Leonard and Gertrude."

Thou art from highest skies,
Every storm and sorrow stilling;
Hearts that doubled anguish tries
Doubly with thy sweetness filling;
On the wave of passion driven,
Oh, how longs my soul for rest!
Peace of Heaven
Come, oh come within my breast.

Tears choked the voice of the old man.

* The widow, an excellent woman, subsequently married a Mr. Kuster, and remained attached to Pestalozzi with true affection.

From his youth, Pestalozzi had been weakly in constitution, and he had repeatedly suffered severe attacks of illness. In the year 1806, he was suddenly knocked down in the street by the pole of a carriage, and trampled under foot by the horses. "It is a great wonder," he said in an address on New Year's Day, 1808, "that I was saved from under the horses' feet. See, they tore the clothes from off my back, but did not touch my body."

In the year 1812, he suffered very severely for a long time from accidentally running a knitting needle into his ear.

But, notwithstanding slight ailments and dangerous accidents, his life was prolonged to a very advanced age.

At length he approached the end of his earthly existence. Some time before his death, he said: "I forgive my enemies; may they find peace now that I go to eternal rest. I should liked to have lived another month, to have completed my last labors; but I again thank God, who in His Providence calls me away from this earthly scene. And you, my children, remain in quiet attachment to one another, and seek for happiness in the domestic circle." Soon after, he breathed his last. He had lain ill only a few days. On the 15th of February, 1827, he had been removed from his country house to the town of Brugg, in order that he might be nearer to his physician; on the morning of the 17th he died, after violent paroxysms of fever; and on the 19th he was buried. His corpse was carried past the new poor school which he had begun to build, but could not complete, and was interred with a quiet and modest funeral service at the village of Birr. Few strangers attended his funeral, for the snow lay thick on the ground, and his interment took place sooner than might have been expected; the news of his death had scarcely been received in the canton of Argovia. Schoolmasters and children from the surrounding villages sang their thanks to the departed in artless strains over his grave.*

Pestalozzi rests from the labors of his toilsome life.

At the grave a Sabbath stillness sets in; we look back upon the past, but, at the same time, we look forward into the eternal life of the departed, and ask whether, in time, he seriously prepared himself for eternity—whether all the labors of his life were done in the Lord, and whether he died in the Lord.

Not as severe judges do we ask, but in all the humility of co-redeemed sinful fellow-men; we ask with the fond wish that he may be blessed eternally.

* Heussler.

In a letter written in the year 1793, Pestalozzi says, "Wavering between *feelings*, which drew me toward religion, and *opinions*, which led me away from it, I went the dead way of my time; I let the essential part of religion grow cold in my inmost heart, without really deciding against religion."

That is the judgment which he pronounced upon himself in his forty-eighth year; at the time of Robespierre, when the earthy political element reigned to such a degree in the minds of men, that no quiet abode remained for the religious element.

The "Evening Hour of a Hermit," written thirteen years earlier, when the world was more tranquil, and as yet not off its hinges, contains passages which are penetrated with true christian unction. To these belongs especially the concluding passage of the whole, already quoted, in which Pestalozzi speaks of Christ as "the Son of God, who with suffering and death has restored to mankind the universally lost feeling of filial love toward God—the Redeemer of the World—the sacrificed Priest of the Lord—the Mediator between God and sinful mankind;" and of his doctrine as "the revelation of God the Father to the lost race of his children."

But other passages of this paper, enticing as they sound, are at variance with essential doctrines of christianity. Thus the one in which Pestalozzi says, "Faith in God, thou art the pure sense of simplicity—the ear of innocence listening to the voice of nature, which proclaims that God is father."

Where is the ear of innocence to be found? The Scripture saith: "There is none righteous, no not one: There is none that understandeth, there is none that seeketh after God. They are all gone out of the way, they are together become unprofitable; there is none that doeth good, no, not one." (Romans iii., 10, 11, 12.)

Where is the ear of innocence? If it were to be found among men, then it might certainly hear a voice of nature, proclaiming that God is father. In that case, the heathen might also have prayed, "Our Father." But nowhere do we find the slightest evidence that the ancients loved their gods, not to say God, with filial love.

And, could man by nature love God, to what purpose were Christ the restorer of the lost filial love of mankind? But this very expression itself appears to me to be almost a euphemism for "The Lord hath laid on him the iniquity of us all." (Isaiah liii., 6.)

We saw, in considering the book, "How Gertrude teaches her Children," how deep an influence Pestalozzi's notion of the innocence of children exercised upon his educational theory; like Rousseau, he wanted to gather figs of thistles. Did he retain this notion to the end of his life? We shall answer this question in the negative.

In "Leonard and Gertrude," all the stress is laid upon active christianity, love is *occasionally* placed almost in opposition to faith: a dead, hypocritical faith not being always distinguished with sufficient exactitude from true faith, which is active in love. The clergyman in Leonard and Gertrude is an honest man, but strongly inclined to mere moralizing; his care of his flock is more that of a faithful personal friend, than of one acting in the spirit and strength of a church.

In the "Researches," christianity is styled a religion of morality—an effort to make the spirit subdue the flesh. If, according to the letter cited, Pestalozzi wavered between feelings, which drew him toward religion, and opinions, which led him away from it, both feeling and christianity give place, in the work just mentioned, to this belabored product of the intellect.

In the book, "How Gertrude teaches her children," the educational theory is, as we have seen, extremely weak on the religious side; it is more a rhetorical theory of intellectual developments estranged from Christ.

But in this book, also, Pestalozzi's feelings repeatedly glances through; there stand forth the aim and yearning desire of his toilsome life, the depth of a love which brought upon the poor helpless man countless sorrows and almost drove him to despair. From the depths of his necessity, he then cries to God, praying, hoping, offering up his thanks: "Friend," he writes to Gesner, "let me now for a moment forget my aim and my labors, and abandon myself entirely to the feeling of melancholy which comes over me, when I remember that I still live, though I am no longer myself. I have lost every thing, I have lost myself; nevertheless, thou, O Lord, hast preserved in me the desires of my life, and hast not shattered to pieces before my eyes the aim of my suffering, as thou hast shattered the aim of thousands of men, who corrupted themselves in their own ways. Thou hast preserved to me the work of my life, in the midst of my own ruin, and hast caused to arise upon me, in my hopeless declining age, an evening brightness, the sight of whose loveliness outweighs the sufferings of my life. Lord, I am not worthy of the mercy and faithfulness which thou hast shown toward me. Thou, thou alone, hast had mercy on the trampled worm; thou alone hast not broken the bruised reed; thou alone hast not quenched the smoking flax; and hast not, to the latest period of my life, turned away thy face from the offering, which from childhood I have desired to bring to the forsaken in the land, but have never been able to bring."

Before I consider the religious character of Pestalozzi's later works, I will first look at that of his institution. It is best delineated by Ramsauer. He entered the institution at Burgdorf in 1800, as

a boy of ten years ; he left it at the age of twenty-six, as head teacher, when he went from Yverdu to Würzburg. Thus he had, both as a learner and as a teacher, become acquainted with the religious tendency of the institution. When, in later years, the deep truth and solemn sanctity of christianity dawned upon his awakened conscience, which impelled him to self-knowledge, then first did he learn to form a just estimate of that religious tendency. He narrates as follows :—

“In Burgdorf, an active and entirely new mode of life opened to me; there reigned so much love and simplicity in the institution, the life was so genial—I could almost say patriarchal; not much was learned, it is true, but Pestalozzi was the father, and the teachers were the friends of the pupils; Pestalozzi’s morning and evening prayers had such a fervor and simplicity, that they carried away every one who took part in them; he prayed fervently, read and explained Gellert’s hymns impressively, exhorted each of the pupils individually to private prayer, and saw that some pupils said aloud in the bedrooms, every evening, the prayers which they had learned at home, while he explained, at the same time, that the mere repeating of prayers by rote was worthless, and that every one should rather pray from his own heart. Such exhortations became more and more rare at Yverdu, and the praying aloud ceased altogether, like so much else that had a genial character. We all felt that more must be learned than at Burgdorf; but we all fell, in consequence, into a restless pushing and driving, and the individual teachers into a scramble after distinction. Pestalozzi, indeed, remained the same noble-hearted old man, wholly forgetting himself, and living only for the welfare of others, and infusing his own spirit into the entire household; but, as it arose not so much from the religious arrangements and from Pestalozzi’s principles, as from his personal character, that so genial a life had prevailed at Burgdorf, that spirit could not last long, it could not gain strength and elevate itself into a christian spirit. On the other hand, so long as the institution was small, Pestalozzi could, by his thoroughly amiable personal character, adjust at once every slight discordance; he stood in much closer relation with every individual member of the circle, and could thus observe every peculiarity of disposition, and influence it according to necessity. This ceased when the family life was transformed in the institution into a constitutional state existence. Now the individual was more easily lost in the crowd; thus there arose a desire, on the part of each, to make himself felt and noticed. Egotism made its appearance every day in more pointed forms. Envy and jealousy rankled in the breasts of many. The instruction, calculated only for the development of the mind, nourished feelings of selfishness and pride; and the counterpoise, which only the fear of God could have given, was not known. Instead of being told that only *that* teacher could labor with God’s blessing who had attained to the knowledge and the belief of the highest truths, and had thus come to see that he was nothing of himself, but that he had to thank God for whatever he was enabled to be or to do, and that every christian, but especially the educator, had daily cause to pray to God for patience, love, and humility, and for wisdom in doing and avoiding; instead of this, we heard day after day that man could do every thing that he wished, that he could do every thing of himself, and that he alone could help himself. Had the otherwise so noble Pestalozzi made the Bible the foundation of all moral and religious education, I verily believe that the institution would still have been in existence, even as those institutions are still in existence and working with success which were founded by Franke, upward of one hundred years ago, with small means, but in full reliance on God. But, instead of making the pupils familiar with the Bible, Pestalozzi, and those of his assistants who gave the so-called religious instruction, or conducted the so-called morning and evening prayers, fell more and more in each succeeding year into a mere empty moralizing; and hence it may be understood how it could happen that I grew up in this institution, was confirmed there, and for sixteen years led a very active and morally good life, without acquiring even the slightest acquaintance with the word of God. I did, indeed, many a time hear the Bible named, and even heard

Pestalozzi complain that nobody read it, and say that in his youth things had been better in this respect; at the domestic worship on Sundays, and during my confirmation instruction, I also frequently heard individual texts read and arbitrarily explained; but neither I nor any other of the young men obtained any idea of the sacredness and connection of God's word. Just as Pestalozzi, by the force of his personal character, attached most of his assistants to himself for years, so that they forgot themselves as he forgot himself, when good was to be done, so also, and much more, might he have inspired them for the Gospel, and the blessing of God would then have rested on him and them, and the institution would have become a christian seminary. It would not have been necessary on this account to hang out a sign-board with the words "Christian Educational Institution," displayed upon it; on the contrary, the more quietly and modestly Pestalozzi and his assistants had conducted themselves, the more effectively would they have worked, and even the most noisy blusterer would soon have come to perceive how very little he could be and do of himself, and thus would have become capable of learning something from strangers. Perhaps some person or other may be disposed to reproach me with one-sidedness, injustice, or even ingratitude, toward Pestalozzi, and to oppose to my testimony the fact that at Yverdon Pestalozzi employed every Friday morning principally in representing Jesus to us as the great exemplar of love and self sacrifice; or I may be asked whether I have quite forgotten the zeal with which Niederer often gave the confirmation instruction. But, in reply to this, I can only refer to the facts which I have just detailed."

I could add but little to this statement of Ramsauer. When I was in the institution, the religious instruction was given by Niederer, but no stranger was allowed to be present at it. We may form a tolerably correct notion, however, of the manner in which he gave it, from what is said on the subject in the "Report to the Parents."*

"All the elder pupils, (says the report,) receive positive religious instruction twice a week. The guiding thread that is used for this purpose is the course of the religious development of the human race, as described in the Holy Scriptures, from the Mosaic records downward, and, based on this, the pure doctrines of Jesus Christ, as he announced them in his Gospel. We base the teaching of moral duties chiefly on Christ's sermon on the mount, and the teaching of doctrines chiefly on St. John's Gospel. The latter is read connectedly and explained from itself and from Christ's eternal fundamental view of God and of himself, as the visible image and representative of the god-head and the god-like, of the relation of mankind to God, and of the life in God. We seek, by the example of Christ, and by the manner in which he viewed and treated men and things and their relations, to awaken in the children an intuitive leaning toward the life and conduct, the belief and hope, which are founded in the unchangeable nature of religion, and to render these things habitual to them, and by the development of those graces through which the Father shone in Him, to raise them to such a mind and mode of life, that God may shine in them also. We do not combat religious error, but endeavor to impart only religious truth. We seek the ground of all dogmas and the source of all religious views in the nature of religion, in the nature of man, and in his propensities, powers, wants, and relations, in order that the child may learn to distinguish the truth in every garb and the substance in every form. The course pursued for the attainment of the last-named object, or the elementary religious instruction, preparatory to the positive doctrines of revelation, is based specially on the solution of the following questions: 1. What is the original religious capability in human nature, or what are the elements of all religious development and education, in so far as they exist in man himself, and proceed from him as something implanted in him by God? These elements are perceptions and feelings. 2. By what means and in what manner must these primitive religious perceptions and feelings necessarily be excited and brought to consciousness in him? Here it is especially the relation to father and mother, to nature, and to society, that is

* There is no doubt that this passage is from Niederer's pen.

regarded as a means of religious excitation and education. 3. By what means and in what manner does man originally and necessarily express the religious perceptions and feelings excited in him? And to what does all this lead man? We find here principally the expression of the religious disposition as a gesture; the expression of the religious notion as a word; the expression of the religious contemplation as an image. The first develops itself as ceremony, the second as instruction and doctrine, the last as symbol and image-worship. With the course of this development is connected the development of what utters itself unchangeably in human nature as veritable and eternal religion, every where operative, and of what, as sensual degeneracy, errors of the passions, and personal depravity, leads to superstition and infidelity, to idolatry and image-worship, to hypocritical self-delusion and deception of others, and lastly, to the contemptuous rejection of all that is divine and sacred. The pupil finds the key to the clear comprehension of this in the intuitive consciousness of the awaking and course of his own feelings, in the impressions which things make on his own mind, and in the religious arrangements by which he is surrounded. As matter of fact, the whole is exemplified in the history of the religious culture of mankind. The indication thereof, or the thread to which the explanation must be attached, in giving the instruction, exists in the language of every nation. The most important results to be accomplished by the instruction are: That the pupil shall lay hold of the true and the eternal in their origin; that he shall look upon the human race as essentially religious, and as an organic whole, developing itself according to necessary and divine laws; that, understanding also in its origin and in its consequences the fall from God and the god-like, he shall all the more earnestly and faithfully follow the way of return to God and to the life in Him, so that, being thus prepared, he may comprehend the worship of God in spirit and in truth, the significance of the eternal Gospel; so that he may attain to an inward godly existence, as he lives outwardly in an intelligent existence."

I have quoted the whole of this passage, because it shows how far the religious instruction was removed from all believing fervor and childlike simplicity, from christian simplicity, as we meet with it in Luther's small catechism. But this passage characterizes only the religious instruction in the institution, and by no means Pestalozzi's religious views and practice.

Still it is clear that at Yverdun he also had in view much less moral education than intellectual. He wished, by means of the latter, to lay before the world striking results of the method; but how shall he show passing strangers the results of moral education, a humble mind and a loving heart, or shall he even expose them rudely to public gaze by an examination? To which was added, that in the multitude of boys he despaired of being able to take each one individually to his heart as a father would do, who never loves his children only *en masse*.

I now return to Pestalozzi's writings, and come to those which he wrote in his old age.

In several of his addresses to the inmates of his house, there are passages which bear witness that even during the years which he passed at Yverdun, christianity still lived in his inmost soul; peaceful Sabbath and festival tones soar above the restless and noisy week-day work. So in his Christmas address of 1810.

"I have been told by old people, (he said,) and I have partly seen myself,

that Christmas Eve used to be a night like no other. The day of the highest earthly joy was not its shadow. The anniversary of the deliverance of the country from slavery, the anniversary of freedom, was not to be compared to it. It was quite a heavenly night, a night of heavenly joy. In its still service dedicated to God, resounded the words: 'Glory to God in the highest, and on earth peace, good will toward men.' When the angels still assembled, as it were, over the heads of men, at this hour, and praised God that the Saviour of the world was born,—what a night was Christmas Eve! Who can describe its joy? Who can tell its bliss? The earth was, on that night, transformed into a heaven. On that night, God was celebrated on high, peace was on earth, and men showed a cheerful good will. Brothers, friends, children, could I but carry you back into the old christian world, and show you the celebration of this hour in the days of innocence and faith, when half the world still accounted it a small thing to die for the faith in Christ Jesus! Could I but show you the joy of Christmas Eve in the picture of those days! The heart full of the Holy Ghost, and the hand full of human gifts—thus stood the christian at this hour in the circle of his brethren. Thus stood the mother in the circle of her children. Thus stood the master in the circle of his workmen—the gentleman in the circle of his own people. Thus stood the commune before their pastor—thus went the rich man into the chamber of the poor. At this hour, enemy held out to enemy the hand of reconciliation. The sinner knelt down and wept over his transgressions, and rejoiced in the Saviour, who forgave him his sins. The hour of heavenly joy was the hour of heavenly sanctification. The earth was a heavenly earth, and the abode of mortal men emitted odors of immortal life. May the joys of this hour, may the joy at the birth of our Redeemer, so elevate us, that Jesus Christ may now appear to us as the visible divine love, as he sacrificed himself and gave himself up to death for us. May we rejoice in the hour in which he became man, because he brought into the world for us the great gift of his life, and laid it upon the altar of divine love. From this hour, he was the priest of the Lord, sacrificed for us. Friends, brothers, sisters, let us pray; O God, give us them again, those fair days of the world, in which the human race truly rejoiced in the birth of Jesus Christ, the Redeemer. Give us again the times in which the hearts of men were at this hour, full of the Holy Ghost, and their hands full of human gifts for their brethren. Father in heaven, thou wilt give us them again, if we but truly desire them."

In the address already mentioned, which Pestalozzi delivered in 1818, when he was seventy-two years old, occur passages which make a profound impression on the mind. He there declares that happiness is to be expected from christianity alone.

"The artificial spirit of our times, (he says,) has also annihilated the influence which the religious feeling of our fathers exercised upon this centre of human happiness. This religious spirit which caused the happiness of the quiet and circumscribed domestic relations, has sunk down amongst us into an insolent spirit of reasoning upon all that is sacred and divine; still we must also acknowledge that the prime source of the real poison of our artificiality, namely, the irreligious feeling of the present age, seems to be shaken in the very depths of its destructive powers; the blessed spirit of the true christian doctrine appears to strike deeper root again in the midst of the corruption of our race, and to preserve inward purity of life in thousands and thousands of men, and, indeed, with regard to popular education, it is from this quarter alone that we can derive the expectation, that we shall ever attain to measures really calculated to reach with sufficient efficacy the views, dispositions, appetites, and habits of our present mode of life, which we must look upon as the original source of our popular depravity and the misfortunes of our times."

The conclusion of the address is particularly important:—

Friends, brothers, become renovators of my house, restorers of its old spirit, and witnesses that the spirit of my youth, which is seen blossoming in 'Leonard and Gertrude,' and nearer maturity in 'How Gertrude teaches her children,' still lives in me. In that spirit, become joint founders of the present result of

the old original, philanthropic and beneficent purpose of my institution. In that spirit, and in no other, I call you all, who are members of my institution, to a sacred union in and through love. Love one another, as Jesus Christ loved us. 'Love suffereth long, and is kind; love envieth not; love vaunteth not itself, is not puffed up, doth not behave itself unseemly, seeketh not its own, is not easily provoked, thinketh no evil; rejoiceth not in iniquity, but rejoiceth in the truth; beareth all things, believeth all things, hopeth all things, endureth all things.' Friends, brothers, bless them that curse you, do good to them that hate you. Heap coals of fire on the heads of your enemies. Let not the sun go down upon your wrath. If thou bring thy gift to the altar, first be reconciled to thy brother, and then come and offer thy gift. All unrelenting severity, even toward those who do us wrong, be far from our house. Let all human severity be lost in the gentleness of our faith. Let no one among you attempt to excuse his severity toward those who are in the wrong. Let no one say that Jesus Christ did not love those who did wrong. He did love them. He loved them with divine love. He died for them. He came not to call the righteous, but sinners, to repentance. He did not find sinners faithful, but made them faithful. He did not find them humble, but made them humble, by his own humility. Verily, verily, it was with the high and holy service of his humility that he conquered the pride of sinners, and chained them by faith to the heart of his divine love. Friends, brothers, if we do this, if we love one another, as Jesus Christ loved us, we shall overcome all the obstacles which stand in the way of our life's purpose, and be able to ground the welfare of our institution upon the everlasting rock, on which God himself has built the welfare of the human race, through Jesus Christ. Amen."

At the grave, I have asked after Pestalozzi's confession of faith; I have sought it in his writings, as well as in his life, and communicated to the reader what he himself confessed in 1793 about his christianity at that period of his life, when, perhaps, he had separated himself furthest from Christ, and lived only in a speculative and political element. "Wavering, (so went the confession,) between feelings which drew me toward religion, and opinions which led me away from it, I went the dead way of my time." This confession we have found confirmed in his writings, as in his life; but in his earliest, and again in his latest writings, religious feeling has been seen soaring above a sceptical intellect. And throughout his long life how high soars a love which would not despair under any suffering, any ingratitude; how high it soars above all doubts, in the pure air of heaven! Men are seduced into infidelity by superficial reflection, which, misapprehending and over-estimating the measure of insight possible to man, fails to judge aright where a clear self-knowledge believes with intelligent resignation. But Christ, who takes the strong for his spoil, reigns ever in the inmost heart of christians as *episcopus in partibus infidelium*; even in times, when their faith wavers, he remains faithful to them. This we see in Pestalozzi, both in his words and in his works.

Who shall dare cast a stone at him, who shall dare condemn him? To him shall much be forgiven, for he loved much. Aye, the whole of his toilsome life is pervaded by love—by a yearning desire to alleviate the condition of the poor suffering people. That love was the

passion of his heart; it kindled in him a burning anger against all who stood in the way of the attainment of its object.

It is true, that the chief obstacle in his way was himself. With God, counsel and action go together; with men, they are only too often separated. Thus we have seen that Pestalozzi, with the clearest knowledge of men, was incapable of managing and governing them; with the most amiable ideals, he was blind when he had to show the way to those ideals. Nay, in endeavoring to realize his great conceptions, he frequently took the course most opposed to them.

No one was further than he was from a cleanly domestic existence; yet no one desired such an existence more earnestly, or understood its value better, than he did. The delineations of Gertrude's housekeeping prove that a poet can truthfully depict not only what he possesses in full degree, but what he longs for with his whole heart because he lacks it altogether.

He passed the greater part of his life in pressing want: thus he could scarcely fail to feel a true and spontaneous sympathy with the poor and abandoned.

If he was cynical in evil days from necessity; in better days, he was so on principle. Corresponding to the bodily cynicism, there was in the character of his mind, something which I would call, not spiritual poverty, but intellectual cynicism: an aversion to the aristocracy of education. And yet, as one of the contradictions of which his character is full, he felt himself called to lay new foundations under the lofty structure of this education, instead of the old pernicious ones. He wanted to support the upper story of the building, without troubling himself about that story itself. On one occasion, he even made it the subject of a boast, that he had not read a book for thirty years.

Hence it came, as I have already said, that he committed so many mistakes usual with self-taught men. He wants the historical basis; things which others had discovered long before appear to him to be quite new when thought of by himself or any one of his teachers. He also torments himself to invent things which had been invented and brought to perfection long before, and might have been used by him, if he had only known of them. For example, how useful an acquaintance with the excellent Werner's treatment of the mineralogical characters of rocks would have been to him, especially in the definition of the ideas, observations, naming, description, &c. As a self-taught man, he every day collected heaps of stones in his walks. If he had been under the discipline of the Freiberg school, the observation of a single stone would have profited him more, than large heaps

of stones, laboriously brought together, could do, in the absence of any such division.

Self-taught men, I say, want the discipline of the school. It is not simply that, in the province of the intellectual, they often find only after long wanderings what they might easily have attained by a direct and beaten path; they want also the ethical discipline, which restrains us from running according to caprice after intellectual enjoyments, and wholesomely compels us to deny ourselves and follow the path indicated to us by the teacher.

Many, it is true, fear that the oracular instinct of the self-taught might suffer from the school. But, if the school is of the right sort, this instinct, if genuine, will be strengthened by it; deep-felt, dreamy, and passive presentiments are transfigured into sound, waking, and active observation.

This self-taught character of Pestalozzi's mind showed itself in his treatment of several branches of instruction. What are his names of towns, which he takes in alphabetical order from the index of a geography book, without possessing any knowledge of the subject; what are the heaps of words transcribed from Scheller's *Lexicon*: what else are they but the trials of an undisciplined mind, to find out new ways of writing schoolbooks?

But when the self-taught man forsakes the old highways, he finds, in spite of much going astray, many short by-ways, the knowledge of which is welcome to the students of the subject, and induces them to make new experiments themselves. In this manner, Pestalozzi exercised an influence even upon his adversaries.

Generally, Pestalozzi's personal influence on the methods of teaching particular subjects was small; but, on the other hand, he compelled the scholastic world to revise the whole of their task, to reflect on the nature and destiny of man, as also on the proper way of leading him from his youth toward that destiny. And this was done, not in the superficial rationalistic manner of Basedow* and his school, but so profoundly, that even a man like Fichte anticipated very great things from it.

But it is to be lamented, that the actual attempts made by Pesta-

* Basedow founded an educational institution called the "Philanthropin," at Dessau, in 1774. In this institution, the educational views of Rousseau, as expounded in his "Emile," were exclusively followed, and every effort made to realize them. Rousseau was at that time the pharos of many educationists in Germany and Switzerland, as he was the pharos of the men of the revolution in France. The *Philanthropin* excited a good deal of attention at the time. The name of the *Philanthropin* still survives, but it has almost become a term of reproach to signify any shallow educational enterprise. It appears, however, that, together with much that was whimsical and even foolish, the institution presented many honest and unselfish efforts on the part of faithful workers, and produced many wholesome fruits.—See *Raumer's account of the Philanthropin*.

lozzi and his fellow-laborers to set up new methods of teaching various subjects, have met with such especial approbation and imitation. An examination of Pestalozzi's profound principles, and an insight into the contradiction between these principles and his practice, would have conduced much more to the discovery of new methods, really answering to the principles. This is applicable, for instance, to what I have said upon the exercises in observation, falsely so called. Most of the imitators of the great man have fallen in love with his dark side, the endeavor to mechanise education. When those purely external appliances and artifices which he employed for mechanising education shall have been so modified as to be no longer recognizable, or shall have been entirely laid aside and forgotten—then Pestalozzi's "Leonard and Gertrude," the "Evening Hour of a Hermit," and "How Gertrude teaches her Children," will still live on and exercise an influence, though even these works, like every thing else that is human, are not altogether free from spot or blemish. Profound thoughts, born of a holy love under severe pains, they are thoughts of eternal life, and, like love, shall never cease.

[To the above connected survey of the Life and System of Pestalozzi, by Karl von Raumer, we shall add in subsequent numbers of the Journal—

I. Summary of the Educational Principles, Methods and Influence of Pestalozzi, by Dr. Blochmann, Dr. Diesterweg, and other German, French and English Educators.

II. Biographical Sketches of Krüsi, Schmid, Niederer, Tobler, Buss, Ramsauer, and other Associate Teachers and Disciples of Pestalozzi.

III. Extracts from the principal publications of Pestalozzi.

IV. List of Publications relating to Pestalozzi and his Educational system.

V. Influence of Pestalozzi on the Aims, Principles and Methods of Popular Education.]

V. INSTITUTIONS AND INSTRUCTION FOR THE BLIND.

BY L. P. BROCKETT, M. D.

CAUSES AND EXTENT OF BLINDNESS.—Blindness, though congenital in many instances, is less frequently so than deafness. When congenital, its causes are generally analogous to those which induce idiocy, deafness and insanity. Intermarriage of near relatives, scrofula, or other diseases of parents, and intemperance on the part of parents, are very common causes. There are many cases, however, which can not be thus accounted for. Blindness occurring subsequently to birth, is usually the result of prevalent ophthalmia, conjunctivitis, iritis, cataract, amaurosis or gutta serena, small pox, measles, accidents from powder, blows on the eye, &c. Of the diseases enumerated prevalent, ophthalmia and amaurosis are most fatal to sight. The latter, which consists in paralysis of the optic nerve, is very seldom cured. It was the cause of Milton's blindness. The diseases of the eye have of late years received much attention, and eminent men have made their treatment a specialty. Most of our large cities have hospitals or infirmaries devoted to the treatment of these diseases, and Jones, Lawrence, Mackenzie, Hays and others, have published treatises on the subject. The operation for the cure of Strabismus or squinting, which some years ago was very common, is less resorted to at the present day than formerly. The operations for cataract, (couching or depressing and dividing the lens, to remove it from the field of vision,) have resulted in the partial restoration to sight of many blind persons.

The statistics of blindness, in different countries, reveal some singular facts. As we proceed toward the Equator, the proportion of the blind to the entire population increases with great rapidity, and the same is observable in very high latitudes. M. Zeune, the late accomplished director of the Institute for the Blind at Berlin, some years ago prepared a table on the subject, which subsequent observations on the Eastern Continent have very nearly verified. The following were the results at which he arrived:

Between 20° and 30° N. L. ratio of blind to inhabit. is	1 to	100
“ 30° and 40° “ “ “ “	1 to	300
“ 40° and 50° “ “ “ “	1 to	800

Between 50° and 60° N. L.	ratio of blind to inhabit.	is 1 to 1,400
“ 60° and 70° “ “ “	“ “ “	1 to 1,000
“ 70° and 80° “ “ “	“ “ “	1 to 550

The white glittering sand, and the intense heat of the sun, shining always from a clear sky, in Egypt and Northern Africa, causes diseases of the eye, and especially ophthalmia, to be very prevalent in those regions, and similar causes prevail, though to a less extent, in Southern Europe.

Among the densely populated nations of Central Europe, accidents with gunpowder, small pox and other epidemic diseases, are the most frequent causes of destruction of sight. In the temperate regions of the north, the number of the blind is comparatively small; but as we approach the Arctic circle, the glittering snows, the smoky dwellings, the alternation from the brilliant nights of the Arctic summer, to the deep darkness of the Arctic winter, all exert their influence upon the visual organs.

On this side of the Atlantic, however, a different ratio seems to prevail. We have not the means for an accurate comparison except of the latitudes between 30° and 45°; but the proportions are very different from those embodied in M. Zeune's table. The ratio of the blind to the entire population of the United States is 1 to 2,328. The states lying between the parallels of 30° and 35° have 1 to 2,525 inhabitants; between 35° and 40°, 1 to 1,750; between 40° and 45°, 1 to 2,460.

Comparing these statistics with those of most of the countries of Europe, we find a great predominance in favor of the United States.*

According to M. Dufau,

Prussia	has 1 blind person to	1,401 inhabitants.
Belgium	“ 1 “ “	1,316 “
Germany	“ 1 “ “	1,300 “
France	“ 1 “ “	1,357 “
Sweden	“ 1 “ “	1,091 “
Norway	“ 1 “ “	566 “
Switzer.	“ 1 “ “	1,570 “
Egypt	“ 1 “ “	97 “

In Prussia $\frac{1}{11}$ of the number are under 15 years of age. In Sweden only $\frac{1}{10}$ of the whole number.

The number of the blind in France	is about	33,000
“ “ “ G. B. & Ireland		25,000
“ “ “ Russia		50,000

* It is questionable, however, whether the U. S. Census of 1850, is as complete and reliable as those of European countries.

The number of the blind in Germany	30,000
“ “ “ United States	10,000

In Southern and Central Europe the number of blind males exceed the females; in Northern Europe, on the contrary, the females exceed the males.

INSTRUCTION OF THE BLIND.—Although individuals among the blind have, in all ages, attained to a fair amount of education, yet it does not seem that the idea of making provision for their education, as a class, entered into the minds of either Greek or Roman. They procured a precarious subsistence by begging by the wayside, or at the entrance of the temples; but there was no one who would teach them more honorable means of obtaining a livelihood, or rescue them from the inseparable evils connected with a life of mendicancy. Nor amid the noble and philanthropic reforms introduced by christianity, was there any provision made for the training and instruction of the blind. They begged on as before, though now frequenting the doors of christian churches, instead of heathen temples, and asking alms in the name of Christ instead of *Æsculapius*. There were in each age, however, some, who feeling themselves moved by the impulse of genius, sought for more elevated society, and more ennobling pursuits, than the beggar's position and employment. The first public provision ever made for the blind is believed to have been the founding of the Hospice des Quinze-Vingts at Paris, by Louis IX., better known as St. Louis, in 1260. It was established by the kind-hearted monarch for the benefit of his soldiers who, in the campaigns in Egypt, had suffered from ophthalmia. As its name implies, it was intended for fifteen score or three hundred blind persons; though for many years past, the number of inmates has been about 400, including the families of the blind, who are also domiciled within its walls. Its annual income is about \$80,000. The allowance to a blind man is \$89 per annum; if he is married this is increased to \$110; if he has one child, \$120; if two, \$130.50; and so on, adding \$10.50 for each child. Besides these, it has about six hundred pensioners, who do not reside at the hospital, but receive according to their age and circumstances, \$20, \$30 or \$40 per annum, to aid in their support; some of those entitled to a residence in the Hospice, prefer to remain with their families, in other parts of the city; to these a pension of \$50 per annum is paid; no instruction is attempted, and the temptations to a life of indolence are such as to render this asylum any thing but a model institution.

A similar, but less extensive institution, was established at Chartres, in the latter part of the thirteenth century; and in 1350, was

further endowed by king John, so as to accommodate 120 blind persons. From a variety of causes, the number of inmates dwindled, till in 1850 there were but ten.

During the sixteenth century, thoughtful and benevolent men, who had seen with interest the sad fate of the blind, sought to devise a process for their instruction, but with no great success. Attempts were made to print for them in intaglio, that is, with letters depressed below the surface; but finding these illegible to the touch, experiments were made with raised letters, which were so constructed as to slide in grooves; these proving inconvenient, an attempt was made by Pierre Moreau, in 1640, to cast letters in lead, of more convenient form, but from some cause his plan was not successful.

In 1670, the Padre Lana Terzi, a Jesuit of Brescia, who had already published an essay on the instruction of deaf-mutes, appeared before the public with a treatise on the instruction of the blind.

Nearly a century later the Abbé Deschamps, and Diderot, the associate of D. Alembert in the Encyclopedia, proposed plans for their instruction in reading and writing.

In 1780, Weissemburg, a blind man of Mannheim, in Germany, published geographical maps in relief.

It was not, however, till 1784, that Valentine Haüy, "the Apostle of the Blind," as the French people have appropriately named him, commenced his labors in their behalf. Attracted at first to humanitarian labors, by the brilliant example of the Abbé De l'Épée, and to this particular department of them, by seeing a burlesque concert of blind performers, he devoted himself to the mode of instructing the blind, with a zeal and ardor which gathered new strength from every obstacle. His first pupil was a young blind beggar, whom he paid a stipend, in place of his acquisitions by begging, and who soon proved an apt scholar. The approbation of the Academy of Sciences and Arts, and the patronage of the Philanthropic Society, encouraged him to further exertions, and in 1786, his pupils, 24 in number, were called to exhibit their attainments, in the presence of the king and royal family, at Versailles. The royal patronage was secured for the new enterprise, and for a while all went on prosperously; the school increased in numbers and popularity, its pupils became eminent as musicians or mathematicians, and Haüy and his school were objects of interest to all.

In 1791 a change came. The Revolution was fairly inaugurated, the Philanthropic Society was broken up, and many of its members were wandering homeless, in foreign lands. The school for the blind was taken under the patronage of the state, and its support decreed;

but as one assembly succeeded another, and the *reign of terror* made the nation bankrupt, the sum decreed for its support was paid only in assignats, which, ere long, became almost worthless. Haüy and his blind pupils worked at the printing press, procured in their more fortunate days, and eked out existence by the severest toil. It is said that Haüy for more than a year confined himself to a single meal a day, that his pupils might not starve. At length brighter days began to dawn, and prosperity seemed about to revisit them; when they were startled with the intelligence, that the Directory had united them with the inmates of the Hospice Quinze-Vingts, and that thenceforth these unfortunate children were to be exposed to the infectious example of the indolence and vice, so rife, at that time, in that great asylum. Overwhelmed by this intelligence, Haüy, who could not bear to see the fruits of seventeen years of arduous toil thus wasted, resigned his office as superintendent, and after a brief but unsuccessful effort at private teaching, went, at the invitation of the Czar, to St. Petersburg, where he founded an institution for the blind, which still exists.

His place was supplied for twelve years by an ignorant and incompetent director, under whom the school had nearly lost all its earlier reputation, retaining only its musical fame, and this more from the efforts of some of Haüy's old pupils, than from any new instruction.

In 1814 the government became satisfied that a great error had been committed in the union of the two institutions, and assigned separate quarters and ampler funds to the school for the blind, which again, under the patronage of royalty, assumed the title of the "Royal Institution for Blind Youth." A Dr. Guillié was appointed director, a man of energy and tact, but malicious, untruthful, and excessively vain. He expelled at once from the school those whose morals had been contaminated by their associations at the *Hospice*, and reorganized it with great pomp and parade. Every thing was done for show; manufactured articles were purchased at the bazaars, and exhibited as the work of the pupils; Latin, Greek, German, Italian and Spanish, were professedly taught, and the pupils made excellent public recitations in them by the aid of interlinear translations, while at the same time, not even the most elementary instruction in arithmetic or history, was given, and although a few pupils could play some tunes brilliantly, the great mass could not even read music.

Dr. Guillié seemed to regard any reference to Haüy as a personal insult; the very mention of his name was interdicted, and every thing he had done studiously attributed to some one else. This system of deception could not last; the government ordered an investigation,

and unable to endure the scorn which followed the report of the commissioners, Dr. Guillié resigned in 1821. Dr. Pignier was appointed his successor, and though a man of truth and honor, his education, which had been entirely in the monkish schools, rendered him utterly unfit for the post. With the best intentions, the financial and educational condition of the school was constantly growing worse. At length in 1840, the government undertook in earnest its reform. Ordering the erection of new buildings in a more healthful location, they appointed a commission to reform and reorganize the school. On the report of that commission, M. Dufau, who had been for twenty-five years, a teacher in the institution, was appointed director, and has continued in that position up to the present time. M. Dufau is eminently qualified for the place, and has filled it with signal ability. Under his administration, the finances have greatly improved, the course of instruction has been lengthened and systematized, and a judicious course of elementary works having been prepared and printed in relief, the progress of his pupils has been rapid in all the studies they have undertaken. The work department has also been thoroughly reorganized, a society established for the assistance of blind workmen, and the wants of the blind very thoroughly cared for.

Indeed, this school, while the oldest, is also, in every respect, the best in Europe.

In order to give a just idea of the course of instruction adopted in the training of the blind, we give the following statement of the division of time, and the course of study pursued in the Paris institution, from M. Dufau's work "*Des-Aveugles*": The pupil rises at six o'clock in the morning; from this time till eight, he studies or works; at eight, breakfast; from half past eight till half past ten, classes; from half past ten to noon, study or work; at noon, dinner; at one o'clock, reading by divisions, according to age; from half past one to seven, musical classes, or other studies and work, this interval being only broken by a collation, at half past three; at seven, supper, after which, study and reading until nine; at nine all go to bed. Each repast is followed by a half hour's recreation. The studies are thus arranged: *Primary course*.—First year, reading, writing in points, sacred history, elements of music; second year, French grammar, ancient history, geography, arithmetic, elements of music, wind or string instruments; third year, French grammar, Roman history, geography, arithmetic, vocalization and singing, piano and other instruments; fourth year, grammar, arithmetic, national history, history of France, vocalization and singing, instrumental instruction. *Higher course*.—First and second years, rhetoric, literature, philosophy,

political geography, general history, geometry, physics and cosmography, harmony, and the use of musical instruments; third and fourth years, moral science, political economy, and musical compositions, instruction on the organ or other instruments.

The tuning of pianos is added to musical studies, in the last year, by those who are destined to follow that business. Those who intend to follow a trade, confine themselves to the workshop, during the second period of four years studying, two hours a day only.

Among the schools for the blind on the continent, after that at Paris, those at Vienna, Berlin, Amsterdam and Lausanne, have attained the highest reputation, for the useful and thorough training of their pupils, and the number of eminent scholars which they have graduated.

The British schools for the blind have never taken a high stand in their literary training. Those of Edinburg, Glasgow, Bristol, Norwich and York, devote more attention to intellectual culture than the others; but the utmost limit attained even in these is the acquisition of a knowledge of the mere rudiments of geography, arithmetic, history, and perhaps grammar. The attention of the pupil is mostly confined to industrial pursuits, basket and mat making, the manufacture of mattresses, &c. In the United States, larger and more liberal views have prevailed. The "Perkins Institution and Massachusetts Asylum for the Blind," founded at Boston, in 1833, through the influence and energetic efforts of Dr. Howe, and the munificence of Col. T. H. Perkins, has, from the first, aimed to give the blind an education, which should fit them for any position in life which their infirmity might allow them to fill; and the same spirit has pervaded the teaching of the New York, Philadelphia, Columbus, and Jacksonville schools, and to a considerable extent, the smaller institutions in other portions of the country.

The time of instruction embraces from six to eight years, and includes a course in mathematics and belles-lettres, as extensive as that in most of the colleges of the country; and a full and thorough musical training. The languages are not usually taught.

There are besides the European Institutions for the blind, of which we gave an incomplete list in a previous number, [No. 9, p. 484,] of the *Journal*, the following, and perhaps some other asylums, industrial establishments and hospitals for the blind in Europe, in which instruction in reading or the other branches of education, is not required. In many of them the inmates are received for life:

Hospice de Quinze-Vingts, Paris, has 400 inmates, 600 pensioners, income, \$66,000.

Society for aid of Blind Workmen, Paris, 20 inmates, income in 1850, \$2,860, expenses, \$1,820.

Blind Sisters of St. Paul, at Vaugirard, 100 inmates.

Little Blind Brothers of St. Paul, near Paris.

House of Labor for the Adult Blind, Vienna, 60 inmates, income, \$8,900, expenses, \$7,800.

Hospital for the Blind, Vienna, on the model of the Hospice Quinze-Vingts.

Industrial Asylum for the Adult Blind, Berlin, 20 inmates.

The Crèche, or Hospital for Young Blind Children, Berlin.

Workshop for Blind Laborers, Berlin.

Hospital for the Blind, Berlin.

Hospital for the Blind, St. Petersburg. } These are asylums rather

Simpson Hospital for Blind and Gouty Persons, Dublin. } than hospitals.

Molyneux Asylum for Blind Females, Dublin.

Limerick Asylum for Blind Females, Limerick.

London Asylum for the Blind, } These are departments of the insti-
London. } tution for the blind, furnishing a
Jewish Asylum for the Indi- } home and comforts to the aged
gent Blind, London. } and infirm blind.

Asylum for the Indigent Blind, Amsterdam, 30 inmates.

PRINTING FOR THE BLIND.—It was not long after Haüy com-
menced the instruction of his blind pupils, that he became convinced
of the necessity of devising some mode of printing, by which touch
might supply the place of sight to the reader; and after revolving
several plans in his mind, accident finally suggested the best method.
Sending his pupil Lesueur to his desk one day for some article, the
young man found there a printed card of invitation, which had re-
ceived an unusually strong impression; passing his fingers over the
back of the paper, he distinguished the letter *O*, and brought the
paper to Haüy to show him that he could do so. The philanthropist
saw at a glance that the principle of printing for the blind was
discovered, and that it was only necessary to perfect the process. He
experimented for a long time on the form of letters best adapted to
be read by touch, and finally adopted the Illyrian, which, from the
square form of the letter, seemed to offer more distinct points of
recognition than any other; but unfortunately his letters were too
large, and the embossing so imperfect, as to make it difficult for those
whose tactile sensibility was defective, to read them. His successor,
Dr. Guillié, adopted a different form of letter in the place of the
Illyrian, and boasted greatly of the perfection of his type; but the
twenty-two volumes published by him were found illegible by the

blind, and were mostly sold to the shops for refuse paper. Dr. Pignier, who succeeded him, probably introduced the script letter, which, with some modifications to promote greater sharpness of embossing, is still used on the continent at Paris, Berlin, Vienna, Pesth, Amsterdam and St. Petersburg, in all of which cities printing for the blind has been executed.

In England, Mr. James Gall, Principal of the Edinburg Institution for the Blind, commenced, in 1826, a series of experiments with a great variety of alphabets, with a view of ascertaining which was best adapted to the purposes of the blind. The alphabet upon which he finally fixed is known as Gall's triangular alphabet. He published several small books in it, but repeatedly modified its form, till at last it approximated to the Roman alphabet. These books have never come into general use among the blind, although quite legible. They were printed in 1832, and the five following years. A more popular and attractive form of letters was adopted, nearly simultaneously, in Great Britain and in the United States. It is known in the former country as Alston's, and in the latter as the Philadelphia letter. It is the Roman capital, with a light sharp face, and deprived of the serifs or hair lines, forming a type analogous to that known among type founders and printers as sans-serif. Dr. Fry is said to have been the first to suggest its use in England, and Mr. Friedlander, the founder of the Philadelphia School for the Blind, had, at a period somewhat earlier, adopted it here. Dr. Russ, the founder of the New York Institution, devised a phonetic alphabet in 1833, which possessed considerable merit, but did not come into use to any great extent. The alphabet for the blind, which is most generally used in Great Britain and America, is the Boston letter, invented and perfected by Dr. S. G. Howe, the founder of the Perkins Institute for the Blind. Its peculiarities, which it would be easier to distinguish than to describe, are, the angular form of the letters; the rigid adherence to what printers call "lower case" letters; the marked distinction between those which are ordinarily most nearly alike in form; its compactness, and the sharpness and perfection of the embossing. On account of these qualities, which rendered it more easily legible by the blind than any other, and reduced the cost of printing, the jury on printing, at the London Crystal Palace exhibition, gave it their preference over the other styles of type for the blind. The number of books in this letter is much greater than in any other.

We have already adverted to Dr. Russ' invention of a phonetic alphabet; the introduction of arbitrary characters has been repeatedly attempted in printing for the blind, and with all the advantages of

large funds to prosecute the work ; but it has proved practically a failure, because the blind have found it more difficult to acquire these arbitrary alphabets than the ordinary English letters ; and because their use in writing or reading would only put them in communication with the few who had acquired these systems, and thus would lead to the greater isolation of the blind as a class.

Three of these alphabets have been put forth in England, and in each there have been several books, (the Scriptures among the number,) published, and each has been proclaimed as an advance on every previous method of teaching the blind. They are known as Lucas', Fresre's and Moon's, the inventors being principals, respectively, of the Bristol, London and Blackheath, and Brighton Asylums for the Blind.

We ought not to omit here a reference to an ingenious apparatus used as a substitute for books and manuscripts, which was the joint invention of two blind men, Messrs. Macbeath and Milue of the Edinburg Institution, in 1830. We allude to the string alphabet ; a mode of designating, by the form and distance of knots, on a cord, the different letters of the alphabet ; this invention, though cumbrous and capable of material improvement, was, for many years, in use in the Edinburg Institution, though never generally adopted elsewhere.

The great cost of printing books for the blind, in consequence of their bulk, and the small editions required, has rendered the supply, very scanty, aside from the Scriptures and the text-books in use in the different institutions. There were in 1856 but forty-six miscellaneous books in English, printed in relief, unless we include those printed in the arbitrary characters, which aside from the Scriptures, amounted to nine volumes more. Many of them are quite small, some comprising only a very few pages ; yet these fifty-five volumes, if sold at actual cost, would amount to about seventy dollars. Provision should be made by the governments of Great Britain and the United States, for a fund, to be devoted to the production of books for the blind.

The variety of books, published for the blind on the continent of Europe, is still smaller. The French catalogue, which is by far the largest, contains, besides the necessary text-books, only a very few religious books, lives of the saints, &c. The Dutch catalogue has but twelve volumes in all, several of which are single books of the Scriptures ; nor are the others more extensive.

The printing of music for the blind, which seems a necessity, from the resource which it furnishes for a comfortable livelihood to many of them, has been a very expensive and difficult matter, so much so,

that music is to a very great extent committed to memory by the pupils of blind institutions. This difficulty has been obviated, by an ingenious system, invented by a French teacher in the institution at Paris, himself blind, M. Louis Braille.

It has always been a problem extremely difficult of solution, to teach the blind to communicate their ideas by writing, in such a way that they themselves should be able to read what they had written. By a very simple apparatus, they could be taught to write with considerable rapidity; but the words once committed to paper would be lost to them; tangible inks, intaglio type, pin type, a small printing apparatus, all were tried, and each found in some respect objectionable. M. Ch. Barbier, in 1825, had invented a system of writing with points, in which he represented, by certain arrangements of points, about forty sounds. His plan was faulty, both as a phonetic system, and a system of writing, requiring as it did, the use of ten or twelve points for almost every sound. M. Louis Braille modified Barbier's system completely, rendering it far more simple, and representing by each character some letter or combination of letters. His plan is based upon a series of fundamental signs comprising the first ten letters of the alphabet; none of these consist of less than two, nor more than four dots. A second series is formed by placing one dot at the left of each fundamental sign; a third by placing two dots under each sign; a fourth by placing one under the right side of each. By prefixing a character comprised of three dots, the first ten are used as figures; by prefixing another the last seven of the fundamental signs represent musical characters, and here, by a sign peculiar to each octave, he avoids the necessity of designating the key to each musical sentence. The apparatus consists of a board in a frame like that of a double slate, the surface of which is grooved horizontally, and vertically, by lines one-eighth of an inch apart; on this the paper is fastened, by shutting down the upper half of the frame, and the points are made with an awl or bodkin through a piece of tin perforated with six holes, $\frac{1}{8}$ of an inch apart. The perforations are made from right to left, in order that the writing when reversed may be read from left to right. This system has been introduced into the French, Prussian, Austrian, Belgian, Swedish and Dutch schools in Europe, the New York, Maryland and Illinois Institutions in the United States, and the Imperial Institute for the Blind in Rio Janeiro.

From the first commencement of instruction for the blind, music has been a favorite pursuit with them. To many it furnished the means of support; for the blind have often, from their sensitiveness

to sound and the delicacy of their touch, as well as from the careful modulations of their voices, extraordinary qualifications for acquiring great skill in instrumental and vocal music. To some it is an agreeable recreation, and to others a source of pure and intense enjoyment. All, however, can not practice it, and while some find employment in the tuning of pianos, for which a well trained ear and skillful touch are requisite, others are occupied in the manufacture of mattresses, mats, baskets, paper boxes, brooms, brushes, the simpler departments of cabinet work, or in trade.

The capacity of the blind as a class to sustain themselves by their own labor, has been one of those practical questions which hardly admit of a complete or satisfactory solution. All, or nearly all, the schools for the blind have workshops, in which the pupils labor some hours every day, in order to acquire some handicraft, which may aid in their support. Most of the larger institutions of the United States have also connected with them, workshops for the adult blind, either their own graduates or others, where certain advantages of shop rent, machinery, material at wholesale prices, or sale of goods at retail prices, and in some instances board at a reduced rate, or a moderate pension, to aid in paying their way, is allowed. Objections have been made to these measures of assistance, but in the fierce competition for subsistence among the poorer classes, we see not how the poor blind man, who has the loss of sight added to the other disabilities of poverty, is to exist without them.

In one instance, (at Philadelphia,) an asylum has been provided for the aged and infirm blind, where, beguiling the weariness of the passing hours by such light toil as they can readily accomplish, they may pass the evening of life in comfort and happiness.

The British institutions for the blind are mostly asylums rather than schools. In the greater part the blind are received for life; their educational training consists merely in reading, musical instruction, and perhaps the most elementary knowledge of figures; but they are taught trades, and required to work a certain number of hours every day. These institutions are for the most part well endowed, and any deficiency in the results of the labor are made up from other funds. On the Continent there are in the larger cities, asylums of a character nearly corresponding to the Hospice de Quinze-Vingts already described, for the infirm and even the healthy blind. Berlin has especially distinguished itself, for the completeness of its provisions, for every class of the blind. Besides the institute for the young blind, it has a *crèche* or hospital for blind infants; a workshop for blind laborers, furnishing material, and paying a premium to the

blind laborer; an industrial asylum for the blind of both sexes, who have graduated at the institute, and are unable to obtain a complete support elsewhere; and a hospital for blind foreigners, and for the sick, aged and infirm blind.

The blind, as a result of their infirmity, have some peculiarities, though fewer than mere theorists have attributed to them. In youth they are generally very happy, and even gay. As they arrive at adult age, they are more disposed to be restless, uneasy, desirous of change, and discontented with their condition. It is under these circumstances, that some writers have been disposed to charge them, as a class, with ingratitude. The charge is unjust. Individuals among them, as among the seeing, undoubtedly, often manifest an ungrateful disposition; but this is rather the result of the restless disposition already noticed, than of unusual depravity. They are generally endowed with very keen perceptions, and are usually better judges of character than persons who can see. Diderot charged them with being devoid of the idea of modesty or shame, but if this charge was the result of observation, he must have mingled with a different class of blind persons from those found in other countries. That modesty of deportment, which is one of the highest graces of womanhood, is nowhere found in greater perfection than among the blind.

The consciousness of physical weakness, has probably had its effect in rendering them generally less vain than deaf-mutes; while, at the same time, their intellectual faculties are usually of a higher order, and their facility in the acquisition of knowledge is much greater.

GENERAL VIEW OF INSTITUTIONS FOR THE BLIND IN THE UNITED STATES.

NAME OF INSTITUTION.	Location.	Cost or estimated value of Buildings and Grounds.	Date of Opening.	Date of Latest Information.	Number of Pupils.	Number of State Beneficiaries.	Annual Amount received from State.	Annual Current Expenses.	Charge to Paying Pupils.	Name of Superintendent.	Number of Instructors.	Number of Blind Instructors.	Number of Graduates.
Perkins Institution and New England Asylum,	Boston, Mass.,	150,000	1832	1857	114	62	\$12,000	\$21,600	\$200	S. G. Howe, M. D.,	6	3	311
New York Institution for the Blind,	New York,	150,000	1832	1856	185	150	30,000	38,728	200	T. Colden Cooper,	16	11	561
Pennsylvania	Philadelphia,	125,000	1833	1857	136	100	23,500	26,583	200	William Chapin,	17	11	340
Ohio	Columbus,	40,000	1837	1857	93	+	18,000	18,000	100	Asa D. Lord, M. D.,	8	2	215
Virginia Institution for Deaf & Dumb & Blind,	Staunton,	75,000	1839	1855	35	25	10,000	11,000	160	J. C. Merillat, M. D.,	9	9	93
Kentucky Institution for Blind,	Louisville,	70,000	1842	1857	60	60	11,000	11,000	140	B. M. Patton,	5	2	45
Tennessee	Nashville,	15,000	1844	1855	26	25	4,000	4,500	200	J. M. Sturtevant,	5	3	3
Indiana	Indianapolis,	100,000	1847	1857	73	+	15,000	15,000	100	J. M. Workman, M. D.,	6	6	8
Illinois	Jacksonville,	80,000	1849	1857	60	+	14,000	14,000	100	Joshua Rhoads, M. D.,	6	6	8
Wisconsin	Janesville,	45,000	1850	1857	20	+	7,000	7,000	100	W. H. Churcman,	4	2	2
Missouri	St. Louis,	45,000	1851	1854	21	+	5,000	7,000	100	W. W. Whelan,	4	2	2
Mississippi	Jackson,	11,000	1848	1857	20	20	7,000	7,000	100	P. Lane,	4	2	2
Georgia Academy	Macon,	*7,500	1852	1857	20	17	4,000	4,000	200	W. N. Caudoin,	4	1	6
Iowa Institution	Iowa City,	6,000	1853	1855	23	+	5,000	5,000	200	Samuel Bacon,	4	1	6
Louisiana Institution for Deaf & Dumb & Blind,	Baton Rouge,	128,000	1852	1855	17	17	5,000	5,000	150	J. S. Brown,	3	1	1
Maryland Institution for Blind,	Baltimore,	1854	1857	1857	17	17	3,000	3,000	200	I. A. McKenney, D. D.,	3	1	1
Columbia Institution,	Washington, D. C.,	1857	1854	1857	24	24	3,000	3,000	100	E. W. Gallaudet,	2	1	1
Michigan Asylum for Deaf & Dumb & Blind,	Flint,	150,000	1854	1857	24	24	8,000	8,000	100	B. M. Fay,	2	1	1
N. Carolina Institution	Raleigh,	1848	1856	1856	13	13	7,000	7,000	150	William D. Cooke,	3	2	2
S. Carolina	Cedar Springs,	12,531	1855	1856	13	13	7,000	7,000	150	N. P. Walker,	3	2	2

* State has since appropriated \$20,000.

† Free to all the Blind of the State under 20 years of age.

‡ For both Departments.



Lowell Mason



Samuel H. Mason

VI. EDUCATIONAL LABORS OF LOWELL MASON.

LOWELL MASON, who is identified with the advancement of musical education in this country, was born in Medfield, Mass., January 8th, 1792. He early manifested a great love for music, and sung, and played on various instruments, almost instinctively. In early youth, he commenced teaching; for which, also, he manifested a strong inclination.

At the age of twenty, he removed from Massachusetts to Savannah, Georgia, where, although engaged in other occupations, the teaching of music, and the conducting of choirs and musical associations, both vocal and instrumental, were leading objects of his attention. During his residence in Savannah, he became deeply interested in Sabbath School teaching, and was, for many years, the superintendent of a large school,—the only one at that time, in the city; and in which all the different Christian denominations united. It was while engaged in this school, that he formed those habits of intercourse with children, which afterward proved so valuable, when teaching became the daily occupation of his life, in the wide sphere of musical instruction in our public schools.

In 1821, the Boston Handel and Haydn Collection of Church Music, of which Dr. Mason was the sole editor, was first published; and, a few years afterward, several gentlemen of Boston, who had been, for some time, engaged in efforts to introduce improvements in church music,—some of whom had become personally acquainted with Dr. Mason, and with the successful results of his musical labors, took measures to obtain his aid and direction in the execution of their plans. Proposals were accordingly made to him to remove to Boston, which were finally accepted; and in the summer of 1827, he took up his residence in that city.

Dr. Mason now commenced the extensive teaching of vocal music in classes, introducing, at once, that feature in musical teaching, which had been but little known before, but which he had successfully pursued in Savannah, the instruction of children; training their voices especially to the performance of the alto part in choral music. These efforts were highly successful: they resulted in the awakening of a

very general interest in musical instruction, and in preparing the way for the formation of the Boston Academy of Music, and for the introduction of music into schools, as an educational study.

Dr. Mason had already established a reputation as a successful teacher, both of vocal and instrumental music, in which he had now been engaged for sixteen or eighteen years, when an event occurred, which not only changed his whole manner of teaching, but which led him to a much wider and more comprehensive view of the subject of musical instruction, than he had before entertained, and to juster conceptions of the whole theory of education, as resting on a rational and philosophical basis. We refer to the fact that he had now become acquainted, for the first time, with the principles of instruction, as developed by Pestalozzi, which, although at first with great reluctance, he at length thoroughly embraced, and has, for nearly thirty years, constantly and faithfully adhered to, and happily and successfully illustrated.

For this clearer light on the subject of education, Dr. Mason was indebted to the enlightened zeal, energy, and perseverance, in all educational improvements, of the late William C. Woodbridge, so extensively known, not only as a geographer but as an educator, whose labors, in both capacities, mark one of the prominent eras of the history of education in the United States. Mr. Woodbridge, while in Germany and Switzerland, where he resided for several years, with the view of becoming acquainted with the best methods of instruction, although like Pestalozzi, he had given little personal attention to the subject of music, became, from his own observation of its excellent influence on the pupils of Pestalozzian schools in general, and especially in the institution of Fellenberg, at Hofwyl, thoroughly convinced of its importance as a school exercise and an educational influence. He accordingly procured all the information in his power respecting it, and obtained the most approved text-books of school or class voice-exercises and songs, as well as of elementary treatises on musical instruction. Among these were the admirable songs of Nägeli, and the treatise by M. T. Pfeiffer and H. G. Nägeli, published at Leipzig, 1810, entitled "*Gesangbildungslehre nach Pestalozzischen Grundsätzen.*" These books by Nägeli and others, which had been prepared with particular reference to the legitimate influence of song in moral culture and the training of the affections, Mr. Woodbridge not only placed in the hands of Dr. Mason, but was at the trouble, himself, to translate them, in part, and to furnish such explanations and directions as he had received personally from Pfeiffer, Nägeli, Krtási, Fellenberg, Kübler, Gersbach, and others.

To those who know, from their own experience, how difficult it is

for one who has, for many years, been successful as a teacher, and has, therefore, great confidence in some method of his own, to substitute for it that of another, to those who have observed the slow progress which has been made in the true art and science of teaching, notwithstanding the greatly increased attention which has been given to the subject of education, for the last quarter of a century,—to those who know that, even at this day, the principles of Colburn's Arithmetic, which were derived from Pestalozzi, are still rejected by many teachers, it will not seem surprising that it was, at first, no easy thing to convince Dr. Mason that the new method was preferable to that of foregoing rules, signs, tables, and definitions, to be committed to memory from a printed tabular or book form, to which he had been so long accustomed, and in the use of which he had attained to such success. But the efforts of Mr. Woodbridge were untiring: they were persevered in with such a constancy, zeal, and good humor, that, at last, Dr. Mason consented to a proposed experiment of teaching a class, after the Pestalozzian manner, provided one could be found for the special purpose. Mr. Woodbridge and others who had become interested in the subject, succeeded in the formation of a large class, of about two hundred ladies and gentlemen, with the express view of bringing the new method to the test of experience. The lessons were carefully prepared, at first, with the assistance of Mr. Woodbridge, and were given by Dr. Mason, with a success vastly greater than had ever before attended any of his efforts. He was fully convinced of the practicability and the fitness of the new method, as a mode of instruction appealing to reason and common sense, not less than to theory and truth, on educational principles. The same mode of teaching he soon began to apply to juvenile classes, and with success corresponding to that in the adult class referred to above.

In 1830, a lecture was given by Mr. Woodbridge, before the American Institute of Instruction, on "Vocal Music as a branch of Education," in the State House in Boston. Illustrations were given by a class of Dr. Mason's pupils. A wider and more important field of instruction was now opened, than had before been contemplated. Dr. Mason's juvenile classes,—which had already been taught gratuitously, for several years; he furnishing not only the tuition but also the room, fuel, and all needful school apparatus,—now rapidly increased in numbers, to such extent that thousands of children, of both sexes, received more or less instruction in singing, and in the knowledge of music. These classes were taught on the afternoons of Wednesdays and Saturdays, so as to enable the children of the public schools to attend: two or three classes, sometimes numbering

altogether, from one to five hundred children, were accustomed to meet at successive hours on the same day. The first juvenile concerts followed. These were given by choirs of children, so numerous as to fill the galleries of the Bowdoin street church.

Dr. Mason was now joined in these labors by Mr. George James Webb; and here it is proper to observe that the whole amount received, as the proceeds of all the juvenile concerts, was given to some charity; neither of the instructors receiving any pecuniary compensation whatever for their labors, until after the formation of the Boston Academy of Music, which, in part, at least grew out of these efforts.

The subject of music in schools was now taken up in good earnest, by some of the best educators and teachers of Boston; and instruction in singing was introduced, almost simultaneously, into the Mount Vernon School, (female,) under the Rev. Jacob Abbott, the Chauncy-Hall School, (male,) under Mr. G. F. Thayer, and the Monitorial School, (female,) under Mr. George W. Fowle.

It would not be consistent with our present purpose to follow the progress and wider diffusion of musical instruction and its genial influences, either on the character of education, or on the improving and extending taste for music in the community at large. We can merely glance at the auspicious establishment of the Boston Academy of Music, and the subsequent introduction of music, as a regular branch of instruction, in the public schools of Boston, whence it rapidly extended throughout New England and the Union.

Under the patronage of the Boston Academy of Music, and under the immediate direction of Messrs. Mason and Webb, various measures were taken for the improvement of musical education, by the formation of permanent classes, the association of church choirs, the establishment of lectures, the periodical appointment of concerts, schools for instrumental music, and the yet more extensive introduction of vocal music in public and private schools.

We must not omit, in this connection, to state the fact that one of the very first regular Teachers' Institutes ever held in our country, was that held in Boston, in August, 1834, by the Academy, for "instruction in the methods of teaching music." In this class, which was annually continued up to the year 1852, the Pestalozzian method of teaching vocal music in classes, was regularly explained and illustrated. Similar classes for teachers were soon established in various places; and it is, perhaps, owing to this fact that Pestalozzian teaching came to be very extensively, though erroneously, regarded as merely a method of *musical* instruction, rather than one of universal application to all branches of study, in all stages of their progress.

In 1837, Dr. Mason visited Europe, for the principal purpose of making himself personally acquainted with the best systems of teaching music in actual use abroad. In Paris, he found Wilhelm's method in use, and popular as taught in the schools of its author; but this being based entirely on those principles which Dr. Mason had, some years before, reluctantly been compelled by his convictions to abandon, and being merely a carefully prepared course of *mechanical* training, could lay no claim to his attention. In Wurtemberg and the northern parts of Switzerland, he became acquainted with Kübler, Gersbach, Fellenberg, and others;—Pestalozzi and Nägeli were no more. The three first named pursued, to greater or less extent, the inductive method; and, from the observation of their modes of teaching, and from personal communication with them, he became more familiar with its practical application to music and to school studies generally.

On his return from Europe, Dr. Mason had ample opportunities for carrying out the principles of inductive teaching, in extensive application to the instruction of his numerous classes; and his methods may not unjustly be mentioned as more rigorously exact and philosophically just than even those adopted in the schools abroad in which they were originally introduced. Pestalozzi himself, though fully convinced of the value of music, as a means of intellectual and moral training, was as little systematic in the practical and executive part of teaching as in other branches, and attempted nothing beyond a rudimental outline, suggestive rather than methodical, and designed to be carried out by others possessed of a more patient spirit of application, or of greater tact and skill. The suggestive views of Pestalozzi, Dr. Mason has carried further, perhaps, than any other teacher has ever done; and, through his exertions, the soundness and practicability of these views, not less than their theoretic truth, have been brought to the thorough test of daily experience in his teaching, which was gratuitously conducted, as an experiment, for one entire year, in one of the public schools of Boston, previous to its general introduction, under his personal direction, in these schools, and in the classes of the Academy. Another sphere of extensive experience of the benefits resulting from Dr. Mason's application of Pestalozzian principles to the processes of instruction, has been that of the Massachusetts Teachers' Institutes, which he has attended, as lecturer and instructor in music, from the commencement, under the direction of the Hon. Horace Mann, the first Secretary of the Massachusetts Board of Education, through the secretaryship, also, of the Rev. Dr. Sears, and, thus far, that of the present Secretary, the Hon. George S. No. 10.—[VOL. IV., No. 1.]—10.

Boutwell. In this form of teaching, Dr. Mason peculiarly excels. His long continued experience as a practical teacher, his rare tact in developing the vital principles of instruction in the simplest and happiest manner, his endless variety of illustrations, his indefatigable perseverance in tracking and exposing errors in thought or in theory, his genial and humane humor, his playful sallies of wit, his kindly sympathy with youth and childhood, his gentle yet impressive monitory hints, and occasional grave reflections, give him an indescribable power over his audience; while the perfect simplicity and strictly elementary character of his instructions evince the depths to which he has penetrated, in tracing the profoundest philosophy of teaching. Nor is his success limited to the single department which, in the sessions of the institutes, falls nominally under his special care. His wide and comprehensive views embrace the whole field of education, and all its prominent subjects. The remark was justly made by the Hon. Horace Mann, that it was well worth any young teacher's while to walk ten miles to hear a lecture of Dr. Mason; for in it he would hear a most instructive exposition of the true principles of all teaching, as well as that of instruction in music.

In 1855, the University of New York recognized the value of Dr. Mason's labors in his more immediate professional sphere, by conferring on him the honorary degree of Doctor in Music;—the first instance of such a degree being conferred by an American university; and Dr. Mason being the first American who ever received such an honor from any quarter.

Dr. Mason owes his high reputation at home and abroad to the fact that he has pursued his long and arduous career as a teacher, not merely with an unparalleled success, which has justly raised him to eminence, but on broad and generous principles elevated far above all barely technical or mechanical skill, displayed in mere flexibility of voice or dexterity of finger. It is as an enlightened educator, who distinctly perceives and eloquently pleads for the value and the power of music, as an influence on human culture, that he stands prominently before his country as one of its noble benefactors. And most assuredly he has already reaped a large share of that reward of grateful feeling which future generations will yet more fully express, as the children in our common schools, and the worshipers in our churches, continue to repeat the strains of chaste melody and skillful harmony for which our whole community stands so deeply indebted to the labors of his daily life.

The services which he has rendered to the cause of education, in his instructive methods of developing the elements of all

culture, as well as of music, are deeply appreciated by the multitude of young teachers who have enjoyed the privilege of listening to his skillful expositions of theory and practice, in all their relations to the daily duties of the teacher's life. The method which he has pursued for the last twenty-five years has been of signal service in drawing out, to a degree unknown before, the proper distinction existing in the generic vocal principle of speech and song, and the relation which the two-fold form sustains to itself, in its component elements. He has been peculiarly successful in inculcating the beauty of a finished articulation in song, and that of true expression in the tones of emotion. While occupied with the claims of *sound*, however, he has always recognized those of *number* and *form*, as correlatives in the processes of culture. He has never pleaded the cause of music exclusively, but always set it forth in its happy influence on all other departments of mental discipline and development.

Dr. Mason's influence, through his published works, not less than his personal instructions, has been in the highest degree conducive to the cultivation of *purity of taste*, as an important element not only in the æsthetic relations of musical art, but in all those of high, moral culture and true elevation of character. The judgment and care with which, in this relation, his selections of school songs have been compiled, are beyond praise. He has furnished, in those unpretending little volumes, a treasury of the best simple melodies of many lands, as these have been presented by eminent masters who have condescended, (or rather risen,) to meet the heart of childhood in its thirst for song; and these beautiful strains of music he has accompanied with words which speak of nature, of life, and of God, in the purest forms of sentiment. To feel the full value of his labors in this department, we have but to glance, for a moment, at the low and degrading character of too many of our popular, and even our school songs. The noble office and mission of music, as an intended refiner and purifier of the heart, Dr. Mason has never overlooked. Well has he said,

“We fear that it is too often the case that music in school is regarded not as having any thing to do with study, but as a mere recreation or amusement. Valuable as it may be, even in this view, we feel certain that, when introduced into schools, music should be made a study, not only in itself considered, but as a correlative to all school pursuits, and occupations. Unless the pupils are made more cheerful, happy, kind, and studious, by the music lesson, it is not properly given; for these are some of the results which music was obviously designed to secure.”

LIST OF PUBLICATIONS BY LOWELL MASON.

Juvenile, or School Books.

- JUVENILE PSALMIST, Boston, 1829.
 JUVENILE LYRE, [the first book of School Songs published in this country,]
 Boston, 1830.
 MANUAL OF INSTRUCTION IN THE ELEMENTS OF VOCAL MUSIC, Boston, 1834.
 JUVENILE SINGING SCHOOL, Boston, 1835.
 SABBATH SCHOOL SONGS, Boston, 1836.
 SABBATH SCHOOL HARP, Boston, 1837.
 JUVENILE SONGSTER, London, 1838.
 JUVENILE MUSIC FOR SABBATH SCHOOLS, Boston, 1839.
 BOSTON SCHOOL SONG BOOK, Boston, 1840.
 LITTLE SONGS FOR LITTLE SINGERS, Boston, 1840.
 AMERICAN SABBATH SCHOOL SINGING BOOK, Philadelphia, 1843.
 SONG BOOK OF THE SCHOOL ROOM, Boston, 1845.
 PRIMARY SCHOOL SONG BOOK, Boston, 1846.
 THE NORMAL SINGER, [four-part Songs,] New York, 1856.

Glee Books, &c.

- *THE MUSICAL LIBRARY, &c., Boston, 1835.
 *THE BOSTON GLEE BOOK, Boston, 1838.
 *THE ODEON, Boston, 1839.
 THE GENTLEMEN'S GLEE BOOK, Boston, 1842.
 *THE VOCALIST, Boston, 1844.
 *THE GLEE HIVE, Boston, 1851.

Sacred and Church Music Books.

- THE BOSTON HANDEL AND HAYDN COLLECTION OF CHURCH MUSIC, Boston,
 1822.
 THE CHOIR, OR UNION COLLECTION, Boston, 1833.
 THE BOSTON ACADEMY COLLECTION, Boston, 1836
 LYRA SACRA, Boston, 1837.
 OCCASIONAL PSALMODY, Boston, 1837.
 SONGS OF ASAPH, Boston, 1838.
 BOSTON ANTHEM BOOK, Boston, 1839.
 THE SERAPH, Boston, 1838.
 THE MODERN PSALMIST, Boston, 1839.
 THE CARMINA SACRA, Boston, 1841.
 THE BOSTON ACADEMY COLLECTION OF CHORUSES, Boston, 1844.
 *THE PSALTERY, Boston, 1845.
 THE NATIONAL PSALMIST, Boston, 1848.
 *CANTICA LAUDIS, Boston, 1850.
 *THE BOSTON CHORUS BOOK, Boston, 1851.
 THE NEW CARMINA SACRA, Boston, 1852.
 THE HOME BOOK OF PSALMODY, London, 1852.
 THE HALLELUJAH, New York, 1854.

Many smaller works and single pieces are not included in the above.

* Published in connection with Mr. George James Webb.

VII. HISTORY OF THE SCIENCE AND ART OF EDUCATION.

BY KARL VON RAUMER.

IN no department of literature is the English Language, as compared with the German or French, so deficient, as in the History, Biography, Science and Art of Education. To supply this deficiency is one of the cardinal objects of this Journal, and in addition to independent treatises on the history and condition of systems and institutions of education in different countries, we propose to give a living interest to the discussion of principles and methods of instruction which have prevailed at different times in the same country, by a series of biographies of eminent teachers, educators, and promoters of education. In these sketches we shall draw largely on the "*History of Pedagogics*"* by Karl von Raumer, a standard work in the educational literature of Germany.

KARL VON RAUMER, was born at Worlitz, in the duchy of Anhalt-Dessau, on the 9th of April, 1783. Until his fourteenth year, he was under private instruction at home; was then, with his brother, (Frederic, the present Minister of Public Instruction in Prussia,) placed at the Joachimsthal Gymnasium at Berlin; in 1801, went thence to the university of Göttingen to study law; in 1803, to Halle, to attend the lectures of Wolf and Steffens, and in 1805, to Freiberg, where he devoted himself to mineralogy and geology under Werner. After exploring the mountain chains in Germany and France, he went to Paris, in the autumn of 1808 to prosecute his geological studies, where a change in his plans of life occurred, which he thus describes in a chapter of his published lectures on education:

"At Paris my views and intentions in regard to the future occupation of my life underwent a great change, which was brought about by two different causes. For one thing, I had learnt by my own experience how little a single individual is able to accomplish for the science of mineralogy, even if he goes to work with the best will and the most toilsome industry; that it required, much more, the united, intelligent and persevering labors of many, in order to pass from a mere belief in the laws of mineralogy to an actual perception of their operation in mountain chains. I thus became convinced that we ought not to work for science as individuals, but that we should, after passing through our own apprenticeship, instruct others and train them for the pursuit of science. How much more useful is it, thought I, to produce *one* new workman than *one*

* *Geschichte der Pädagogik vom Wiederaufblühen klassischer Studien bis aus unsere Zeit* Stuttgart, 1847. 3 vols.

single new work, seeing that the former can execute many works, and even train other workmen. This conviction caused me to turn my attention to the question of education. But a second cause operated in a still higher degree to produce the same result. The sad time that had passed since 1806 had affected me with horror and dismay; it had made me wish to shun the society of my fellow-men, and had quite disposed me to give myself up to the most solitary researches among the mountains. This disposition was strengthened at Paris, in the midst of the haughty despisers of our German fatherland. But it was here, too, where hope first dawned within me, where a solitary light beamed toward me through the darkness of night. I read Pestalozzi, and what Fichte says, in his 'Addresses to the German Nation,' about Pestalozzi and education. The thought, that a new and better Germany must rise from the ruins of the old one, that youthful blossoms must spring from the mouldering soil, took strong hold of me. In this manner, there awoke within me a determination to visit Pestalozzi at Yverdon.

Fichte's Addresses had great influence on me. Surrounded by Frenchmen, the brave man pointed out to his Berlin hearers in what way they might cast off the French yoke, and renew and strengthen their nationality.

He promised deliverance especially through a national education of the Germans, which he indicated as the commencement of an entire reformation of the human race, by which the spirit should gain a complete ascendancy over the flesh. To the question, to which of the existing institutions of the actual world he would annex the duty of carrying out the new education, Fichte answered, 'To the course of instruction which has been invented and brought forward by Henry Pestalozzi, and which is now being successfully carried out under his direction.'

He then gives an account of Pestalozzi, and compares him with Luther, especially in regard to his love for the poor and destitute. His immediate object, says Fichte, was to help these by means of education, but he had produced something higher than a scheme of popular education,—he had produced a plan of national education which should embrace all classes of society.

Further on he expresses himself in his peculiar manner on the subject of Pestalozzi's method, which he criticises. He takes exception to Pestalozzi's view of language, namely, 'as a means of raising mankind from dim perceptions to clear ideas,' and to the Book for Mothers. On the other hand, he strongly recommends the development of bodily skill and dexterity proposed by Pestalozzi, for this, among other reasons, that it would make the whole nation fit for military service, and thus remove the necessity for a standing army. Like Pestalozzi, he attaches a high value to the skill necessary for gaining a livelihood, as a condition of an honorable political existence.

He especially insists that it is the duty of the State to charge itself with education. He spoke in the year 1808, in the capital of Prussia, which had been deeply humiliated by the unhappy war of the preceding years, and in the most hopeless period of Germany's history.

'Would that the state,' he said to a Prussian audience, among whom were several high officers of state, 'would look its present peculiar condition steadily in the face, and acknowledge to itself what that condition really is; would that it could clearly perceive that there remains for it no other sphere in which it can act and resolve as an independent State, except the education of the rising generation; that, unless it is absolutely determined to do nothing, this is now all it can do; but that the merit of doing this would be conceded to it undiminished and unenvied. That we are no longer able to offer an active resistance, was before presupposed as obvious, and as acknowledged by every one. How then can we defend our continued existence, obtained by submission, against the reproach of cowardice and an unworthy love of life? In no other way than by resolving not to live for ourselves, and by acting up to this resolution; by raising up a worthy posterity, and by preserving our own existence solely in order that we may accomplish this object. If we had not this first object of life, what else were there for us to do? Our constitutions will be made for us, the alliances which we are to form, and the direction in which our military resources shall be applied, will be indicated to us, a statute-book will be lent to us, even the administration of justice will sometimes be taken out of our hands; we shall be relieved of all these cares for the next years to come. Education

alone has not been thought of; if we are seeking for an occupation, let us seize this! We may expect that in this occupation we shall be left undisturbed. I hope, (perhaps I deceive myself, but as I have only this hope still to live for, I can not cease to hope,) that I convince some Germans, and that I shall bring them to see that it is education alone which can save us from all the evils by which we are oppressed. I count especially on this, as a favorable circumstance, that our need will have rendered us more disposed to attentive observation and serious reflection than we were in the day of our prosperity. Foreign lands have other consolations and other remedies; it is not to be expected that they would pay any attention, or give any credit to this idea, should it ever reach them; I will much rather hope that it will be a rich source of amusement to the readers of their journals, if they ever learn that any one promises himself so great things from education.

It may easily be imagined how deep an impression such words made on me, as I read them in Paris, the imperial seat of tyranny, at a time when I was in a state of profound melancholy, caused by the ignominious slavery of my poor beloved country. There also I was absorbed in the perusal of Pestalozzi's work, 'How Gertrude teaches her children.' The passages of deep pathos in the book took powerful hold of my mind, the new and great ideas excited strong hopes in me; at that time I was carried away on the wings of those hopes over Pestalozzi's errors and failures, and I had not the experience which would have enabled me to detect these easily, and to examine them critically.

About the same time I read the 'Report to the Parents on the state of the Pestalozzian Institution;' it removed every doubt in my mind as to the possibility of seeing my boldest hopes realized. Hereupon, I immediately resolved to go to Yverdon, which appeared to me a green oasis, full of fresh and living springs, in the midst of the great desert of my native land, on which rested the curse of Napoleon."

At an age when most men, of his acknowledged ability and scholarship, are only thinking of securing a civil employment, which shall bring both riches and honor, Von Raumer hastened to Pestalozzi at Yverdon, where he devoted himself, for nearly two years, to a study of the principles and methods of elementary instruction, as illustrated by the great Swiss educator.

Returning from Switzerland, in May, 1810, Von Raumer accepted an appointment of regular professor at Halle, with a handsome salary; but, not finding the pleasure he anticipated in his professorial lectures, he soon after gave up the post, and proceeded to establish a private school at Nuremberg, where he strove to realize his own ideal of an educational institution. In this enterprise he was not so immediately successful as he hoped to be. In 1822 he married a daughter of Kappellmeister Reichardt, and, by the advice of his friends, he returned to academic life by accepting the appointment of professor of natural history, at Erlangen. In addition to his regular duties, he found time to prepare and deliver occasional lectures on the "History of Pedagogy from the revival of classical learning to our own time." These lectures were subsequently published in three parts—the first of which was issued in 1843. Of the origin and plan of the work the author thus speaks in the preface to the complete edition in 1846.

"This work has grown out of a series of lectures, upon the history of education,

which I delivered, in 1822, at Halle, and several years later, from 1833 to 1842, at Erlangen.

The reader may inquire, how it was that my attention was directed to this subject? If he should, it will perhaps be sufficient to say in reply, that during the thirty-one years of my professorship, I have not merely interested myself in the *science* to which my time was devoted, but also in its corresponding *art*, and this the more, because much of the instruction which I gave was additional to my regular lectures, and imparted in the way of dialogue. This method stimulated my own thoughts too, to that degree, that I was induced as early as the year 1819 to publish many didactical essays, and subsequently, a manual for instruction in Natural History. But were I called upon for a more particular explanation, it would be necessary for me to relate the many experiences of my somewhat eventful life, both from my passive years of training and instruction, and from my active years of educating and instructing others. This, however, is a theme, to which I can not do justice within the brief compass of a preface; if hereafter an opportunity shall offer, I may treat it in another place.

And yet after all, the book itself must bear testimony to the fitness of the author for his task. Of what avail is it to me, to say that I have been taught by Meierotto, Buttman, Frederick Augustus, Wolf, Steffens, Werner, Pestalozzi, and other distinguished men? When I have said all this, have I done any more than to show that the author of this book has had the very best opportunity to learn what is just and true?

My book begins with the revival of classical learning. And Germany I have had preëminently in view. Why, by way of introduction, I have given a brief history of the growth of learning in Italy from Dante to the age of Leo X., the reader will ascertain from the book itself. He will be convinced, if not at the outset, yet as he reads further, that this introduction is absolutely necessary to a correct understanding of German didactics.

A history of didactics must present the various standards of mental culture, which a nation proposes to itself during its successive eras of intellectual development, and then the modes of instruction which are adopted in each era, in order to realize its peculiar standard in the rising generation. In distinguished men that standard of culture manifests itself to us in person, so to speak, and hence they exert a controlling influence upon didactics, though they may not themselves be teachers. 'A lofty example stirs up a spirit of emulation, and discloses deeper principles to guide the judgment.'

But their action upon the intellectual culture of their countrymen has a redoubled power, when at the same time they labor directly at the work of teaching, as both Luther and Melancthon did for years. This consideration has induced me to select my characters for this history among distinguished teachers, those who were held in the highest respect by their contemporaries, and whose example was a pattern for multitudes. Such an one was John Sturm at Strasburg, a rector, who with steady gaze pursued a definite educational aim, organizing his gymnasium with the utmost skill and discernment, and carrying out what he had conceived to be the true method, with the most scrupulous care. An accurate sketch of the educational efficiency of this pattern rector, based upon original authorities, in my opinion conveys far more insight and instruction than I could hope to afford, were I to entangle myself amid fragmentary sketches of numberless ordinary schools, framed upon Sturm's plan.

Thus much in explanation of the fact that this history has taken the form of a series of biographies. And in view of the surprising differences among the characters treated of, it can not appear singular, if my sketches should be widely different in their form.

There was one thought, which I will own occasioned me abundant perplexity during my labors. If I was about to describe a man, who, I had reason to suppose, was more or less unknown to most of my readers, I went about the task with a light heart, and depicted his life and labors in their full proportions, communicating every thing which could, by any possibility, render his image clearer and more lifelike to the reader. But how different the case, when the educational efficiency of Luther is to be set forth. 'My readers,' I say to myself, 'have long been acquainted with the man, and they will not thank me for the information that he was born at Eisleben, on the 10th of November, 1483; as if they had not known this from their youth up.' I am, therefore, compelled

to omit all such particulars, and to confine myself exclusively to his educational efficiency. And yet this did not stand alone; but was for the most part united, with its entire influence, both to the church and the state. As with Luther, so also was it with Melancthon and others. Considerate readers will, hence, pardon me, I hope, when, in cases of this kind, they are not fully satisfied with my sketches.

In another respect, too, I ought perhaps to solicit pardon, though I am reluctant to do so. We demand of historians an objective portraiture, especially such as shall reveal none of the personal sympathies or antipathies of the writer. Now it is proper to insist upon that truth and justice which will recognize the good qualities of an enemy, and acknowledge the faults of a friend. But free from likes and dislikes I neither am, nor do I desire to be, but, according to the dictates of my conscience and the best of my knowledge, I will signify my abhorrence of evil and my delight in good, nor will I ever put bitter for sweet or sweet for bitter. It may be, too, that a strict objectivity requires the historian never to come forward himself upon the stage, and never to express his own opinion in respect to the facts which he is called upon to chronicle. Herein he is not allowed so much freedom of action as the dramatist, who, by means either of the prologue and epilogue, or of the chorus between each of the acts, comes forward and converses with the public upon the merits of his play. Such an objectivity, likewise, I can not boast myself of; for I record my own sentiments freely where I deem it necessary. And surely will not the objectivity of history gain more by an unrestricted personal interview with the historian, at proper intervals, than by compelling him to a perpetual masquerade behind the facts and the narrative? Certainly it will, for in that case the reader discovers the character of the writer in his opinions, and knows what he himself is to expect from the narration. He likewise observes with the more readiness, where the writer, though conscientiously aiming at truth and impartiality, nevertheless betrays symptoms of human infirmity and party zeal. From a church historian, for instance, who should express his puritanical views without reserve, no intelligent reader would expect an impartial estimate of the middle ages.

Another motive also urges me to a free expression of my opinions, and that is, in order thereby to allure my readers to that close familiarity with many important educational subjects which the bare recital of facts seldom creates. If, in this history, the ideal and the methods of such different teachers are depicted, these diverse views can not but have the effect, especially those practically engaged in training the young, to induce a comparison of their own aims and procedure therewith. Sentiments that harmonize with our own give us joy, and inspire us with the pleasant consciousness that our course is the right one; differing or opposing opinions lead us to scrutinize our own course, even as were it another's; and from such scrutiny there results either perseverance based upon deeper conviction, or a change of course. I am happy to acknowledge, that this practical aim has been my chief motive in undertaking the present work, and has been uppermost in my thoughts during its prosecution.

As far as possible, I have depended on contemporaneous sources, and in part from exceedingly rare works, and such, as, for aught that I know to the contrary, in the present age, have fallen into almost total oblivion. And, for this reason, I was the more influenced to render a service to the reader, by bringing widely to his view the men and the manners of earlier centuries, through the medium of contemporaneous and characteristic quotations."

We give on the next page the Table of Contents of the three volumes of Raumer's great work, from which we shall, from time to time, transfer chapters to our pages, in such order as will give variety to the articles of the Journal.

KARL VON RAUMER, is also the author of the following works:

SCHOOL INSTRUCTION IN NATURAL SCIENCE. (*Ueber der Unterricht in die Naturkunde auf Schulen.*) Berlin: 1824.

DESCRIPTION OF THE EARTH'S SURFACE; AN INTRODUCTION TO GEOGRAPHY. (*Beschreibung der Erdoberfläche; eine Vorschule der Erdkunde.*) 3rd improved ed. Leipzig: 1838.

PALESTINE. (*Palästina.*) 2nd enlarged ed. Leipzig: 1838.

CONTRIBUTIONS TO BIBLICAL GEOGRAPHY. (*Beiträge zu Biblische Geographie.*) This is an addition to the *Palästina*.

GESCHICHTE DER PADAGOGIK vom wiederaufblühen klassischer studien bis unsere zeit." [*History of Pedagogics, or of the Science and Art of Education, from the revival of classical studies down to our time.*] By Karl von Raumer. 3 vols. Stuttgart, 2d edition, 1847.

VOLUME I.

PREFACE.

1. Middle Ages.
2. Italy, from birth of Dante to death of Petrarca and Boccaccio. 1. Dante. 2. Boccaccio. 3. Petrarca. Review of the period.
3. Development of classical studies in Italy, from death of Petrarca and Boccaccio until Leo X. 1. John of Ravenna and Emanuel Chrysoloras. 2. The educators, Guarino and Vittorino de Feltre. 3. Collection of MSS. Cosmo de Medici. Nicholas V. First printing. 4. Platonic Academy. Greek philologists. 5. Italians. Philadelphus. Poggius. Laurentius. 6. Lorenzo de Medici. Ficinus. Argyropulus. Landinus. Politianus. Picus de Mirandola.
4. Leo X. and his time; its lights and shadows.
5. Retrospect of Italy. Transition to Germany.
6. *Germans and Dutch*, from Gerhardus Magnus to Luther, 1340-1483. 1. The Hieronymians. 2. John Wessel. 3. Rudolf Agricola. 4. Alexander Flegius. 5, 6. Rudolf von Lange and Herman von den Busch. 7. Erasmus. 8. School at Schlestadt. Ludwig Dringenberg. Wimpfeling. Crato. Lapidus. Platter. 9. John Reuchlin. 10. Retrospect.
- Reformation. Jesuits. Realism.
- From Luther to the death of Bacon, 1483-1626. 1. Luther. 2. Melancthon. 3. Valentin Friedland. Troitzendorf. 4. Michael Neander. 5. John Sturm. 6. Wurtemberg. 7. Saxony. 8. Jesuits. 9. Universities. 10. Verbal Realism. 11. Francis Bacon. 12. Montaigne.

Appendix.—I. Thomas Platter. II. Melancthon's Latin grammar. III. John Sturm.

VOLUME II.

New ideas and methods of education. Struggle, mutual influence, and gradual connection and exchange between the old and the new.

- From Bacon's death to that of Pestalozzi.* 1. The Renovators. 2. Wolfgang Ratich. 3. The Thirty Years' War. 4. Comenius. 5. The Century after the Thirty Years' War. 6. Locke. 7. A. H. Franke. 8. Real Schools. 9. Reformatory Philologists. J. M. Gesner. J. A. Ernesti. 10. J. J. Rousseau. 11. Philanthropists. 12. Hamann. 13. Herder. 14. F. A. Wolf. 15. Pestalozzi.

Appendix.—I. Wolfgang Ratich and his literature. II. Pedagogical works of Comenius. III. Interior of the Philanthropinum. IV. Pestalozzi and his literature. V. Pestalozzi's Evening Hour of a Hermit. VI. Pestalozzi on Niederer and Schmid. VII. Strangers who remained some time at Pestalozzi's institution. VIII. Rousseau and Pestalozzi.

VOLUME III.

Early childhood. Schools for small children. School and home. Educational institutions. Tutors in families.

Instruction. 1. *Religion.* 2. *Latin.* Preface.

I. History of Latin in Christian times. Speaking Latin. Writing Latin.

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Natural history and philosophy. Preface. 1. Difficulties. 2. Objections against this instruction in gymnasia answered. 3. Grades of natural knowledge. 4. Beginnings. 5. Science and art. 6. Mathematical instruction and elementary instruction in the knowledge of nature. 7. Instruction in mineralogy. 8. Characteristics of scholars. 9. Instruction in botany. 10. Unavoidable inconsistency. 11. "Mysteriously clear," (*Goethe*.) 12. Law and liberty. Concluding remarks.

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Physical training. 1. Hygiene. 2. Hardening the body to toil and want. 3. Gymnastics. 4. Cultivation of the senses. Concluding observations.

Appendix.—I. Ruthardt's new *Loci Memoriales*. II. Teachers of mineralogy. III. Use of counters in the elementary instruction in arithmetic. IV. Explanation of the common abbreviated counting with cyphers.

VIII. THE SCHOOLMASTER,

OR A PLAIN AND PERFECT WAY OF TEACHING CHILDREN TO UNDERSTAND, WRITE
AND SPEAK THE LATIN TONGUE.*

BY ROGER ASCHAM.

Written in 1563-4, and first printed in 1571.

PREFACE TO THE READER.

WHEN the great plague was at London, the year 1563, the Queen's Majesty, Queen Elizabeth, lay at her Castle of Windsor; where, upon the tenth day of December, it fortun'd, that in Sir William Cecil's chamber, her Highness's principal Secretary, there dined together these personages, M. Secretary himself,¹ Sir William Peter,² Sir J. Mason,³ D. Wotton,⁴ Sir Richard Sackville,⁵ Treasurer of the Exchequer, Sir Walter Mildmay,⁶ Chancellor of Exchequer, M. Haddon,⁷ Master of Requests, M. John Astely,⁸ Master of the Jewel House, M. Bernard Hampton,⁹ M. Nicasius,¹⁰ and I.¹¹ Of which number, the most part were of her Majesty's most honorable Privy Council, and the rest serving her in very good place. I was glad then, and do rejoice yet to remember, that my chance was so happy to be there that day, in the company of so many wise and good men together, as hardly then could have been picked out again, out of all England beside.

M. Secretary hath this accustomed manner; though his head be never so full of most weighty affairs of the realm, yet at dinner time he doth seem to lay them always aside; and findeth ever fit occasion to talk pleasantly of other matters, but most gladly of some matter of learning, wherein he will courteously hear the mind of the meanest at his table.

Not long after our sitting down, "I have strange news brought me, saith M. Secretary, this morning, that divers scholars of Eaton run

* The following is the original title of the work, as given by UPTON.

THE

SCHOLE MASTER;

Or plaine and perfite Way of teaching Children, to understand, writ, and speake, the LATIN TONGUE, but specially purposed for the private bringing up of Youth in Gentlemen and Noblemens Houses, and commodious also for all such as have forgot the LATIN TONGUE, and would, by themselves, without a Scholemaster, in short Tyme, and with small Paines, recover a sufficient Habilitie, to understand, write, and speake LATIN.

By ROGER ASCHAM,

Anno 1571.

AT LONDON,

Printed by JOHN DAYE, dwelling over ALDERSGATE.

Cum Gratia & Privilegio Regiæ Majestatis, per Decennium.

1, 2, &c. The Numerals refer to Annotations on pages 161—166.

away from the school for fear of a beating.”¹² Whereupon M. Secretary took occasion to wish, that some more discretion were in many schoolmasters, in using correction, than commonly there is; who many times punish rather the weakness of nature, than the fault of the scholar; whereby many scholars, that might else prove well, be driven to hate learning before they know what learning meaneth; and so are made willing to forsake their book, and be glad to be put to any other kind of living.

M. Peter, as one somewhat severe of nature, said plainly, that the rod only was the sword, that must keep the school in obedience, and the scholar in good order. Mr. Wotton, a man mild of nature, with soft voice and few words, inclined to M. Secretary's judgment, and said, “In mine opinion the school-house should be in deed, as it is called by name, the house of play and pleasure, and not of fear and bondage; and as I do remember, so saith* Socrates in one place of Plato. And therefore if a rod carry the fear of a sword, it is no marvel if those that be fearful of nature, choose rather to forsake the play, than to stand always within the fear of a sword in a fond (*foolish*) man's handling.”

M. Mason, after his manner, was very merry with both parties, pleasantly playing both with the shrewd touches of many curst† boys, and with the small discretion of many lewd‡ schoolmasters. M. Haddon was fully of M. Peter's opinion, and said, that the best schoolmaster of our time was the † greatest beater, and named the person. “Though, quoth I, it was his good fortune, to send from his school into the University§ one of the best scholars indeed of all our time, yet wise men do think, that that came to pass, rather by the great towardness of the scholar, than by the great beating of the master; and whether this be true or no, you yourself are best witness.” I said somewhat further in the matter, how, and why young children were sooner allured by love than driven by beating, to attain good learning; wherein I was the bolder to say my mind, because M. Secretary courteously provoked me thereunto; or else in such a company

* The passage, to which the Dean of *Canterbury* refers, is in *Plato's* 7th Book of *Republic*, Chap. 16, and is afterward cited by Mr. *Ascham*. Τὰ μὲν τοίνυν λογισμῶν τε καὶ γεωμετριῶν, καὶ πάσης τῆς προπαιδείας, ἦν τῆς Διαλεκτικῆς δεῖ προπαιδευθῆναι, παισὶν ἄσι χρὴ προβάλλειν ἄχ' ὡς ἐπάναγκες μαθεῖν τὸ σχῆμα τῆς διδασχῆς ποιούμενης. Τί δὲ; “Ὅτι (ἦνδ' ἐγὼ) ἄδεν μάθημα μετὰ δολείας τον ἐλευθερον χρὴ μαθάνειν. Οἱ μὲν γὰρ τὸ σώματος πόνου, βία πόνόμενοι, χειῖρον οὐδὲν τὸ σώμα ἀπεργάζονται, Ψυχῇ δὲ βίαιον ἄδεν ἔμμονον μάθημα Ἄλληθῆ, ἔφη. Μη τοίνυν βία (εἶπον) ὧ ἄριστ, τῆς παιδας ἐν τοῖς μαθήμασι, ἀλλὰ παίζοντας τρέφε, ἵνα καὶ μάλλον διέσ τ' ἦς καθορῶν ἐφ' ὃ ἕκαστος πέφυκεν. (17.)

† Curst, *mischievous*; lewd, *savage*.

‡ This was *Nicholas Udel*, Master of *Eaton School*, whom *Bale* stiles, *Elegantissimus omnium bonarum literarum Magister. et earum felicissimus interpres*. His severity his own scholar, Mr. *Tusser*, has sufficiently proclaim'd.

§ This was Mr. *Haddon*, sometime Fellow of *King's College* in *Cambridge*.

and surely in his presence, my wont is to be more willing to use mine ears, than to occupy my tongue.

Sir Walter Mildmay, M. Astley, and the rest, said very little; only Sir Richard Sackville said nothing at all. After dinner, I went up to read with the Queen's Majesty. We read then together in the Greek tongue, as I well remember, that noble oration of Demosthenes against Æschines, for his false dealing in his embassy to King Philip of Macadonie. Sir Richard Sackville came up soon after, and finding me in her Majesties privy chamber, he took me by the hand, and carrying me to a window, said :

“M. Ascham, I would not for a good deal of money have been this day absent from dinner; where, though I said nothing, yet I gave as good ear, and do consider as well the talk that passed, as any one did there. M. Secretary said very wisely, and most truly, that many young wits be driven to hate learning, before they know what learning is. I can be good witness to this myself; for a fond (*foolish*) schoolmaster, before I was fully fourteen years old, drave me so with fear of beating from all love of learning, that now, when I know what difference it is, to have learning, and to have little, or none at all, I feel it my greatest grief, and find it my greatest hurt that ever came to me, that it was my so ill chance, to light upon so lewd a schoolmaster. But feeling it is but in vain to lament things past, and also wisdom to look to things to come, surely, God willing, if God lend me life, I will make this my mishap some occasion of good hap to little Robert Sackville my son's son. For whose bringing up, I would gladly, if it so please you, use specially your good advice. I hear say you have a son much of his age; we will deal thus together: point you out a schoolmaster, who by your order shall teach my son and yours,¹³ and for all the rest, I will provide, yea though they three do cost me a couple of hundred pounds by year; and beside, you shall find me as fast a friend to you and yours, as perchance any you have.” Which promise the worthy gentleman surely kept with me until his dying day.

We had then farther talk together of bringing up of children, of the nature of quick and hard wits, of the right choice of a good wit, of fear, and love in teaching children. We passed from children and came to young men, namely, gentlemen: we talked of their too much liberty to live as they lust; of their letting loose too soon to overmuch experience of ill, contrary to the good order of many good old Commonwealths of the Persians, and Greeks; of wit gathered, and good fortune gotten by some, only by experience without learning. And, lastly, he required of me very earnestly to shew what I thought of the common going of English men into Italy. “But, saith

he, because this place, and this time will not suffer so long talk, as these good matters require, therefore I pray you, at my request, and at your leisure, put in some order of writing the chief points of this our talk, concerning the right order of teaching, and honesty of living, for the good bringing up of children and young men; and surely, beside contenting me, you shall both please and profit very many others." I made some excuse by lack of ability, and weakness of body. "Well, saith he, I am not now to learn what you can do; our dear friend, good M. Goodricke,* whose judgment I could well believe, did once for all satisfy me fully therein. Again, I heard you say, not long ago, that you may thank Sir John Cheke¹⁴ for all the learning you have; and I know very well myself, that you did teach the Queen. And therefore, seeing God did bless you, to make you the scholar of the best master, and also the schoolmaster of the best scholar, that ever were in our time, surely, you should please God, benefit your country, and honest your own name, if you would take the pains to impart to others what you learned of such a master, and how you taught such a scholar. And in uttering the stuff ye received of the one, in declaring the order ye took with the other, ye shall never lack neither matter, nor manner, what to write nor how to write, in this kind of argument."

I beginning some further excuse, suddenly was called to come to the Queen. The night following, I slept little; my head was so full of this our former talk, and I so mindful somewhat to satisfy the honest request of so dear a friend. I thought to prepare some little treatise for a New-years' gift that Christmas: but, as it chanceth to busy builders, so, in building this my poor school-house, (the rather because the form of it is somewhat new, and differing from others,) the work rose daily higher and wider, than I thought it would at the beginning.

And though it appear now, and be in very deed, but a small cottage, poor for the stuff, and rude for the workmanship; yet in going forward I found the site so good, as I was loth to give it over; but the making so costly, out-reaching my ability, as many times I wished that some one of those three, my dear friends, with full purses, Sir, Tho. Smith, M. Haddon, or M. Watson had had the doing of it. Yet nevertheless, I myself spending gladly that little, that I gat at home by good Sir John Cheke, and that I borrowed abroad of my friend Sturmius,¹⁵ beside somewhat that was left me in reversion, by my old Masters Plato, Aristotle and Cicero, I have at last patched it up, as I could, and as you see. If the matter be mean, and meanly handled, I pray you bear both with me, and it; for never work went up in

* Bishop of Ely, and Lord Chancellor under Edward, VI.

worse weather, with more lets and stops, than this poor school-house of mine. Westminster-Hall can bear some witness, beside* much weakness of body, but more trouble of mind, by some such sores, as grieve me to touch them myself; and therefore I purpose not to open them to others. And in the midst of outward injuries, and inward cares, to increase them withal, good Sir Richard Sackville dieth, that worthy gentleman; "That earnest favorer and furtherer of God's true Religion; that faithful servitor to his prince and country; a lover of learning, and all learned men; wise in all doings; courteous to all persons, shewing spite to none, doing good to many; and as I well found, to me so fast a friend, as I never lost the like before." When he was gone, my heart was dead; there was not one that wore a black gown for him, who carried a heavier heart for him, than I; when he was gone, I cast this book away; I could not look upon it, but with weeping eyes, in remembering him, who was the only setter on, to do it; and would have been not only a glad commender of it, but also a sure and certain comfort to me, and mine for it.

Almost two years together, this book lay scattered and neglected, and had been quite given over of me, if the goodness of one had not given me some life and spirit again. God, the mover of goodness, prosper always him and his, as he hath many times comforted me and mine, and, I trust to God, shall comfort more and more. Of whom most justly I may say, and very oft, and always gladly I am wont to say, that sweet verse of Sophocles, spoken by Oedipus to worthy Theseus.

Ἐχω γὰρ ἂν ἴχω διὰ σέ, κἄν ἄλλον βροτῶν.†

This hope hath helped me to end this book; which if he allow, I shall think my labors well employed, and shall not much esteem the misliking of any others. And I trust he shall think the better of it because he shall find the best part thereof to come out of his school whom he of all men loved and liked best.

Yet some men, friendly enough of nature, but of small judgment in learning, do think I take too much pains, and spend too much time, in setting forth these childrens affairs. But those good men were never brought up in Socrates's school, who saith‡ plainly, "that no

* *Ingravescente jam ætate. a nocturnis et pomeridianis studiis abhorrebat: Antelucanis et matutinis temporibus legebat, commentabatur, studebat, scribebat. Erat corpore imbecillius, et valetudinarius, multis morbis fractus, continentibus febribus correptus, variis, agrotationibus afflictus; quæ paucis ante mortem annis eum in hecticam febrem conjecerunt.* This is taken out of Mr. Grant's excellent Oration on Mr. Ascham. (19)

† *For whatsoever I have, I have through thee, and through none other of living men.*

‡ Plato in initio Theagis: Ἀλλὰ μὲν δὴ, ὦ Δημόδοκε, καὶ λέγεται γε συμβυλὴ ἱερὸν χοῆμα εἶναι. εἴπερ ἂν καὶ ἄλλη ἡτιςῶν ἐστὶν ἱερὰ, καὶ αὐτὴ ἂν εἴη, περὶ ἧς σὺ νῦν συμβυλεύεις. Ὅν γάρ ἐστι περὶ οὗ τοιοῦτον ἂν ἄνθρωπος βυλεύσασαίτο, ἢ περὶ Παιδείας καὶ αὐτῆ, καὶ τῶν αὐτῆ δίκαιων. This Passage is cited by the Author, tho' not so fully. (16.)

man goeth about a more godly purpose, than he that is mindful of the good bringing up both of his own and other men's children."

Therefore, I trust, good and wise men will think well of this my doing. And of other, that think otherwise, I will think myself, they are but men, to be pardoned for their folly, and pitied for their ignorance.

In writing this book, I have had earnest respect to three special points, truth of religion, honesty in living, right order in learning. In which three ways, I pray God, my poor children may diligently walk; for whose sake, as nature moved, and reason required, and necessity also somewhat compelled, I was the willing to take these pains.

For, seeing at my death, I am not like to leave them any great store of living, therefore in my life time, I thought good to bequeath unto them, in this little book, as in my will and testament, the right way to good learning: which if they follow, with the fear of God, they shall very well come to sufficiency of living.

I wish also, with all my heart, that young Mr. Robert Sackville,¹⁶ may take that fruit of this labor, that his worthy grandfather purposed he should have done: and if any other do take either profit or pleasure hereby, they have cause to thank Mr. Robert Sackville, for whom specially this my schoolmaster was provided.

And one thing I would have the reader consider in reading this book, that because no schoolmaster hath charge of any child, before he enter into his school; therefore I leaving all former care, of their good bringing up, to wise and good parents, as a matter not belonging to the schoolmaster, I do appoint this my schoolmaster then, and there to begin, where his office and charge beginneth. Which charge lasteth not long, but until the scholar be made able to go to the University, to proceed in logic, rhetoric, and other kinds of learning.

Yet if my schoolmaster, for love he beareth to his scholar, shall teach him somewhat for his furtherance, and better judgment in learning, that may serve him seven year after in the University, he doth his scholar no more wrong, nor deserveth no worse name thereby, than he doth in London, who selling silk, or cloth, unto his friend, doth give him better measure, than either his promise, or bargain was.

FAREWELL IN CHRIST.

ANNOTATIONS.

THE idea of the SCHOOLMASTER originated in the table-talk of a company "of wise and good men," who dined together in the chambers of Sir William Cecil, at Windsor Castle on the 10th of December, 1563;—a company which Aseham says, "could hardly then be picked out again out of all England besides."

(I.) SIR WILLIAM CECIL, for forty years Secretary of State under Queen Elizabeth, and raised to the peerage by the title of Baron of Burleigh, in 1571, was born at Bourn, in Lincolnshire, September 13, 1520,—educated at the grammar school of Grantham and Stamford, at St. John's College, Cambridge, and at Gray's Inn, London,—was married to a sister of Sir John Cheke, in 1541, and on her death in 1543, to a daughter of Sir Anthony Cook in 1545, and was largely concerned in the public affairs of his country and age. He was a hard student in early life, a thoughtful reader of books, as well as observer of men, wise and moderate in his political measures, and never unmindful of his family and social duties in his anxious labors for the state. Much light is thrown on the domestic habits of Lord Burleigh, in the "Diary of a Domestic"—or "*The Complete Statesman*," as it is entitled by the writer, who describes himself as having "lived with him during the last twenty-five years of his life."

"His kindness, as nature ever leads all men, was most expressed to his children; if he could get his table set round with his young little children, he was then in his kingdom; and it was an exceeding pleasure to hear what sport he would make with them, and how aptly and merrily he would talk with them,—with such pretty questions and witty allurements, as much delighted himself, the children, and the hearers. * * He had his own children, grand children, and great grand children, ordinarily at his table, sitting about him like olive branches. * * He was of spare and temperate diet, * * and above all things, what business soever was in his head, it was never perceived at his table, where he would be so merry, as one would imagine he had nothing else to do; directing his speech to all men according to their qualities and capacities, so as he raised mirth out of all men's speeches, augmenting it with his own, whereby he was never in want of company, so long as he was able to keep company. * * His recreation was chiefly in his books, wherewith if he had time, he was more delighted than others with play at cards. * Books were so pleasing to him, as when he got liberty from the queen to go unto his country house to take air, if he found but a book worth the opening, he would rather lose his riding than his reading. And yet riding in his garden and walks, upon his little mule, was his greatest disport. But, so soon as he came in, he fell to his reading again, or else to dispatching of business. * * His favorite book was Cicero's Offices. His kindness of nature was seen in his declaration that he entertained malice toward no individual, and thanked God that he never retired to rest out of charity with any man."

While appreciating the advantages of the best education, and striving to secure them at any price for his own children, Lord Burleigh deemed "human learning, without the fear of God, of great hurt to all youth." With the most profound reverence for "divine and moral documents," his "Advices to his son, Robert Cecil," are characterized by the shrewdest worldly wisdom.

Son Robert,

The virtuous inclinations of thy matchless mother,* by whose tender and godly care thy infancy was governed, together with thy education under so zealous and excellent a tutor, puts me in rather assurance than hope that thou art not ignorant of that *summum bonum* which is only able to make thee happy as well in thy death as in thy life; I

*Lady Burleigh, was one of five daughters of Sir Anthony Cook, preceptor of Edward VI., all of whom were distinguished for their mental accomplishments, and for their exemplary demeanor as mothers of families. Her death, after sharing his fortunes for forty-three years, Lord Burleigh regarded as the great calamity of his life.

mean the true knowledge and worship of thy Creator and Redeemer; without which all other things are vain and miserable. So that thy youth being guided by so sufficient a teacher, I make no doubt that he will furnish thy life with divine and moral documents. Yet, that I may not cast off the care beeming a parent toward his child, or that thou shouldest have cause to derive thy whole felicity and welfare rather from others than from whence thou receivedst thy breath and being, I think it fit and agreeable to the affection I bare thee, to help thee with such rules and advertisements for the squaring of thy life as are rather gained by experience than by much reading. To the end that, entering into this exorbitant age, thou mayest be the better prepared to shun those scandalous courses whereunto the world, and the lack of experience, may easily draw thee, and because I will not confound thy memory, I have reduced them into ten precepts; and, next unto Moses' Tables, if thou imprint them in thy mind, thou shalt reap the benefit, and I the content. And they are these following:—

I. When it shall please God to bring thee to man's estate, use great providence and circumspection in choosing thy wife; for from thence will spring all thy future good or evil. And it is an action of thy life like unto a stratagem of war, wherein a man can err but once. If thy estate be good, match near home and at leisure; if weak, far off and quickly. Inquire diligently of her disposition, and how her parents have been inclined in their youth. Let her not be poor, how generous* soever; for a man can buy nothing in the market with gentility. Nor choose a base and uncomely creature altogether for wealth; for it will cause contempt in others and loathing in thee. Neither make a choice of a dwarf or a fool; for by the one thou shalt beget a race of pigmies; the other will be thy continual disgrace; and it will yrke† thee to hear her talk. For thou shalt find it to thy great grief, that there is nothing more fulsome‡ than a she-fool.

And touching the guiding of thy house, let thy hospitality be moderate, and, according to the means of thy estate, rather plentiful than sparing, but not costly; for I never knew any man grow poor by keeping an orderly table. But some consume themselves through secret vices, and their hospitality bears the blame. But banish swinish drunkards out of thine house, which is a vice impairing health, consuming much, and makes no show. I never heard praise ascribed to the drunkard but the well-bearing his drink, which is a better commendation for a brewer's horse or a drayman than for either a gentleman or a serving man. Beware thou spend not above three or four parts of thy revenues, nor above a third part of that in thy house; for the other two parts will do no more than defray thy extraordinaries, which always surmount the ordinary by much; otherwise thou shalt live, like a rich beggar, in continual want. And the needy man can never live happily nor contentedly; for every disaster makes him ready to mortgage or sell. And that gentleman who sells an acre of land sells an ounce of credit; for gentility is nothing else but ancient riches. So that, if the foundation shall at any time sink, the building must needs follow. So much for the first precept.

II. Bring thy children up in learning and obedience, yet without outward austerity. Praise them openly, reprehend them secretly. Give them good countenance, and convenient maintenance, according to thy ability; otherwise thy life will seem their bondage, and what portion thou shalt leave them at thy death they will thank death for it, and not thee. And I am persuaded that the foolish cockering§ of some parents, and the over-stern carriage of others, causeth more men and women to take ill courses than their own vicious inclinations. Marry thy daughters in time lest they marry themselves. And suffer not thy sons to pass the Alps; for they shall learn nothing but pride, blasphemy, and atheism.¶ And if by travel they get a few broken languages, that shall profit them nothing more than to have one meat served in divers dishes. Neither, by my consent, shalt thou train them up in wars; for he that sets up his rest to live by that profession can hardly be an honest man or a good christian. Besides, it is a science no longer in request than use. For soldiers in peace are like chimneys in summer.

III. Live not in the country without corn and cattle about thee; for he that putteth

* Well-born. † Irk. ‡ Disgusting. § Over-indulgence.

¶ In this strong aversion to foreign travel, Ascham sympathized.

his hand to the purse for every expense of household, is like him that keepeth water in a sieve. And what provision thou shalt want, learn to buy it at the best hand; for there is one penny saved in four betwixt buying in thy need and when the markets and seasons serve fittest for it. Be not served with kinsmen, or friends, or men intricated to stay; for they expect much, and do little; nor with such as are amorous, for their heads are intoxicated. And keep rather two too few, than one too many. Feed them well, and pay them with the most; and then thou mayest boldly require service at their hands.

IV. Let thy kindred and allies be welcome to thy house and table. Grace them with thy countenance, and further them in all honest actions; for, by this means, thou shalt so double the band of nature, as thou shalt find them so many advocates to plead an apology for thee behind thy back. But shake off those glow-worms, I mean parasites and sycophants, who will feed and fawn upon thee in the summer of prosperity; but, in an adverse storm, they will shelter thee no more than an arbor in winter.

V. Beware of surtyship for thy best friends. He that payeth another man's debt seeketh his own decay. But if thou canst not otherwise choose, rather lend thy money thyself upon good bonds, although thou borrow it. So shalt thou secure thyself, and pleasure thy friend. Neither borrow money of a neighbor or a friend, but of a stranger; where paying for it, thou shalt hear no more of it. Otherwise thou shalt eclipse thy credit, lose thy freedom, and yet pay as dear as to another. But in borrowing of money be precious of thy word; for he that hath care of keeping days of payment is lord of another man's purse.

VI. Undertake no suit against a poor man with receiving* much wrong; for besides that thou makest him thy compeer, it is a base conquest to triumph where there is small resistance. Neither attempt law against any man before thou be fully resolved that thou hast right on thy side; and then spare not for either money or pains; for a cause or two so followed and obtained will free thee from suits a great part of thy life.

VII. Be sure to keep some great man thy friend, but trouble him not for trifles. Compliment him often with many, yet small gifts, and of little charge. And if thou hast cause to bestow any great gratuity, let it be something which may be daily in sight: otherwise, in this ambitious age, thou shalt remain like a hop without a pole, live in obscurity, and be made a foot-ball for every insulting companion to spurn at.

VIII. Toward thy superiors be humble, yet generous.† With thine equals familiar yet respectful. Toward thine inferiors show much humanity, and some familiarity: as to bow the body, stretch forth the hand, and to uncover the head; with such like popular compliments. The first prepares thy way to advancement,—the second makes thee known for a man well bred,—the third gains a good report; which, once got, is easily kept. For right humanity takes such deep root in the minds of the multitude, as they are more easily gained by unprofitable curtesies than by churlish benefits. Yet I advise thee not to affect, or neglect, popularity too much. Seek not to be Essex: shun to be Raleigh.§

IX. Trust not any man with thy life, credit or estate. For it is mere folly for a man to enthral himself to his friend, as though, occasion being offered, he should not dare to become an enemy.

X. Be not scurrilous in conversation, nor satirical in thy jests. The one will make thee unwelcome to all company; the other pull on quarrels, and get the hatred of thy best friends. For suspicious jests, when any of them savor of truth, leave a bitterness of mind of those which are touched. And, albeit I have already pointed at this inclusively, yet I think it necessary to leave it to thee as a special caution; because I have seen many so prone to quip and gird,‡ as they would rather lose their friend than their jest. And if perchance their boiling brain yield a quaint scoff, they will travel to be delivered of it as a woman with child. These nimble fancies are but the froth of wit."

* Though you receive.

† Not mean.

‡ Mock and jibe.

§ Essex was the idol of the people; his rival, Raleigh, their aversion, till his undeserved misfortunes attracted their compassion, and his heroism their applause.

(2.) SIR WILLIAM PETER, (or Petre,)—born at Exeter, and educated at Exeter College, Cambridge,—employed in visitation of the monasteries, obtained grants of many Abbey lands, was knighted and made secretary of state under Henry VIII., and died in 1572. He was a liberal benefactor to Exeter and All Soul's College.

(3.) SIR JOHN MASON was born of obscure parents in Abingdon, but received a good education from his uncle, a monk of Abingdon Abbey, and at All Soul's College, and in consequence rose to important offices under Henry VIII., Edward IV., Queens Mary and Elizabeth. He was chancellor of the university of Oxford at the time of his death. His maxim was, "*DO, and say Nothing.*" He endowed liberally a hospital at Abingdon.

(4.) NICHOLAS WOTTON, Doctor of Laws, and Dean of Canterbury, was a man of great abilities, and an intimate friend of Lord Burleigh, and employed by him in many important embassies to foreign princes, and was privy counselor to Henry VIII., Edward VI., and Queens Mary and Elizabeth,—secretary of state to Edward VI., and declined the offer of being made Archbishop of Canterbury by Queen Elizabeth. He died poor, when so many public men became rich in sequestration of abbey property.

(5.) Sir Robert Sackville, "although not himself a scholar, was a lover of learning, and all learned men;" and in his descendants, for many generations, the office of patron seemed hereditary. The name of his grandson, Charles, Earl of Dorset comes down to us loaded with the panegyrics of poets and artists whom he befriended. Prior's dedication to his son, is one of the most elegant panegyrics in the English language, and Pope's Epitaph will make Dorset longer remembered than all of his own writings.

(6.) WALTER MILDMAY was educated at Christ College, Cambridge, of which he afterward became a benefactor. He was knighted by Edward VI., and made chancellor of the exchequer in 1556 by Elizabeth. He was a man of learning, and an encourager of learning. He founded Emanuel College, Cambridge, where many of the early Puritan divines of New England, Hooker, Stone, Davenport and others, were educated. Of his benefactions to this college, he said to Queen Elizabeth, who was suspicious of the puritan tendencies of some of the professors, "I have set an acorn, which, when it becomes an oak, God only knows what will be the fruit thereof."

The fruit borne by this college was far from being acceptable to the church party in King James' reign.* In the song of the "Mad Puritan," written by the witty Bishop Corbet the hero sings:

"In the house of pure Emanuel
I had my Education,
Where some surmise, I dazzled my eyes
With the light of revelation.
Bravely I preach
Hate cross, hate surplice,
Mitres, copes and rochets.
Come, hear me pray
Nine times a day,
And fill your heads with crotchets."

(7.) WALTER HADDEN, who became Master of Requests under Queen Elizabeth, Judge of the Prerogative Court of Canterbury, and Commissioner at the royal visitation of the University of Cambridge, was born in Buckinghamshire, in 1516, was educated at Eton, and King's College, Cambridge, where he was

professor of rhetoric and oratory, and, at one time, master of Trinity College. He stood amongst the foremost as a Latin scholar, and Queen Elizabeth, when asked which she preferred, Hadden or Buchanan, replied—"Buchananum omnibus antepono; Haddonum, nemini postpono." He was the principal compiler of the "Reformatio Legum Ecclesiasticarum." He died in 1572.

(8.) MR. JOHN ASTELY, or ASTERLY, Master of the Jewel House, was the author of a treatise on Riding, entitled—"The Art of Riding, set forth in a Briefe, with a due Interpretation of certain places, alledged out of Zenophon and Gryson, very expert and excellent Horsemen: wherein also the true use of the Hand by the said Gryson's Rules and Precepts is shown." 1584.

(9.) Mr. Bernard Hampton was educated at Cambridge, and clerk of the Privy Council.

(10.) M. NICASIVS was a Greek of Constantinople, who visited England in the time of Queen Elizabeth, partly to promote a union between the Greek Church and the Church of England, and partly to collect what charity he could for the distressed Christians of his own country.

(11.) ROGER ASCHAM, in respect to scholarship, knowledge of the world, and conversational talent, was second to no one in the goodly company of eminent and learned men assembled that day in the chambers of Sir William Cecil.

(12.) BEATING was early recognized as an essential part of an English institution of learning, and neither prince or pew was spared the salutary infliction of the rod. Archbishop Anselm protested against its use in 1070, as calculated to "convert men into brutes," and, in the "Paston Letters," Mrs. Agnes Paston instructs Mr. Greenfield, tutor of her son, "to truly belash him until he will amend." In the same curious collection will be found the articles by which the Earl of Warwick, when he took charge of Henry VI., binds the Earl of Gloucester and the Council to stand by him "in chastising him, (the young king,) in his defaults," although he should "in conceit of his high and royal authority" "loathe the chastening." We shall have more to say on this topic hereafter.

(13.) SIR THOMAS SMITH, for a time Provost of Eton College, and university orator at Cambridge, was born in 1514, and educated at Queen's College, and coöperated with Sir John Cheke in introducing the pronunciation of Greek, as advocated by Erasmus. He was author of a treatise on a reformation of the spelling of the English language, entitled "*De recta et emendata lingua Anglicæ Scripturæ.*" In 1548 he was advanced to the office of secretary of state, and knighted. In 1578 he was the author of an act of Parliament, by which the Universities of Oxford and Cambridge, and the two colleges of Eton and Winchester, were authorized to require in their leases that a third part of the old rent should be paid in kind; a quarter of wheat for each 6s. 8d., or a quarter of malt for every 5s.; or that the lessee should pay for the same according to the price that wheat and malt should be sold for, in the market next adjoining to the respective colleges, on the market day before the rent comes due.

(14.) SIR JOHN CHEKE, whom Ascham characterizes as "one of the best scholars" and "the conningest masters of his time," was born in Cambridge in 1514, was educated at St. John's College, which he afterward, as professor, assisted to build up to be the chief seat of learning, especially in Greek, and where he trained such scholars as Cecil, Ascham, Hadden, Bill, &c.; was entrusted with the education of Prince Edward, by whom, when he became King, he was knighted, made Privy Councillor, and one of his Secretaries of State;

served in several educational and ecclesiastical commissions; promoted the appointment of good men to office; became involved in the civil and theological troubles of his times; and died in 1557, at an age when his country had most to expect from his learning and experience. He was a great promoter of the study of Greek, and its correct pronunciation, and labored with his friend, Sir Thomas Smith to give prominence to the Saxon element in the English language, and to rid its orthography of many of its anomalies. For this purpose he made a new translation of the Gospel of St. Matthew, in which he strove to use only English Saxon words. See Strype's *Life of Sir J. Cheke*.

(15.) JOHN STURM, or STURMIUS, was born at Schleiden, near Cologne, was educated at Liege, Louvain and Paris, and for forty-five years was rector of the gymnasium and college at Strasburg, which he established and made the best classical school in Europe. He was much consulted in the drafting of school-codes, and in the organization of gymnasia, and his "Plan for organizing institutions of learning," his "Classic Letters," addressed to the teachers of his own school, and his editions of classic authors, entitle him to a prominent place in the history of "Pedagogics." Raumer, in his "History of the Science and Art of Teaching," devotes a chapter to Sturm's system of education.

(16.) THEAGES is not considered by many scholars worthy of Plato, and its authorship is attributed to Antipater, the teacher of Panætius, and the disciple of Diogenes of Babylon.

Theages desired "to become a wise man," to the great trouble of his father, Demodocus, who resorts to Socrates for counsel. Socrates replies in the language of the proverb, applied to those who came to counsel the oracles "*Counsel, Demodocus, is said to be a sacred thing;*" and then adds, "*If then any other consultation is sacred, this is so, about which you are now considering. For there is not a thing, about which a person may consult, more divine than about the instruction of himself and of those related to him.*" After probing the young man by questions, Socrates concludes to receive him into his companionship.

(17.) Plato in the Dialogues on the Republic, exhibits the misery of man let loose from law, and a general plan for making him subject to law, as the sure way of perfecting his nature. In the seventh dialogue, from which Ascham quotes, Plato unfolds the province of a good early education, in turning the eyes of the mind from the darkness and uncertainty of popular opinion, to the clear light of truth, and points out some of the uses of mathematics and gymnastics, in quickening and enlarging the apprehension, and inuring to intense application. In this connection he asserts:

"Every thing then relating to arithmetic and geometry, and all the previous instruction which they should receive before they learn dialectics, ought to be set before them while they are children, and on such a plan of teaching, that they may learn without compulsion. Why so? Because, said I, a free man ought to acquire no training under slavery; for the labors of the body when endured through compulsion do not at all deteriorate the body; but for the soul, it can endure no compulsory discipline. True, said he. Do not then, said I, my best of friends, force boys to their learning; but train them up by amusement, that you may be better able to discern the character of each one's genius."

This, too, was the doctrine of Quintilian, in *Inst. Lib.* 1. c. 1, 20:—*Nam id in primis cavere oportebit, ne studia, qui amare nondum potest, oderit et amaritudinem semel perceptam etiam ultra rudes annos reformidet.*

IX. LIFE AND EDUCATIONAL SYSTEM OF JOHN STURM.

FROM THE GERMAN OF KARL VON RAUMER.*

JOHN STURM, or Sturmius, as his name was latinized, one of the best classical scholars and school teachers of his time, was born at Schleiden, in the Eifel, near Cologne, in 1507. His father was steward to Count Manderscheid, with whose sons the young John was educated until his fourteenth year, when he went to the school of the Hieronymians † at Liege, and hence, in 1524, to the University of Louvain, where he spent three years in studying, and two more in teaching. Of his parents and early teachers he ever spoke with gratitude and veneration, and his mother he characterizes as a "superior woman." Among his fellow-students was Sleidanus, the historian, and Andreas Bersalius, the anatomist.

In connection with Rudiger Rescius, the professor of Greek at Louvain, Sturm established a printing press, from which Homer and other Greek and Roman classics were issued. With copies of these books for sale, and for use by students, he removed to Paris, in 1529, where he studied medicine, read public lectures on logic, and the Greek and Roman classics, got married, and had private scholars from Germany, England, and Italy. Here he established a high reputation as a scholar and teacher, and corresponded with Erasmus, Melancthon, Bucer, and others. Such was his reputation as a classical scholar and teacher that, when the magistrates of the city of Strasburg ‡ decided

* *Geschichte der Pädagogik.* The biographical portion of Von Raumer's chapter is abridged, and that portion which treats of the theological controversies of the times, and particularly of the differences between the German, and the Swiss, and French reformers, with the former of whom Sturm sympathized, and to some extent coöperated, is altogether omitted. Sturm was avowedly a Lutheran, and the Calvinist charged him with absenting himself from the communion table and from church for twenty years.

† The Hieronymians were a regular order of canons, or clergy, employed in teaching, founded by Gerhard Grovte, in 1373. They wore a white dress, with black scapula, and were most numerous and efficient in the Netherlands, where they originated. They were also known as Hieronymites, Hermits of St. Hieronymus, Collatian Brothers, Gregorians, or Brethren of Good Will. The instruction in their schools was partly elementary and partly classical. Their scholars learned to copy MSS., to read and write, were diligently drilled in speaking Latin, and in the study of the Scriptures, the Fathers, and a few of the classics, especially Cicero. See *Raumer, Hist. of Ped.*, Vol. 1, p. 64: Cramer, *Hist. of Ed. in the Netherlands*, p. 260, et seq. It was at Liege, from the Hieronymians, that Sturm received the educational principle which he afterward embodied in his own school at Strasburg, "Pietas sapiens et eloquens est finis studiorum."

‡ A theological school was proposed in 1501, but not established till 1531. In 1524, a number

to establish a gymnasium, he was earnestly solicited to organize and conduct it as Rector. He accordingly, in 1537, removed to that city, where he labored for forty-five years as a teacher, and, by his example, correspondence and publications, was greatly influential in introducing a better organization and methods of instruction into the schools of Europe. His plan of organizing a gymnasium or classical school was drawn up in 1538, and published under the title of "*The best mode of opening institutions of learning.*" The development of this plan was exhibited in Letters which he addressed to the teachers of the various classes of his Gymnasium, in 1565, and in an account of the examination of the school, published in 1578.

On the 7th of December, 1581, by a decree of the city council, Sturm was deposed from the Rectorate, "on account of his advanced age, and for other reasons," viz.: publishing a pamphlet, in which he opposed the dominant religious majority in some of the theological disputes of the day. He was soon after attacked with blindness, and, worn out by the labors of a toilsome life, and weakened by age, and pinched by poverty incurred by his generosity to those who fled to him from persecution, he died in 1589, in the eighty-second year of his age, and was buried in the church-yard of St. Gallus, in Strasburg.

Sturm was a man of medium size, dark and ruddy complexion, firm features, long beard, clear and well-modulated voice, honorable presence, and a somewhat slow gait. He was amiable and dignified, in conversation earnest and courteous, in action decided and prompt, and industrious both in his public and private relations. He was ever keeping pace with those about him, learning Hebrew, for instance, in his fifty-ninth year, and inspiring his teachers with his own enthusiasm. He enjoyed the respect of the emperors Charles V., Ferdinand I., and Maximilian II., as well as of Queen Elizabeth, of England. His fame as a teacher and educator was European, and his school was a Normal School of classical instruction. His pupils were among the "men of mark" throughout Germany. At one time there were two hundred noblemen, twenty-four counts and barons, and three princes under his instruction; and, besides organizing directly many classical schools, his pupils rose to be head-masters of many more, and his principles were embodied in the School Code of Wurtemberg in 1559, and in that of Saxony in 1580, and in the educational system of the Jesuits.

of elementary schools were instituted, which were placed under the direction of school inspectors, of whom the preacher, James Sturm, was one, and through whose influence John Sturm was induced to remove to Strasburg. The gymnasium organized in 1537 was endowed with the privileges of a College, in 1567, by Emperor Maximilian II., and John Sturm was appointed its Rector *in perpetuo*.

STURM'S SYSTEM OF INSTRUCTION.

Whoever clearly conceives a distinct object of pursuit, and brings perseverance, intelligence and tact to bear upon its attainment, will be sure, at least, to do something worthy of note; and especially so, when, at the same time, he falls in with the tendency and the sentiments of the age in which he lives. This is, above all, true of school reformers. If they know not what they would have, if they have no definite aim in view, it is impossible for us to speak with any propriety of the methods which they may have taken to reach their aim. Their course is wavering and uncertain, and they inspire distrust instead of confidence. But Sturm was no wavering, undecided, purposeless man. With firm step he advanced toward the realization of a definitely conceived ideal; an ideal, too, which, in greater or less distinctness, floated before the minds of most of his contemporaries, and which was regarded by them as the highest aim of mental culture. Hence, he enjoyed a widely extended and an unquestioning confidence. This, his ideal, Sturm has defined for us in numerous passages; and it is our first duty to examine it, if we wish to judge of his method.

“The end to be accomplished by teaching,” says he, “is three-fold; embracing piety, knowledge and the art of speaking.” In another place, he expresses himself thus; “A wise and persuasive piety should be the aim of our studies. But, were all pious, then the student should be distinguished from him who is unlettered, by scientific culture and by eloquence, (*ratione et oratione.*) Hence, knowledge, and purity and elegance of diction, should become the aim of scholarship, and toward its attainment both teachers and pupils should sedulously bend their every effort.” What description of knowledge, and what species of eloquence Sturm had in view, we shall now proceed to inquire.

The boy should be sent to school,—so he insists,—in his sixth or seventh year. His school education proper should occupy nine years, or until he is sixteen; it should then be succeeded by a more independent style of culture. Lectures should be substituted for recitation, and that for five years, or until he is in his twenty-first year.

The Gymnasium included nine classes, corresponding with the nine years that the pupil was to spend there. Seven of these years Sturm assigned to a thorough mastery of pure, idiomatic Latin; the two that remained were devoted to the acquisition of an elegant style; and to learn to speak with the utmost readiness and propriety, was the problem of the five collegiate years. During the first seven years

of the child's life, he was to be left in the care of his mother. Every year the scholars in the lower classes were to be promoted, each into the next higher class, and premiums were to be awarded to the two best scholars in each class.

Thus, Sturm expressed himself, in 1537, in the "Plan," on which he organized his school, in which, he gives a full sketch of the course of study to be pursued by each class. And, the arrangement, thus previously indicated, was essentially the same after the lapse of twenty-seven years, save that the Gymnasium then embraced ten classes, instead of nine. This appears from the "Classic Letters" which, in 1565, Sturm wrote to the teachers of the various classes. Forty years after the foundation of the Gymnasium, in 1578, a general examination took place, the particulars of which were recorded with the faithful minuteness of a protocol. And this, again, as well as the "Classic Letters," harmonizes, in the main, with Sturm's original plan of instruction. And, in all this, the observation forces itself upon us that, as he proposed to himself a well-marked and distinct aim at the outset of his career, so he advanced toward that aim through all those long years with an iron will and a steady step.

I will now give Sturm's course of instruction in detail, on the authority chiefly of the report above mentioned of the examination of the school, and of the "Classic Letters." We will commence, following the order of the "Letters," with the exercises of the tenth or lowest class, and so proceed to the first.

TENTH CLASS.—To Frisius, the teacher of this class, Sturm writes, "That he is to lay the foundation; to teach the children the form and the correct pronounciation of the letters of the alphabet, and, after that, reading; which will be better expedited by learning Latin declensions and conjugations than by the use of the catechism. The German catechism must be committed to memory, for the Latin would be a mere matter of rote. The love of the children will reward him for his pains; as he himself (Sturm) can testify from his own grateful recollections of his earliest teachers. At the examination, (in 1578,) the first scholar in the ninth class put the following questions to the first scholar in the tenth.

Q. What have you learned in the tenth class?

A. Letters, spelling, reading and writing, all the paradigms of nouns and verbs, and the German catechism likewise.

Q. Read me something from the *Neanisci* of our Rector.

A. *An tu non es Lucius socius studiorum meorum, qui modo a me e foro discesseras?*

Q. What is the meaning of *socius*?

A. A companion.

Q. Decline *socius*.

A. *Socius, socii, socio, etc.*

Q. What is the meaning of *discedo*?

A. I go away.

Q. Conjugate *discedo*.

A. *Discedo, discedere, etc.*

Q. To what conjugation does *discedo* belong?

A. That I have not learned.

NINTH CLASS.—To Schirner, the teacher of this class, Sturm writes, "That he is to ground the scholar more thoroughly in declining and conjugating, adding all the anomalous and irregular forms. Then, too, he must see that the scholars learn a great number of Latin words, particularly the appellations of common and familiar objects. Of such words, he must every day give a few to one scholar, a few to another, and so on, to commit to memory; only taking care not to select words at random, but in their natural groups, as organic systems, each formed upon a distinct and independent idea. Thus, too, each boy, by listening to the words which the others repeat, will himself the more readily fasten them in his own mind.

This method of enriching the memory with words, Sturm says, he should have introduced twenty-seven years before, had it been appreciated. How was it that Roman youths, at so early an age, learned to express themselves with ease and propriety? They prattled in Latin on their mother's breast; the nurses, in whose care they were placed, talked to them in infantile dialect in broken Latin; and this, as they grew older, was gradually corrected. And then the children were continually learning new words from the household servants, who played with them, not simply to amuse them, but likewise to exercise them in speaking Latin. To this we must add their daily intercourse with their companions, in which the older boys derived an ever increasing knowledge, both of words and things. All this the youth of the present day lack entirely, as neither parents, domestics, nor comrades speak Latin. "This evil," continues Sturm, "must be removed by the diligent efforts of the teacher, and in the way which I have indicated." In another place he repeats the same complaint. "Cicero," he says, "was but twenty years old when he delivered his speeches in behalf of P. Quintius and Sextius Roscius; but, in these latter days, where is the man, of fourscore even, who could bequeath to the world such masterpieces of eloquence? And yet, there are books enough, and there is intellect enough. What, then, do we need further? I reply, the Latin language, and a correct method of teaching. Both these we must have, before we can arrive at the summit of eloquence." In conclusion, Sturm implores Schirner not to undervalue, for a moment, his labors with the elementary class; but, to stand up as a champion against those gladiators of barbarism who from indolence have corrupted, or from envy have withstood, the purity of the Latin tongue.

At the examination, the first in the eighth class asked the first in the ninth, as follows.

Q. To what conjugation does *discedo* belong?

A. To the third, because it makes e short before re in the infinitive.

Q. To what class does *discedo* belong?

A. It is a neuter verb.

Q. What is a neuter verb?

A. A neuter verb is, &c.

Q. Decline the imperative of *discedo*.

A. *Discede, discedito*, etc.

Q. What else have you learned in the ninth class?

A. Besides the German catechism, I have committed to memory the *Second Onomasticon*, and translated the *Neanisci* of our Rector into German.

Q. Translate the dialogue that has just been rehearsed.

A. *An tu non es Lucius*, Are you not Lucius; *socius studiorum meorum*, my school-fellow; *qui*, who; *discesseras*, went; *a me*, from me; *modo*, just now; *e foro*, at the market place.

Q. To which of the parts of speech does *modo* belong?

A. I do not know; for the indeclinables are not taught in my class.

EIGHTH CLASS.—To Matthias Huebner, teacher of this class, Sturm writes, "That it must be his especial care that the boys forget nothing they have learned in the lower classes. And what they have there learned he can best ascertain by consulting their prescribed school-books, which in all the classes are most faithfully conformed to.

The boys, who have been promoted from the ninth into the eighth class, must be able to inflect all the nouns and verbs. This they will have learned more by practice than in a scientific manner, just as the Roman and Greek boys were exercised in language before the grammarians gave them the reasons why they ought to speak as they did. Moreover, the boys in the next lower class had learned by heart many short sayings and sentences; but, since in these no very wide range of words occurred, they were enjoined to compile dictionaries, and to enter therein all the common and necessary words under distinct heads, such heads for instance as the following, the *whole* and its *parts*, *friendship* and *enmity*, *cause* and *effect*, etc. These dictionaries must now, in the eighth class, be increased and enlarged; if the boys have before fixed in their minds the definition of *epistola*, they will now learn what is meant by the phrase *epistolam reddere*, etc. As the boys in the lower classes have learned by practice how to decline and conjugate, so now they must be thoroughly grounded in all the eight parts of speech, and each declension and conjugation must be fully and distinctly characterized, and illustrated by examples drawn from that which they have already learned.

Besides this, they are to read the select letters of Cicero with constant reference to the grammatical construction of the language; and, in such reading, different letters are to be assigned to the different *decuriae*.*

* The classes were subdivided into *decuriae*, or tens; the first in each *ten* was called the *decurion*.

During the last months of their school-year, the boys of this class are to commence a series of exercises in style, which will take the place of their previous oral practice in the formation of new, or the alteration of given Latin phrases.

At the examination, the first scholar in the seventh class put to the first scholar in the eighth class the following questions, beginning as before with the last of the preceding series.

Q. Tell me, to which of the parts of speech *modo* belongs.

A. It is an adverb of time.

Q. What is an adverb ?

A. It is an indeclinable part of speech, &c.

Q. How many indeclinable parts of speech are there ?

A. Four, &c., &c.

Q. What else have you learned in your class ?

A. Besides a fuller etymology, we have read the first book of the select letters of Cicero, the fourth dialogue in the *Neanisci*, the last part of the *Second Onomasticon*, and the German Catechism.

Q. Read a letter from Cicero.

A. *Cicero filius Tironi* S. P. D. *Etsi justa et idonea usus es excusatione intermissionis*, etc., etc.

Q. Translate what you have read.

A. *Etsi usus es*, although you have offered; *excusatione justa*, a just apology, etc.

Q. To what part of speech do you refer *idonea* ?

A. It is an adjective; in the ablative case, and singular number.

Q. How do you form its comparative ?

A. By prefixing *magis*; *magis idoneus*.

Q. By what rule do we say *uti excusatione* ?

A. Syntax is not taught in my class.

SEVENTH CLASS.—Sturm writes to Lingelsheim, the teacher of this class, "It must be his care that the scholars do not lose any thing of that which they have learned in the three preceding classes; and then that they should add to what they have already learned;—in the first place, Latin syntax. This must contain but few rules, must be clear, and set forth by examples, and that chiefly from Cicero. In the daily reading of Cicero's letters, the rules of syntax, through constant use, must be more and more impressed on the memory. Pliny says that we must read much, but not many things; in this class, however, many things must be read, in order to arrive at much.

Subjects must be assigned to the scholars for their exercises in style; but, in the treatment of such subjects, conciseness must be aimed at. The teacher should render assistance in this matter, either orally or by writing, (on the blackboard,) constructing sentences beforehand, as music-teachers sing first what they wish their pupils to learn. The subjects are to be drawn from what the scholars have learned in this or the previous classes, so that the exercise in style shall involve a repetition, and thus refresh the memory. And, for such an exercise on Sundays, the German Catechism is to be translated. This translation must be made in classical Latin, such words alone excepted as

have been authorized by the church, as *Trinitas, sacramentum, baptismus*, etc. The scholars in this class should, by no means, use any other catechism than that which they have had before in the lower classes.

At the examination, the first in the sixth class, asked the first in the seventh :

Q. By what rule do we say *idonea uti excusatione* ?

A. *Utor, fruor, fungor*, etc

Q. *Excusatione idonea* ?

A. Adjectives, pronouns and participles, etc.

Q. *Excusatione intermissionis* ?

A. One substantive governs another, etc.

Q. What else do you learn in your class ?

A. We read two dialogues in the *Neanisci* of our Rector, the second book of the select letters of Cicero, the "Precepts" of Cato, the catechism, and the "Sunday Sermons;" and, in the first book of music, we learn the scale and intervals. Also, in my class, exercises in style are commenced.

Q. Read a sentence from Cato.

A. *Disce aliquid, nam quam subito fortuna recedit.*

Ars remanet vitamque hominis non deserit unquam.

Q. Translate this distich.

A. *Disce aliquid*, learn something; *nam*, for; *cum fortuna recedit*, when fortune fails, etc.

Q. *Disce aliquid*; what is the rule for this construction ?

A. A verb signifying actively, etc.

Q. For *cum subito recedit* ?

A. Adverbs qualify verbs, etc.

Q. Read something in Greek.

A. I have not read any Greek in my class.

SIXTH CLASS.—To Malleolus, the teacher of this class, Sturm writes, "That, from the examination of the scholars of the seventh class for their promotion, he has learned their progress. He is to consider that to keep what has been acquired is no less an art than the first acquisition of it. The longer letters of Cicero may now be translated into German, and in such an order that different letters shall be assigned to different *decuriæ*. And, in a similar manner, he is to proceed with poetical selections. The first *decurion*, for example, may repeat the "*Veni redemptor gentium*" of Bishop Ambrose; the second, Martial's epigram, "*Vitam quæ faciunt beatiorem*;" the third, the ode of Horace, commencing with "*Rectius vives, Licini, neque altum*," for the teacher to translate and explain. Then each of the three may require a similar translation and explanation of the other scholars. In the writing exercises, pains is to be taken to arrive at a greater elegance of style.

Saturdays and Sundays are to be devoted to the translation of the catechism, and to the reading of some letters of Hieronymus.

Greek, moreover, is to be commenced in this class.

At the examination, the first in the fifth class asked the first in the sixth as follows :

Q. Read a fable from the Greek of Æsop.

A. Ἐλαφος καὶ Λέων.

Ἐλαφος κνηγιος φευγουσα, etc.

Q. Decline Ἐλαφος.

A. Ὁ καὶ ἡ Ἐλαφος, etc.

Q. What is Φευγουσα?

A. A participle, from φευγω; future, φευξω.

Q. What have you read in Latin?

A. The last two books of the select letters of Cicero, the Andria of Terence, the first book of poetry, the *Syntaxis Figurata*, the shorter Latin catechism of Luther, and the Sunday Sermons. In music, we have attended to the science of time.

Q. Read something from the fifth book of the *Tristia* of Ovid.

A. *Littora quot conchas, quot amoena rosaria flores*

Quotve soporiferum grana papaver habet, etc.

Q. *Littora*, etc. What kind of construction is this?

A. It is a zeugma; for the verb agrees in number with the nearest nominative, etc.

Q. How does zeugma differ from syllepsis?

A. In syllepsis, the adjective or verb agrees with the most important word; but, in zeugma, with the nearest.

Q. *Conchas*; what is the quantity of its first syllable?

A. The quantity of syllables is not taught in the sixth class.

FIFTH CLASS.—Sturm writes to Bitner, the teacher of this class, that the boys come to him well versed in grammar, provided with a store of Latin words for every-day objects, the German appellations for which had become familiar to them beforehand. But now, in the fifth class, objects entirely unknown to the boys, and words, designating such objects, also equally unknown to them, are to be brought forward. Since they have as yet heard nothing relative to the art of poetry, they are now to be made acquainted with metre, with the quantity of syllables, and with the varieties of feet and of verses, and metrical examples are to be given to them. And further, they must learn mythology; and, in addition to Cicero's Cato and Laelius, must read the Eclogues of Virgil. Instruction in Greek is to be continued. The boys are to learn the Greek words for virtues and vices, for manners, practices and customs, etc., and also to complete their encyclopædias of Latin words.

Style, too, is to be more thoroughly cultivated. And, toward the close of the school-year, they must practice the art of making verses; not, however, by composing poems upon given subjects, so much as by restoring the meter to stanzas that have been disarranged for the purpose. In this there is no occasion either for invention or for a choice of words; they are simply to put the words given them in their proper places.

It will be a good exercise to give the scholars some example of eloquence to translate into German, and then to make them reproduce it, extempore, in Latin again; for, in such case, the Roman orator himself, instead of the teacher, will act the part of prompter. Saturdays and Sundays one of the shorter Pauline epistles is to be interpreted.

At the examination, the first in the fourth class repeated the

question which the first in the sixth class could not answer; but directed it, as well as the succeeding questions, to the first in the fifth.

Q. What is the quantity of the first syllable of the word *conchas*?

A. It is long, by position. Position is, etc.

Q. What is the quantity of the last syllable of *littora*?

A. It is short, by the rule, etc.

Q. What sort of a foot is *littora*?

A. A dactyle; because the first syllable is long, the last two short.

Q. How many kinds of feet are there?

A. Three; those of two, three and four syllables, respectively.

Q. What do we construct out of such feet?

A. A poem or verse.

Q. What is a verse?

A. A metrical whole constructed of separate feet.

Q. What have you read besides in Latin?

A. Some of Cicero's letters to his friends, the first and second Eclogues of Virgil, the second book of poetry, and the shorter Latin catechism of Luther.

Q. What have you read in Greek?

A. The second part of the "Instruction in the Greek tongue," and the Sunday Sermons.

Q. What is the perfect tense of *φύγω*?

A. *πέφυχα*.

Q. Why do you not say *φέφενχα*, as *λέλεχα* from *λέγω*?

A. Because, when the verb begins with a rough mute, the reduplication takes the corresponding smooth.

Q. What is the Second Aorist of *φύγω*?

A. *ἔφυγον*, formed from the imperfect, *ἔφενγον*, by rejecting the first vowel of the diphthong.

Q. Conjugate *ἴστημι*.

A. *ἴστημι*, etc.

Q. Conjugate the anomalous verb *ἴστημι*.

A. The anomalous verbs and the Attic tenses, the teacher of the fifth class has not explained.

FOURTH CLASS.—To Laurence Engler, the teacher of this class, Sturm writes, "That he receives the boys from the fifth class well grounded in Latin and Greek grammar, provided with a good store of choice words, and familiar with illustrations drawn from poets, and with a greater number still from orators. With all this in view, he must now see to it that the boys exert themselves to their utmost in listening, in interpreting, and in rehearsing from memory; but he must be careful, at the same time, not to task them beyond their powers. The sixth oration against Verres, which includes nearly all kinds of narration, must be read; further, the epistles and satires of Horace; and, in Greek, together with the grammar, the "Book of Examples." That which has been learned, in the preceding classes, must be repeatedly recalled into the memory. Diligent practice must be bestowed on style; and, on Saturdays and Sundays, the shorter Pauline epistles are to be read by the boys, who are to explain them as they read, but in the plain manner of paraphrase alone.

At the examination, the first of the third class asked the first of the fourth as follows:

Q. Conjugate *ἴστημι*.

A. *ἴστημι*, *ἴσθης*, etc.

Q. How is it in the middle voice?

A. *ἴσθαι*, and by epenthesis, *ἴσταται*, from whence comes *ἐπίσταται*, I know.

Q. What have you interpreted in Greek ?

A. Æsop's fables, and, on Sundays, the first epistle to Timothy.

Q. Repeat a Greek sentence to me.

A. Τῶν νέων οἱ μὴδὲν ἐπιστάμενοι, οὐ μὲμποῖ εἶσιν, ὅταν αὐτοὺς οἱ γονεῖς οὕτως ἀγάωσιν, which means, etc.

Q. In what mood and tense is ἀγάωσιν ?

A. In the second aorist, subjunctive, from ἄγω ; whose second aorist is ἤγον, or, by Attic epenthesis, ἤγαγον.

Q. How many metaplasm occur in ἀγάωσιν ?

A. Two ; epenthesis and paragoge.

Q. What is paragoge ?

A. The addition of a letter or a syllable to the end of a word, as τούτοι for τούτον, or *laudari* for *laudari*.

Q. What Latin have you studied ?

A. The Eclogues of Virgil, some odes of Horace, the second book of Cicero's "Letters to Friends," and his speech in behalf of Marcus Marcellus ; also, a part of the Adelphi of Terence.

Q. Repeat something out of Horace.

A. *Integer vitæ scelerisque purus
Non eget Mauri jaculis neque arcu
Nec venenatis gravida sagittis
Fusce pharetra.*

Q. To what species of verse does this ode belong ?

A. It is called *dicolon tetrastrophon* ; *dicolon*, because two kinds of verse unite in its formation, namely, the Sapphic, of five feet, in the first three lines, and the Adonic, of two feet in the last line : and *tetrastrophon*, because the ode recurs, after every fourth line, to the same kind of verse with which it commenced.

Q. What figure is exemplified in *eget* ?

A. A zeugma of speech.

Q. How does this differ from a zeugma of construction ?

A. It is a zeugma of speech when the meaning of a verb or an adjective is applicable to every thing to which it is referred ; as, in this sentence from Horace, *Lingenda tellus et domus et placens uxor*. But, if such meaning is not applicable to every thing, then a zeugma of syntax or construction is witnessed ; as, for example, in the following :

*Visendus ater flumine languido
Cocyus errans et Danaï genus
Infame, damnatusque longi
Sisyphus Æolides laboris.*

Q. Have you attended, also, to tropes ?

A. No ; our teacher has not told us any thing of them.

THIRD CLASS.—To Boschius, the teacher of this class, Sturm writes, "That he should not only give to the boys a firm hold on what they have already learned, but should extend the range of their studies ; should open to them the graces of rhetoric, such as tropes, figures, etc., illustrating all* by examples. The treatise of Herennius on rhetoric must be laid before them, and, with it, the speech for Cluentius must be read ; and, in Greek, the best efforts of Demosthenes must be studied, besides the first book of the Iliad, or that of the Odyssey.

On Sundays, the Pauline epistles are to be read in the five upper classes, and, either entirely or in part, committed to memory. Style exercises are a matter of course ; for style must be always incessantly practiced and improved. Selections from orations in Greek must be translated by the boys into Latin, or from orations in Latin into Greek. The historians and poets, too, may be turned to account in a similar manner ; the odes of Pindar and Horace changed into a different

meter, many poems composed, many letters written, and other like tasks constantly undertaken.

The comedies of Terence and Plautus are, likewise, to be acted; and, in this matter, the boys are to be encouraged to rival the classes above them. All the plays of these two poets are to be acted by the four highest classes; twenty decuriae can accomplish this within six months. He, Sturm, had himself, three years before the revolt of the peasants, acted at Liege the part of Geta in the Phormio of Terence, and, although he had had no one to direct his practice, he yet derived great benefit from it.

At the examination, the first in the third class, a certain Baron von Sonneck, was catechised by the first in the second class, as follows:

Q. Since, O, noble Baron, I understand that you are acquainted with figures, allow me to ask you what a figure is?

A. A figure, (in Greek *σχήμα*.) is an ornament of speech, substituted for a plainer and more direct mode of conveying thought.

Q. What else have you learned in the third class?

A. I have read the Menippus of Lucian, and the two Epistles of Paul to the Thessalonians.

Q. What have you read in Latin?

A. The third book of Cicero's Letters to his Friends, his speech *post reditum*, and the greater part of the sixth book of the *Aeneid*.

Q. Repeat some prominent passage from Lucian's dialogue, the Menippus.

A. Menippus says to Philonides, concerning the punishment of the proud in Hades: *μισάττει ὁ Παδάμανθος τὴν ὀλιγοχρόνιον ἀλαζονείαν τῶν ἀνθρώπων, ὅτι μὴ ἐμέμνητο θνητοί τε ὄντες αὐτοὶ καὶ θνητῶν ἀγαθῶν τετυχηκότες.*

Q. What is the rule for the construction, *τετυχηκότες τῶν ἀγαθῶν*?

A. Participles are followed by the same cases as their verbs; but, verbs signifying "to obtain or to miss" govern the genitive in Greek; wherefore, *τυχεῖν* governs the genitive.

Q. Give me a verse from Virgil.

A. *Aeneas* thus prays to Apollo: "*Phæbe, graves Trojae semper miserate labores.*"

Q. Can you show that these verses of the poet are constructed after the rules of art?

A. The critics of poetry lay down seventeen demands, (*accidentia*), which must be conformed to in every verse. That Virgil has conformed to all these in the above verses, I will now attempt to shew. The measure is dactylic, as befits epic verse; the feet, (the dactyle and the spondee,) which are appropriate to this measure, being employed. In the scansion, the caesura, etc., the passage harmonizes with all the rules of the art.

Q. "You observe," continues the questioner, "that the noble Lord understands all these subjects, but I wish to know one thing further; is the phrase '*Phæbe da Latio considerare Teucros*' a logically accurate proposition?"

A. To this point, with reference to the rules of logic, it is your part to respond.

SECOND CLASS.—To Renard, the teacher of this class, Sturm writes, that he himself is not to give a literal interpretation of the Greek poets and orators, but rather to assign that labor to the scholars; but he may, nevertheless, direct their attention to the relation which exists between oratorical and poetical usage, and may require them to copy striking passages from the classics in their commonplace-books.

And the like course is to be taken with Latin authors, and a comparison is to be instituted between these and the Greek.

Logic, the instrument of wisdom, must be laid before the scholars, the analytical or introductory part first, and afterward the synthetical or syllogistic; and rhetoric, too, must ever accompany logic, for which

study the "Institutes of Herennius" may be taken as a text-book. The teacher may read, with reference to rhetoric, the Olynthiac and Philippic orations of Demosthenes, and also some of Cicero's. What orations of Cicero shall he read? Either he may decide himself, or he may allow the boys to choose; for these should be often permitted to use their own judgment. Daily exercises in style are indispensable, and a higher point must be reached therein than in the previous classes.* The scholars may also write short dissertations, and deliver them either *memoriter* or from their notes.

On Sundays, the Epistle to the Romans is to be read, learned by heart, and recited by all. The scholars of this class must act the comedies of Terence and Plautus to greater perfection than those below them can do; and, later in their course, they may represent a play of Aristophanes, Euripides, or Sophocles, which the teacher has first expounded to them; and, if they should wish to take up any others afterward, they may do so at their own risk, as those who are self-instructed.

At the examination, the first in the first class put to the first in the second the same question which the first in the third had left unanswered.

Q. Resolve me this question in dialectics, is "*Phoebe, da Latio considerare Teucros,*" a completed or logically accurate proposition?

A. It is not, and I thus prove why it is not. A completed proposition is a perfect sentence, in which the noun is united to the verb, and which enunciates either a truth or a falsity. But, this phrase embodies neither that which is true nor that which is false. Therefore, I conclude that it is not a completed proposition.

Q. From what part of logic, and for what reason, do you so conclude?

A. From the part that relates to definition; upon the rules of which part I take my stand, and thence argue again. If a sentence does not conform to some one logical definition, that which is conveyed by this definition is not applicable to such sentence. But the phrase in question does not conform to the definition of a completed proposition. Therefore, the term "completed proposition" is not applicable to this phrase.

Q. But here is another rule of dialectics: From pure negations no conclusion can follow. Your propositions are pure negations; therefore, your conclusion is a *non sequitur*.

A. I deny the *minor* of your argument; for my second proposition is an indirect affirmation. Hence, my syllogism, since it is stated in the terms of the figure called *Ferio*, remains impregnable.

Q. Allow me to ask you whether you would call your syllogism demonstrative, argumentative, or sophistical.

A. To judge by its purport, I would call it demonstrative. But, if you were to require more of me, as that I should answer with respect to the science of demonstration or to sophistical arguments, I could not satisfy you; for the precepts of these are not taught in the second class.

Upon this the questioner proceeds as follows:

Q. What have you read in rhetoric?

A. The first and second dialogues of Dr. Sturm upon Cicero's divisions of the oration, in which is discussed the five-fold problem of the orator; namely, invention, disposition, expression, action and memory.

Q. Does not judgment belong here, too?

A. Orators class judgment under the head of invention; for, invention supposes a selection of the best arguments, and certainly we must discriminate and judge when making such selection.

* It is incredible, Sturm adds in this place, how much one can accomplish by effort, by imitation, by emulation, and by the belief that all obstacles yield to art and industry.

Q. What other authors have you read ?

A. The second Philippic of Demosthenes, and Cicero's pleas in behalf of Roscius Amerinus and Caius Rabirius, besides the first book of the Iliad.

Q. Why the name Iliad ?

A. Because it is a narration of events and exploits, of which Ilium or Troy was the theatre.

Q. What species of argument (*status*) is employed in the plea for Rabirius ?

A. I have heard it called the conjectural argument ; * but I am no more familiar with the nature of arguments than with that of the various subdivisions of the oration.

FIRST CLASS.—To Goelius, the teacher of the first class, Sturm writes, that he is to carry logic and rhetoric to a further extent, though not to their perfection, after the manner of the Aristotelians and the Greek rhetoricians ; for this should be deferred until the boys have left the gymnasium, and then should be achieved by means of a shorter method composed by himself, (Sturm,) a method which, though not following Aristotle throughout, yet contains all the divisions and subdivisions (*genera et partes*) which are to be found in Aristotle, Hermogenes, and Cicero. The rules of logic and rhetoric are to be applied, by way of illustration, to Demosthenes and Cicero. And, to the same end, too, what remains of Virgil, and some portion of Homer, should be read ; for, these poets, Homer especially, have conduced greatly to the perfection of oratory.†

Thucydides and Sallust are to be translated in writing by the scholars themselves, some having these passages, and others those, assigned to them ; not all taking the same.

In this class, too, the dramatic representations are to be more frequent, and not a week is to elapse without its play.

Of the scholars, Sturm desires a thoroughly cultivated facility in writing and in declamation : all that they produce, whether in prose or in poetry, must be artistic.

The Epistles of St. Paul are to be expounded by the scholars, and prominent passages of the same, after the manner of the rhetoricians, are to be amplified.

At the examination, one member of the first class asked another, as follows :

Q. Tell me what you have read in the first class ?

A. In the logic of Dr. Sturm, I have learned the precepts of demonstrative and sophistical syllogisms ; in rhetoric, the last two dialogues upon Cicero's divisions of the oration, and his three books "De Officiis ;" besides the Phoenissae of Euripides ; out of Demosthenes, Philip's letter, and Demosthenes' reply to the same ; the latter part of the catechism of Chytraeus ; and, on Sundays, St Paul's epistle to the Galatians.

Q. What is a demonstrative syllogism ?

A. It is a conclusion drawn from necessary truths, and of special use in extending the area of knowledge. For, thus says Aristotle, "Demonstration is the syllogism of science, predicated upon necessary propositions," as for instance :

* The conjectural argument, (*status conjecturalis*), or the "*An sit*" of Quintilian, consists wholly and solely of an attempt to establish or to set aside the *truth* of the charges alledged.

† "I am convinced that the rules of each species of oratory, as well as the ornaments of each, can be shewn to exist in Homer ; so that, if the art of eloquence were extinct, it could be fully restored from this rich fountain."—*Sturm*.

Every cause is antecedent to its effect ;
 The rising of the sun is the cause of day ;
 Therefore, the rising of the sun is antecedent to the day.

Q. Of what nature is this demonstration ?

A. It is a perfect demonstration, and is called by Aristotle *τῶν δι' ὅτι*, (of the Why.) It consists of true propositions, primary, not secondary ; the more prominent, the antecedent, and those which are the causes of the conclusion, and which furnish us with demonstrative science.

Q. Is there any other species of demonstration ?

A. There is ; namely, the imperfect demonstration, which is called *τοῦ ὅτι*, (of the Because ;) when the conclusion does not flow from primary or direct, but from intermediate propositions, or from effects, or secondary and remote causes, as if I should say,

Wherever it is day, there the sun has arisen ;
 But, it is day with us ;
 Therefore, with us the sun has arisen.

This is the demonstration *a posteriori*. For the cause is demonstrated from its effect. The day is not the cause of the sun's appearance ; but, the rising of the sun *is* the necessary and efficient cause of the day.

Q. Since, then, you assert that the rising of the sun is the cause of day, what would you say if I should prove to you that it is not yet day with us ?

A. I would like to hear whether you can truly demonstrate what you thus advance.

Q. Is not the state of things at Frankfort different from that which obtains here at Strasburg ?

A. Yes.

Q. Is it not day now at Frankfort ?

A. So I imagine.

Q. Then it is not day with us at Strasburg.

A. I deny your consequence. For you have stated a fallacy in the form of the seventh species of the *ignoratio elenchi*. Your terms do not both refer to the same thing, (*πρὸς αὐτό*), but each to a different point, (*πρὸς ἄλλο*.) The major of your argument possesses nothing in common with the minor ; therefore, your conclusion is a *non sequitur*.

Q. Then, you have studied sophistics, if I may judge by your rejoinder.

A. Yes ; I have learned the rules of that art as they have been delivered to us by our illustrious rector, Dr. Sturm, from the sophistical problems of Aristotle.

Hereupon the respondent exposed the fallacy of the two following sophisms.

(1.) He who is well versed in sophistical reasoning seeks to deceive others by his conclusions. You say that you are well versed in sophistical reasoning ; you, therefore, seek to deceive me.

(2.) He who has five fingers on one of his hands, also has three, and two, and has five, likewise. But, he who has three, two, and five, has ten. Whoever, therefore, has five fingers on one of his hands, has ten on the same hand.

In rhetoric there was no examination, but the questioning proceeded as follows :

Q. What have you learned in your class, of mathematics ?

A. To that which we learned in the second class we have added astronomy, and some problems from the first book of Euclid.

Q. In what manner do astronomers measure the primary movement (*primum motum*) of the heavens ?

A. By means of ten circles ; namely, the horizon, the meridian, the equator, the zodiac, 2 colures, 2 tropics, and 2 polar circles.

Q. Are these circles visible ?

A. No ; they are imaginary, and conceived to result from the movements of certain celestial points and lines.

Q. What is the name of the first circle ?

A. The Greeks called it *ὁρίζων*, (horizon,) from *ὁρίζεσθαι*, to limit ; and the Romans, *finitor*.

Q. How is it situated, with respect to the axis of the earth ?

A. When it passes through the poles it is in a *right* position ; but, when one pole is above it, while the other is below it, it is *oblique*. Whence, the one sphere is called *right*, the other *oblique*.*

* As this definition is not sufficiently clear, I will quote the more intelligible words of John

Q. What purpose does the horizon serve ?

A. To divide the celestial sphere into an upper and a lower half, and thereby mark out those periods of its primary motion which determine day and night. When the sun is in the upper hemisphere, it is day; when in the lower, night. The stars, at their rising, come up above the horizon; at their setting, they sink below it.

Q. Which is the second circle ?

A. The meridian. This passes through the zenith and the poles.

Q. For what does it serve ?

A. For the determination of latitude. The celestial sphere it divides into an eastern and a western half. It likewise halves the arc of day, and the arc of night, so that when the sun crosses this circle in the upper hemisphere, it is mid day; when it crosses it in the lower, it is midnight. It also divides the day into forenoon and afternoon.

Q. Which is the third circle ?

A. The equator; so called from its equalizing day and night.* It runs from east to west, and is, at all points, equi-distant from the poles.

Q. For what does the equator serve ?

A. From it we reckon longitude. The celestial sphere it divides into a northern and a southern half. The primary motion of the heavens it measures off into periods by twenty-four arcs, which, in the order of their *ascension*, mark the course of the twenty-four hours.

Q. Which is the fourth circle ?

A. The zodiac; called by Ptolemy the oblique circle; described by the revolutions of the sun and the other planets.

Q. Whence comes the name ?

A. From the *animals* which the ancients represented in its belt.

Q. What are they ?

A. Aries, etc.

Q. Which of these are opposite, the one to the other ?

A. Aries to Libra, Taurus to Scorpio, Gemini to Sagittarius, Cancer to Capricornus, Leo to Aquarius, and Virgo to Pisces.

Q. To what use is the zodiac applied ?

A. We determine both longitude and latitude by it; and it is the pathway of the planets, whose revolutions measure times and seasons. The sun travels over its course in a year, which is not far from the space of three hundred and sixty-five days and six hours; and the moon runs completely round it in a month, or twenty-seven days and eight hours, etc. In conclusion, the examiner spoke as follows: "Not to detain the audience longer, I feel satisfied that you are familiar with all other things which have been given to your class to study, and I, therefore, willingly accord to you the palm of victory."

The foregoing description will serve to denote the character of the Strasburg Gymnasium. We will now consider the College, with which it was connected.

(To be continued.)

Sacrobusto, whose treatise "on the Sphere" Sturm employed as a text-book. "There are two horizons; the right and the oblique. Those have a right horizon and a right sphere whose zenith is in the equinoctial; because their horizon is a circle passing through the poles, cutting the equinoctial at right spherical angles; whence, their horizon is called *right*, and their sphere *right*. Those have an oblique horizon with whom the pole is situated above their horizon; and, because their horizon intersects the equinoctial at oblique angles, their horizon is called *oblique*, and their sphere *oblique*."

* We find this more intelligibly expressed in Sacrobusto, as follows: "It is called the equinoctial because, when the sun crosses it, as it does twice in the year, the days and nights are equal over the whole world; whence, it is called the *equator* of the day and the night."

X. THE SCHOOL AND THE TEACHER IN LITERATURE.

THOMAS HOOD. 1798—1845.

THOMAS HOOD, the son of a bookseller, was born in London, in 1798. He entered the counting-house of a Russian merchant as clerk,—which he left on account of his health, for the business of engraving, but in 1821, became sub-editor of the London Magazine, and afterward was an author, by profession, till his death in 1845. His “Whims and Oddities,” “Comic Almanac,” &c., have established his reputation for wit and comic power, and his “Song of a Shirt,” “Eugene Aram’s Dream,” &c., indicate the possession of more serious and higher capacities.

His “*Irish Schoolmaster*,” “*The Schoolmaster Abroad*,” “*The Schoolmaster’s Motto*,” abound in whimsical allusions to the peculiarities of Irish and English schools and the teachers of our day—greatly exaggerated, we would fain believe.

THE IRISH SCHOOLMASTER.

ALACK! ’tis melancholy theme to think
How Learning doth in rugged states abide,
And, like her bashful owl, obscurely blink,
In pensive glooms and corners, scarcely spied;
Not, as in Founders’ Halls and domes of pride,
Served with grave homage, like a tragic queen,
But with one lonely priest compell’d to hide,
In midst of foggy moors and mosses green,
In that clay cabin hight the College of Kilreen!

This College looketh South and West alsoe,
Because it hath a cast in windows twain;
Crazy and crack’d they be, and wind doth blow
Thorough transparent holes in every pane,
Which Dan, with many paines, makes whole again,
With nether garments, which his thrift doth teach
To stand for glass, like pronouns, and when rain
Stormeth, he puts, “once more unto the breach,”
Outside and in, tho’ broke, yet so he mendeth each.

And in the midst a little door there is,
Whereon a board that doth congratulate
With painted letters, red as blood I wis,
Thus written,
“CHILDREN TAKEN IN TO BATE:”
And oft, indeed, the inward of that gate,
Most ventriloque, doth utter tender squeak,

HOOD'S IRISH SCHOOLMASTER.

And moans of infants that bemoan their fate,
 In midst of sounds of Latin, French, and Greek,
 Which, all i 'the Irish tongue, he teacheth them to speak.

For some are meant to right illegal wrongs,
 And some for Doctors of Divinitie,
 Whom he doth teach to murder the dead tongues,
 And soe win academical degree ;
 But some are bred for service of the sea,
 Howbeit, their store of learning is but small,
 For mickle waste he counteth it would be
 To stock a head with bookish wares at all,
 Only to be knock'd off by ruthless cannon ball.

Six babes he sways,—some little and some big,
 Divided into classes six ;—alsoe,
 He keeps a parlour boarder of a pig,
 That in the College fareth to and fro,
 And picketh up the urchins' crumbs below,
 And eke the learned rudiments they scan,
 And thus his A, B, C, doth wisely know,—
 Hereafter to be shown in caravan,
 And raise the wonderment of many a learned man.

Alsoe, he schools for some tame familiar fowls,
 Whereof, above his head, some two or three
 Sit darkly squatting, like Minerva's owls,
 But on the branches of no living tree,
 And overlook the learned family ;
 While, sometimes, Partlet, from her gloomy perch,
 Drops feather on the nose of Dominie,
 Meanwhile with serious eye, he makes research
 In leaves of that sour tree of knowledge—now a birch.

No chair he hath, the awful Pedagogue,
 Such as would magisterial hams imbed,
 But sitteth lowly on a beechen log,
 Secure in high authority and dread ;
 Large, as a dome for Learning, seems his head,
 And, like Apollo's, all beset with rays,
 Because his locks are so unkempt and red,
 And stand abroad in many several ways ;—
 No laurel crown he wears, howbeit his cap is baize.

And, underneath, a pair of shaggy brows
 O'erhang as many eyes of gizzard hue,
 That inward giblet of a fowl, which shows
 A mongrel tint, that is ne brown ne blue ;
 His nose,—it is a coral to the view ;
 Well nourish'd with Pierian Potheen,—
 For much he loves his native mountain dew ;—
 But to depict the dye would lack, I ween,
 A bottle-red, in terms, as well as bottle-green.

As for his coat, 'tis such a jerkin short
 As Spenser had, ere he composed his Tales ;
 But underneath he had no vest, nor aught.

So that the wind his airy breast assails ;
 Below, he wears the nether garb of males,
 Of crimson plush, but non-plushed at the knee ;—
 Thence further down the native red prevails,
 Of his own naked fleecy hoserie :—
 Two sandals, without soles, complete his cap-a-pee.

Nathless, for dignity, he now doth lap
 His function in a magisterial gown,
 That shows more countries in it than a map,—
 Blue tinct, and red and green, and russet brown,
 Besides some blots, standing for country-town ;
 And eke some rents, for streams and rivers wide ;
 But, sometimes, bashful when he looks adown,
 He turns the garment of the other side,
 Hopeful that so the holes may never be espied !

And soe he sits, amidst the little pack,
 That look for shady or for sunny noon,
 Within his visage, like an almanack,—
 His quiet smile fortelling gracious boon :
 But when his mouth droops down, like rainy moon,
 With horrid chill each little heart unwarms,
 Knowing, that infant show'rs will follow soon,
 And with forebodings of near wrath and storms
 They sit, like timid hares, all trembling on their forms.

Ah ! luckless wight, who can not then repeat
 "Corduoy Colloquy,"—or "Ki, Kœ, Kod,"—
 Full soon his tears shall make his turfy seat
 More sodden, tho' already made of sod,
 For Dan shall whip him with the word of God,—
 Severe by rule, and not by nature mild,
 He never spoils the child and spares the rod,
 But spoils the rod and never spares the child,
 And soe with holy rule deems he is reconcil'd.

But, surely, the just sky will never wink
 At men who take delight in childish throe,
 And stripe the nether-urchin like a pink
 Or tender hyacinth, inscribed with woe ;
 Such bloody Pedagogues, when they shall know,
 By useless birches, that forlorn recess,
 Which is no holiday, in Pit below,
 Will hell not seem design'd for their distress,—
 A melancholy place that is all bottomlesse ?

Yet would the Muse not chide the wholesome use
 Of needful discipline, in due degree.
 Devoid of sway, what wrongs will time produce,
 Whene'er the twig untrained grows up a tree,
 This shall a Carder ; that a Whiteboy be,
 Ferocious leaders of atrocious bands,
 And Learning's help be used for infamie,
 By lawless clerks, that, with their bloody hands,
 In murder'd English write Rock's murderous commands

But ah! what shrilly cry doth now alarm
 The sooty fowls that dozed upon the beam,
 All sudden fluttering from the brandish'd arm,
 And cackling chorus with the human scream,
 Meanwhile, the scourge plies that unkindly seam
 In Phelim's brogues, which bares his naked skin,
 Like traitor gap in warlike fort, I deem,
 That falsely let the fierce besieger in,
 Nor seeks the Pedagogue by other course to win.

No parent dear he hath to heed his cries;—
 Alas! his parent dear is far aloof,
 And deep in Seven-Dial cellar lies,
 Killed by kind cudgel-play, or gin of proof,
 Or climbeth, catwise, on some London roof,
 Singing, perchance, a lay of Erin's Isle,
 Or, whilst he labors, weaves a fancy-woof,
 Dreaming he sees his home,—his Phelim smile;—
 Ah me! that luckless imp, who weepeth all the while!

Ah! who can paint that hard and heavy time,
 When first the scholar lists in Learning's train,
 And mounts her rugged steep, enforc'd to climb,
 Like sooty imp, by sharp posterior pain,
 From bloody twig, and eke that Indian cane,
 Wherein, alas! no sugar'd juices dwell,
 For this, the while one stripling's sluices drain,
 Another weepeth over childblains fell,
 Always upon the heel, yet never to be well!

Anon a third, for this delicious root,
 Late ravish'd from his tooth by elder chit,
 So soon is human violence afoot,
 So hardly is the harmless bitter bit!
 Meanwhile, the tyrant, with untimely wit
 And mouthing face, derides the small one's moan,
 Who, all lamenting for his loss, doth sit,
 Alack,—mischance comes seldomtimes alone,
 But aye the worried dog must rue more curs than one.

For lo! the Pedagogue, with sudden drub,
 Smites his scald-head, that is already sore,—
 Superfluous wound,—such is Misfortune's rub!
 Who straight makes answer with redoubled roar,
 And sheds salt tears twice faster than before,
 That still, with backward fist, he strives to dry;
 Washing, with brackish moisture, o'er and o'er,
 His muddy cheek, that grows more foul thereby,
 Till all his rainy face looks grim as rainy sky.

So Dan, by dint of noise, obtains a peace,
 And with his natural untender knack,
 By new distress, bids former grievance cease,
 Like tears dried up with rugged huckaback,
 That sets the mournful visage all awrack;
 Yet soon the childish countenance will shine

Even as thorough storms the soonest slack,
 For grief and beef in adverse ways incline,
 This keeps, and that decays, when duly soaked in brine.

Now all is hushed, and, with a look profound,
 The Dominic lays ope the learned page ;
 (So be it called) although he doth expound
 Without a book, both Greek and Latin sage ;
 Now telleth he of Rome's rude infant age,
 How Romulus was bred in savage wood,
 By wet-nurse wolf, devoid of wolfish rage ;
 And laid foundation-stone of walls of mud,
 But watered it, alas ! with warm fraternal blood.

Anon, he turns to that Homeric war,
 How Troy was sieged like Londonderry town ;
 And stout Achilles, at his jaunting-car,
 Dragged mighty Hector with a bloody crown :
 And eke the bard, that sung of their renown.
 In garb of Greece, most beggar-like and torn,
 He paints, with colly, wand'ring up and down.
 Because, at once, in seven cities born ;
 And so, of parish rights, was, all his days, forlorn,

Anon, through old Mythology he goes,
 Of gods defunct, and all their pedigrees,
 But shuns their scandalous amours, and shows
 How Plato wise, and clear-ey'd Socrates,
 Confess'd not to those heathen hes and shes ;
 But thro' the clouds of the Olympic cope
 Beheld St. Peter, with his holy keys,
 And own'd their love was naught, and bow'd to Pope,
 Whilst all their purblind race in Pagan mist did groupe !

From such quaint themes he turns, at last aside,
 To new philosophies, that still are green,
 And shows what railroads have been track'd, to guide
 The wheels of great political machine ;
 If English corn should grow abroad, I ween,
 And gold be made of gold, or paper sheet ;
 How many pigs be born, to each spalpeen ;
 And, ah ! how man shall thrive beyond his meat,—
 With twenty souls alive, to one square sod of peat !

Here, he makes end ; and all the fry of youth,
 That stood around with serious look intense,
 Close up again their gaping eyes and mouth,
 Which they had opened to his eloquence,
 As if their hearing were a three-fold sense.
 But now the current of his words is done,
 And whether any fruits shall spring from thence,
 In future time, with any mother's son !
 It is a thing, God wot ! that can be told by none.

Now by the creeping shadows of the noon,
 The hour is come to lay aside their lore ;
 The cheerful pedagogue perceives it soon,

And cries, "Begone!" unto the imps,—and four
 Snatch their two hats and struggle for the door,
 Like ardent spirits vented from a cask,
 All blythe and boisterous,—but leave two more,
 With Reading made Uneasy for a task,
 To weep, whilst all their mates in merry sunshine bask,

Like sportive Elfins, on the verdent sod,
 With tender moss so sleekly overgrown,
 That doth not hurt, but kiss the sole unshod,
 So soothingly kind is Erin to her own!
 And one, at Hare and Hound, plays all alone,—
 For Phelim's gone to tend his step-dame's cow;
 Ah! Phelim's step-dame is a canker'd crone!
 Whilst other twain play at an Irish row,
 And, with shillelah small, break one another's brow!

But careful Dominie, with ceaseless thrift;
 Now changeth ferula for rural hoe;
 But, first of all, with tender hand doth shift
 His college gown, because of solar glow,
 And hangs it on a bush, to scare the crow;
 Meanwhile, he plants in earth the dappled bean.
 Or trains the young potatoes all a-row,
 Or plucks the fragrant leek for pottage green,
 With that crisp curly herb, call'd Kale in Aberdeen.

And so he wisely spends the fruitful hours,
 Linked each to each by labour, like a bee;
 Or rules in Learning's hall, or trims her bow'rs;—
 Would there were many more such wights as he,
 To sway each capital academie
 Of Cam and Isis, for alack! at each
 There dwells, I wot, some dronish Dominie,
 That does no garden work, nor yet doth teach,
 But wears a floury head, and talks in flow'ry speech!

THE NEW ENGLAND COUNTRY SCHOOL.

THE following sketch of a Country School in New England—"as it was," is copied from the "*Columbian Muse*, a selection of American Poetry, from various authors—published by Matthew Carey, Philadelphia, 1794,"—where it is credited to the *New Hampshire Spy*.

THE COUNTRY SCHOOL

"PUT to the door—the school's begun—
Stand in your places every one,—
Attend,———"
* * * *

"Read in the bible,—tell the place—"
"Job twentieth and the seventeenth verse—
"Caleb, begin." "And—he—shall—suck—
Sir,—Moses got a pin and stuck———"
"Silence,—stop Caleb—Moses! here!"
"What's this complaint?" "I didn't, Sir,"—
"Hold up your hand,—What is't a pin?"
"O dear, I won't do so agin."
"Read on." "The increase of his b—b—borse—"
"Hold: H, O, U, S, E, spells house."
"Sir, what's this word? for I can't tell it."
"Can't you indeed! Why spell it." "Spell it."
"Begin yourself, I say." "Who, I?"
"Yes, try. Sure you can spell it." "Try."
"Go, take your seats and primers, go,
You sha'n't abuse the bible so."

"Will pray Sir Master mend my pen?"
"Say, Master, that's enough. Here Ben,
Is this your copy?" "Can't you tell?"
"Set all your letters parallel."
"I've done my sum—'tis just a groat—"
"Let's see it." "Master, m' I g' out?"
"Yes,—bring some wood in—What's that noise?"
"It isn't I, Sir, it's them boys."

"Come Billy, read—What's that!" "That's A—"
"Sir, Jim has snatch'd my rule away—"
"Return it, James. Here, rule with this—
Billy, read on,"—"That's crooked S."
"Read in the Spelling-book—Begin."
"The boys are out"—"Then call them in—"
"My nose bleeds, mayn't I get some ice,
And hold it in my breeches?"—"Yes."
"John, keep your seat." "My sum is more—"
"Then do't again—Divide by four,
By twelve, and twenty—Mind the rule.
Now speak, Manassah, and spell tool."
"I can't"—"Well try"—"T, W, L."
"Not wash'd your hands yet, booby, ha?
You had your orders yesterday.
Give me the ferrule, hold your hand."
"Oh! Oh!" "There,—mind my next command."

"The grammar read. Tell where the place is."
 "C sounds like K in cat and cases."
 "My book is torn." "The next." "Here not—"
 "E final makes it long—say note.
 What are the stops and marks, Susannah?"
 "Small points, Sir."—"And how many, Hannah?"
 "Four, Sir." "How many, George? You look :"
 "Here's more than fifty in my book."
 "How's this? Just come, Sam?" "Why I've been—"
 "Who knocks?" "I don't know, Sir." "Come in."
 "Your most obedient, Sir?" "And yours."
 "Sit down, Sir." "Sam, put to the doors."
 "What do you bring to tell that's new!"
 "Nothing, that's either strange or true.
 What a prodigious school! I'm sure
 You've got a hundred here, or more.
 A word, Sir, if you please." "I will—
 You girls, till I come in be still."

"Come, we can dance to night—so you
 Dismiss your brain distracting crew,
 And come—For all the girls are there.
 We'll have a fiddle and a player."
 "Well, mind and have the sleigh-bells sent,
 I'll soon dismiss my regiment."

"Silence! The second class must read
 As quick as possible—proceed.
 Not found your book yet? Stand—be fix'd—
 The next read, stop—the next—the next.
 You need not read again, 'tis well."
 "Come Tom and Dick, chuse sides to spell.
 "Will this word do?" "Yes, Tom spell dunce.
 Sit still there all you little ones."
 "I've got a word," "Well, name it." "Gizzard."
 "You spell it Sampson." "G, I, Z."
 "Spell conscience, Jack." "K, O, N,-
 S, H, U, N, T, S." "Well done!"
 "Put out the next"—"mine is folks."
 "Tim, spell it"—"P, H, O, U, X."
 "O shocking! Have you all try'd?" "No."
 "Say Master, but no matter, go—
 Lay by your books—and you, Josiah,
 Help Jed to make the morning fire."

XI. ART.—ITS IMPORTANCE AS A BRANCH OF EDUCATION.

BY M. A. DWIGHT.

THE teacher who gives instruction in the art of drawing, will find that no real advance is made in skill of hand, until the curve line in all its variations is mastered. This includes not only the mathematical forms, such as the circle and semi-circle, but the infinite variations that are required to express the muscles called in action by the impulses of nature, which demands the greatest manual skill. Without this skill, anatomical knowledge is of no avail to the draughtsman, and in acquiring it, the eye becomes trained to observe the nicest variations of line, as the ear, in the study of the musical instrument, learns to discriminate the slightest possible variation in sound. Then the mind and hand work in unison, and the artist does not stop in his progress to consider the rudiments that he has thus made his own, any more than the writer to consult his grammar and dictionary. After each has thrown off his production, so to speak, he may in the correction of it, refer to the rules that govern his art, and which are common to all cultivated minds. Here the author has the advantage of the artist, for if there are more to give just criticism in literature, and who will not spare him, there are also more to appreciate fine writing; and the certainty that he will encounter this criticism, makes the author careful to inform himself of all that belongs to good writing, and incites him to aim at the highest standard of merit. The artist, on the contrary, meets no such tribunal. The judgment of the public in regard to his productions has no standard; for the people to whom his work is presented, have never been taught what constitutes the merits of a picture.

The question may be asked, how shall they learn this? Just as all men learn to judge the works of the scholar and the poet,—when by a long course of training they have mastered the same elements, and the same rules and principles that govern the productions of the most gifted, and have acquired the power to discriminate between the true and the false, the intrinsic and the meretricious.

The student who would acquire skill as a writer, first learns orthography, then grammar; then the various elements of composition in a gradual course of practice; and finally, produces an original theme according to the established rules of the art of writing; and any

teacher will tell him, that it is in this way, and this only, that he will become a successful author. So the artist must first learn the curve, then the combination of curves according to the laws of harmony, then the elements of composition, which, if he would so understand as to appreciate the productions of others, he must practice more or less himself. In no other way can he acquire skill to excel in the practice of the arts, or qualify himself to judge the merits of works of art. No student, whatever his object in the pursuit of the study, should stop short of composition. It does not follow that every one who is taught the art of composing in written language will become an author; but the education he has received, enables him to appreciate and enjoy the beauties of literature. So education in art enables one to enjoy all its productions, and affords the unspeakable pleasure of understanding the character of pictures, statues, etc., which bear the impress of great minds that have chosen the language of art as their medium of expression, and in which they have embodied conceptions as great, and beauties of sentiment as exquisite as those of any poet that ever put pen to paper, or sang to the music of his harp. Expressions, that to those ignorant of art, are, alas! a dead letter.

The next question is, where shall we find teachers who are qualified to impart the requisite instruction? And we can only answer, where? The Schools of Design should have prepared them; but they have signally failed in this department which ought to have been a prominent object of those institutions, and efficiently accomplished. I have known scholars who attended the schools in Boston and New York for the purpose of becoming qualified for teachers, express their bitter disappointment in having failed to obtain any true instruction, or any knowledge of art that was improving to themselves, or that could be imparted to others.

The training of teachers in this department as well as that for every other branch of education, should be in the care of educators. "A committee of taste," or a "committee of benevolence," can not understand, much less provide, for this great want. No institutions can do so much toward it as the State Normal Schools, and with them, the responsibility rests. The committee of a Normal School are provided with funds, and the Principal to whom they entrust its direction, has it in his power to regulate the studies required, so that all introduced shall have their due share of time and attention. The Principal of a private school, on the contrary, must be governed by the wishes of the various parents and guardians by whom he is employed; who, as a general rule, are decided by the scholars in the

choice of studies, except in regard to music and French, which in all cases, ability out of the question, are considered as indispensable acquirements.

It may be said in reply, that drawing is already taught in the Normal Schools. Yes—mechanical copying. This I have seen, when the teachers worked faithfully according to their ability; taught quite as well as they were taught themselves, perhaps better. But, let me ask, is it well enough, when it is not the best way? When neither teacher nor scholar can apply a rule or explain a principle of art? When instruction in this department falls so far below the standard of teaching in every other? And with the power controlled by the committee of the Normal Schools, are they doing justice to the scholars, when this department is neglected, and the place of teacher badly filled?

Hon. Henry Barnard, in his work entitled, "Education in Europe," shows the importance attached to the study of drawing by the educated, and the educators of that country; and if it is so important to them, is it not equally important to us who aim at the same standard of attainments, and if possible, higher? Those who have given attention to the subject, can see and understand the advantage that foreign artizans have over our own, from the training of eye and hand that the study and practice of drawing has given them. In scientific research too, they have the advantage; for in Europe, every department of scientific study has its scientific teacher of drawing, and without the same advantage, can we compete with them in progress? The great mistake with us has been in regarding the art of drawing as an isolated pursuit, and of no practical value; as an accomplishment that only the few could acquire, the only end and aim of which is, to make pictures to be purchased at great prices by those whose wealth enables them to indulge in the ornamental; mistakes that have naturally arisen from the profound and universal ignorance of the subject.

Another mistake is, in postponing the commencement of the study until the scholar has passed the age when thorough practice in the rudiments can be required, and perfect ease in handling the pencil can be secured. The child who is expected to excel in playing the piano, is required to commence very young, and pursue the study with diligence for a term of eight or ten years, at least, before the parents' ambition is satisfied with the display of skill; when the same child is, in the finishing year of school education, placed under a drawing teacher with the vain and unreasonable expectation that the result of six months' effort will be "a picture to carry home." If

at this age, an attempt is made to give any thing like a thorough training, the scholar rebels, the parents are dissatisfied, and the teacher is pronounced incompetent, and ill-qualified for his place. Realizing this, he will either leave it in disgust, or pander to the false ambition of fond parents, deceiving them with a performance of his own, which they, in their ignorance, receive as the work of the scholar. The result is, parental pride and vanity are gratified in this exhibition of skill accredited to their daughter's account, she is flattered by the encomiums it calls forth, and to their friends, who are equally well informed on the subject of art and its requirements, the teacher is duly recommended as eminently worthy of patronage.

To overcome this ignorance of art, and the evil is not a light one, there is but one way, and that is, to give this branch of study its proper rank in schools, beginning with the State Normal. No change can be effected in public opinion, until the public are as well educated in this department of scientific skill as in every other. To accomplish it will be a work of time, for to secure complete success, we must begin with the young, and train them in sure and gradual progress, until they have mastered both the principles and practice of art.

The first elementary lesson should be in the handling of the pencil in preliminary exercises, that shall enable the scholar to commence with regular lessons successfully. In the delineation of his lines three things are required, *viz.*: accuracy, force, and freedom,—all of which must be constantly inculcated, till, in the imitation of any object or group of objects, the student has acquired sufficient skill to give the designed effect, without the aid of his teacher. He may then commence with the practice of light and shade, which should also be studied on the cast, accompanied with instruction in the principles that govern the distribution of light and shade upon a single object, or a group of objects. If the scholar is advanced too hastily, the disadvantage is never overcome; every elementary step must be sure and of course gradual. Hence the importance of commencing young, that there may be time enough. First let form be mastered; then light and shade; then color; then composition; for this system, whatever may be the natural ability, is the only royal road to excellence.

It has been already stated, that no student of drawing should stop short of composition; and to acquire the ability to compose with ease and skill, the practice from the commencement should be, drawing from the cast, rather than from the paper model; because, in the *first* place, with this method of study and practice, the teacher can lead his scholar on from step to step from the outset, until he is prepared to draw from life. In the *second* place, by commencing with

the cast, he draws with more confidence and independence ever after. On the contrary, commencing with the paper models gives a feeling of timidity with regard to drawing from objects that is not readily overcome. In the *third* place, in making his own delineation of an object, instead of a mechanical copy of a drawing placed before him, the scholar feels that he is really producing something new, which increases his interest in the study, and is a constant stimulus to improvement. If he has any genuine taste for art, he may in this way, be gradually advanced until he has thoroughly mastered the art of composition, when he is prepared to design according to the ability with which his Creator has endowed him.

By commencing with the cast, is not meant that of the human figure, which is too difficult for a beginner. Architectural ornaments such as are used in house decorations, furnish a variety of simple curves, as well as combinations of curves, that afford excellent studies for the first lessons. These should be selected with care, and none adopted for the purpose that are false in taste and skill, because the scholar should be trained from the beginning to learn the laws of unity and harmony, which are indispensable to the composition of every subject however limited. The difference in the progress made by the scholar in using a series of good and correct models, or those that are poor and faulty is incalculable. For this reason, the selection of models should never be a question between scholar and teacher, or parent and teacher, for art is governed by established rules as simple, and by scientific laws as arbitrary as those that belong to music or to geometry. In other studies pursued, no difficulty of this kind occurs, for the teachers employed in the various departments are supposed to be better qualified to judge than the scholars. But, alas! for the teacher of drawing. In the first place, all children are allowed to say whether they wish to learn to draw, and their own inclination decides the question. This study being the only one in regard to which they are left free to choose, shows them, at once, that no importance is attached to it. If they object on the plea of having no taste for it, no one regards it as evidence of a deficiency in natural gifts; but what parent ever allowed a child to say, that they had no taste for music; ear or no ear, taste or no taste, the master is summoned to make an accomplished musician of the subject given him; and ear or no ear, taste or no taste, the child is made to work with indefatigable diligence, and the lessons are steadily pursued, intermingled with alternate tears and remonstrances, which avail nothing with the parent, for musical skill commands a little coveted *éclat*. This the scholar does not always secure, but as a reward for the application made, her individual pleasure in after life is greatly enhanced by the

gratification of a cultivated taste, in the frequent opportunities afforded of listening to fine music.

In the next place, if latent talent is developed with the growth, the years that should have been devoted to the acquirement of elementary knowledge and skill in this, as well as in other studies, have passed by. But, during that period, the eye and taste have become somewhat cultivated, and if the art of drawing is then attempted, the very slow progress made, combined with the feeling of disgust at the puerile effort of skill, will discourage all who have not more than an ordinary share of ability.

Before closing, I would beg leave earnestly to recommend, that drawing should be taught scientifically in every school where it is taught at all, more particularly in the State Normal, the ostensible object of which is, to prepare teachers for all departments of instruction. Our people have yet to learn that the rules of art are founded in science, and that drawing, to be taught successfully and usefully, must be taught scientifically. The author of an exceedingly interesting and valuable article published in the "American Journal of Education," entitled "Science and Scientific Schools," (*Vol. II.*, p. 354,) in speaking of the ancients, says, "they had, it is true, built magnificent temples. But, the taste of the architect, and that of the statuary, or poet, is simply an emanation from the divine breath within man, and is cultivated by contemplation, and only surface contact with nature." Will the writer pardon the liberty taken in commending to his attention the science of art? He will find, on understanding it, that magnificent temples, and beautiful statuary, as well as all works of art, are the result of study and scientific skill, and never in any instance, designed and accomplished simply by what he considers inspiration, and mere "surface contact with nature."

In the same article, (p. 369,) the writer speaks of the result of the Crystal Palace Exhibition in London, when the English, finding by comparing the productions there exhibited with their own, that the manufactures of other countries surpassed theirs in the display of artistic skill; the skill which of all others gives the greatest advantage in the great marts of the world, for the artistic will eclipse the mechanical, even in its greatest perfection. And what but scientific art gives the French artizan the advantage over all others, and in all markets commands the preference for their productions?

In the comprehensive plan given in the article referred to, which embraces nothing superfluous to a thorough education, "drawing and the history and criticism of the art" are included. If the art of drawing is worthy of a place in the list of studies pursued, is it not worthy of the same thorough attention as the rest? And, if art is

not to be studied scientifically in a scientific school, why should it be introduced at all? We heartily sympathize in the hopes and ambition expressed by the writer for the New Haven Scientific School, and at the same time beg leave to say that when properly pursued, such is the influence of this study upon the whole mental culture, that if other scientific schools will give prominence to the study of art, "Yale, like other shaded plants, will begin to dwindle, and her laurels fade."

It is true, as he says, our young men go to Germany for the purpose of acquiring a higher mental cultivation than the facilities afforded them in their native land enables them to gain at home; and what is it that marks so decided a difference between the advantages afforded them in European institutions, and those in the United States? Is there any point of difference so material in the two systems, as that of art culture, which is there considered as of first importance, and here entirely overlooked? In Germany, no student of Greek is expected to understand the ancient classics, until he has attended lectures upon Greek art, and become familiar with the antiquities collected in their rich museums; and that he may understand these lectures, he is first taught the rudiments of art at school with elementary practice.

In all pursuits, we Americans look at the practical and the profitable, and in examining the statistics of art, we find that in Apelles' time, when every well educated Greek was well educated in art, pictures brought the highest prices to living artists; for then Apelles sold his picture of Alexander grasping the thunderbolt, which was deposited in the temple of Diana at Ephesus, for two hundred and eleven thousand dollars. Corréggio, who died in 1534, executed his "Saint Jerome" for about two thousand dollars. In 1749, the king of Portugal offered ninety thousand dollars for it. When the French had possession of Pama, the duke vainly offered two hundred thousand dollars to redeem the same picture from being sent to Paris. Benjamin West, who in his day was honored in England as being at the head of his profession, received in 1817, four thousand dollars for his "Annunciation," then considered one of his best pictures. In 1840, the same picture was sold by auction for fifty dollars.

West undoubtedly possessed great natural gifts, and, by diligent application and study, found out for himself much that belonged to the practice of art. Still, he never overcame the disadvantage under which he labored from the want of early instruction, and never attained the excellence that he would have done, had he received thorough training from a master. Canova said of him, "he *groups*, he does not *compose*." In his time art was but little cultivated in England, and comparatively few then went to the continent; where, in

visiting the galleries, the taste becomes cultivated, and the eye gains the power of discrimination. During the present century, many have availed themselves of this great advantage; hence the different estimate made of the pecuniary value of West's pictures in his own time and the present; a fact worthy of note by all who claim for art, as for manufactures, a certain and available profit.

Many who go abroad for the purpose of seeing ancient works of art, are incapable of appreciating them, because in their education this branch of study has been entirely neglected; still, they claim to be judges, and are ambitious to procure fine pictures and statuary, the possession of which will prove their superior taste and judgment. In this they tacitly acknowledge the great importance attached to the subject, and at the same time unwittingly betray their ignorance, which is the necessary consequence of our having no schools of instruction. Our government pay great prices to native artists for their pictures, and thus by voluntary patronage distinguish them above their fellow countrymen; yet no importance is attached to a school of art. The great inventive power of our people is freely admitted by those of other nations with whom we come in competition, but our productions are less finished than theirs, because the inventors have received no artistic training, and of course their work suffers in the comparison.

Impressed with the vague idea that in the pursuit of art there is some radical defect, one says, "all that our artists need to enable them to compete with those of Europe, is a liberal patronage." Another says, "if we would have art succeed in America, we must have large public galleries, thrown open to the people." A third says, "artists can never do any thing here, they must go to Italy, the land of art." But the true question is, shall art be taught to our people scientifically, and with the same care as other studies pursued? or shall it be condemned as utterly useless, and therefore, unworthy the attention of educationists?

On this point let our educationists decide, and act conscientiously for the good of the young who are to perpetuate our Republic, and protect its future interests, and for whom they have in all other branches of education acted so judiciously and energetically. Let not those who are to follow after them, and on whom the same duties must devolve for the interests of their successors, while grateful that so much was done, mingle their gratitude and praise with reproach and regret that in the education given them, one valuable pursuit was neglected, one important thing omitted, a study which of all others, opens the way to profit, to honor, and to distinction, both individual and national.

XII. CULTIVATION OF THE REFLECTIVE FACULTIES.

Lectures addressed to Young Teachers,

BY WILLIAM RUSSELL, LANCASTER, MASS.

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INTRODUCTORY OBSERVATIONS.—In the preceding lectures of this series, we were occupied with the consideration of the *perceptive* and the *expressive* faculties, with a view to the plan and purposes of education. Following the historical order of development in the different classes in which the mental powers may, for such purposes, be grouped, we enter now on the study of the various modes of intellectual action which may be classed under the denomination of

REFLECTIVE FACULTIES.

Here we are met anew by a difficulty inherent in our native language, in the paucity and indefiniteness of the terms which it employs to designate the phenomena of mind. The vagueness of the phrase "reflective faculties," is a serious impediment to clearness and distinctness of conception, as regards any attempt at exact definition or satisfactory classification of intellectual acts or conditions. The term "reflective," however, if we resort once more to the serviceable aid of etymology, as a key to the interpretation of language, will prove strikingly suggestive of meaning; and, by its figurative force and peculiar significance, will atone, to some extent, for its deficiency in philosophic precision.

The term "perceptive," (literally, *taking through*,) suggests the intellectual condition in which the mind is in the act of *taking*, receiving, or forming, ideas *through* the medium of the senses. The term "expression" implies a state in which the mind is undergoing a process of *pressing*, or *being pressed*, *from within outward*. But the term "reflection," (*bending back*,) suggests, figuratively, that state or act of the mind in which it reflects, repeats, or *gives back, inwardly*, the images impressed upon itself,—the effects of which it is conscious,—whether produced from without or from within, whether occasioned by perception, imagination, conception, or emotion. In this condition is implied that attention turns inward, and dwells, more or less consciously, on its internal subjects, rather than on the objects by which they may have been occasioned.

The history,—so to term it,—of intellectual action implied in the application of the word “reflective,” represents the mind, as in the act of going forth from its inner self, meeting the forms of the external world, and, by the impression which these produce upon it, “reflecting,” (turning back or inward,) upon itself, to contemplate and deliberately consider what it there consciously beholds. Nor does the term lose aught of its significance, when it is applied to the inward action of the mind on the phenomena of its own consciousness, when the forms of imagination, or even of pure thought itself, become so forcible as to attract and absorb the attention. The figurative word then represents the mind as turning back upon itself, to look inward, so as to ascertain and define, or consider more fully, the objects of its own creation, and to follow the trains of thought which these suggest. In either of the supposed cases,—whether the objective or the subjective world furnish the data of thought,—the result is an ultimate inward movement, which, although it may, in given instances, lead to the anticipation of external action, as a consequence, is, so far, a purely mental condition, sanctioning the popular usage which applies the term “reflection” to all modes of intellectual action which are of a strictly internal character.

Recognizing this fact of language, and pursuing our analysis of the human faculties as subjects of disciplinary culture, we now, therefore, change our field of observation, and pass from the outward spheres of perceptive observation and expressive communication to the silent, inner, invisible, spiritual, and purely intellectual region of *Thought*. We now contemplate man as made in the image of his Maker, as an intelligent and rational being; and we trace the working of those powers which ally him to “things unseen and eternal.”

Following, as before, the method of observing (1,) the *forms* of mental action grouped under a given classification; (2,) their *actuating principle*, or motive force; (3,) their natural and habitual *tendency*; (4,) the *results* of their action; and (5,) the *educational processes* consequently required for their development and discipline, we proceed to a summary

(I.) ENUMERATION OF THE REFLECTIVE FACULTIES.

Memory, Conception, Consciousness, Reason, Understanding, Judgment.

Explanatory Remark.—This classification is presented not as one philosophically complete or exhaustive, but merely as a suggestive outline, for educational purposes. It is intentionally limited to the chief of those forms of mental action which may be regarded as acts or powers not only strictly interior, but *purely intellectual*, as contradis-

tinguished from those which are concerned with the external objects and facts of *perception*, from those which consist in inward or outward movements of *feeling*, and from those which are conversant with the ideal forms and creations of the *imagination*. A more extensive classification, including the subdivisions and subordinate details of reflective intellection, will necessarily present itself at a later stage of our analysis, when we come to the consideration of the various forms of exercise to which this group of faculties is subjected in the processes of education.

(1.) *MEMORY: the Basis of Reflective Power.*—This faculty naturally claims our first attention, when we contemplate man as a being endowed with the power of reflective intelligence. It is this faculty which enables him to take the first step from the exterior and objective world into the interior and subjective. Its exercise empowers him, even in the absence of the objects of sense, to retain or to recall, for indefinite periods, and at indefinite intervals, the ideas which he derived from them. He can thus, at pleasure, dispense with the actual presence of external objects, and yet, by dwelling on them mentally, after he has withdrawn from them outwardly, pursue the trains of thought to which they give rise. As a result, he thus acquires a more intimate knowledge of their relations to his own interior being, and converts the pabulum of intelligence, furnished in the data of the outward world, into the pure elements of intellectual sustenance. The activity of this power is, in fact, the measure of his growth in mental stature and strength. It is the condition of all intelligent progress, whether we regard memory as the grand receptacle and depository of all those elements of knowledge which are at once the rudiments of intellectual life, the springs mental of action, and the material of thought, or as the chain which links the past to the present, and retains every acquisition as a foothold for the next step forward in the processes of reason and the investigation of truth.

Remembrance.—The faculty of memory, even in its comparatively passive and quiescent form of mere retention, or *remembrance*, gives man the power of holding with a firm grasp all the treasures which observation enables him to accumulate from without, and to carry them with him into that internal region of thought where they are to be assimilated to his own mental being, and become component parts of it, in transfigured forms of living power and beauty. Not only so: but even the involuntary susceptibility of this vast capacity preserves in the mind the imprint of every passing thought, every form of imagination, and every mood of feeling, which has character enough to excite his attention and recall him to himself, in the exercise of consciousness and reflection.

Intellectual and Moral Offices of Memory.—This benign retentive power gives unity to man's intellectual and moral life. It is the sure and steadfast anchor by which he grapples the present to the past, and is saved from the fluctuation and fragmentary tossing of "the ignorant present." In the wide field of culture, memory makes the mind the seed plot and garden ground of all the knowledge which human care and kindness have the skill or the power to drop into it. Fertilized by the genial influences of well directed education, the retentive capacity of memory becomes rich in every precious and noble product of mind by which the intellectual life of the world is nourished and sustained.

But it is as an element of intellectual and moral power in human character, that this faculty reveals its chief value. Its very nature and tendency is to constitute man a *reflective* being, by withdrawing him from the influence of a too exclusive regard to the present and the external; by soliciting his attention to the profoundest verities of his own intelligent and immortal being; and by balancing the stern realities of experience against the sometimes fallacious solicitations of hope, or the grave actualities of the past against the doubtful promises of the future. It prompts to *thought*, and leads to security amidst uncertainty and distraction. It invites to reflective *meditation*, by the suggestive materials in which it abounds. It cherishes *contemplation*, by opening to the mind's eye the long vista of the past with its fast-linked trains of scene and incident and action, and the inefaceable impressions which all these have graven upon the heart. It tends to make man a considerate and thoughtful being, by the faithful monitions which it furnishes to the lips of wisdom warning against the errors of judgment or of will, by reminding of their penalties formerly incurred.

Remembrance saves from the domineering ascendancy and absorbing attractions of the sensuous and the transient, by intermingling with the fluidity and evanescence of the present the solidity and permanence of the past. It thus tends to give gravity and weight to character; and if its influence is sometimes a shade too sombre for gayety, it contributes a not undesirable element to the sternness of manhood, as a safeguard to the firmness of will. Its office is, in this respect, a preventive one,—to save man from the instability which the exclusive influence of things present and things outward might induce; and, by attracting him inward to himself, it favors the acquisition of that self-knowledge which is the anchor of his safety.

Recollection.—This term is but another name for the faculty of memory, and merely intimates that the impressions made on the mind

by a given object, scene, or event, may have been, for a time, effaced, or its elements dispersed, by the intervention of other agencies; and that, with or without an effort of the will to that effect, but by the operation of some law of mental association, the idea recurs or returns, as it were, and, perhaps, unexpectedly and suddenly, to the mind. We are then said to "recollect," (*gather again*,) or recall what had, for a season, escaped the retentive hold of memory.

The very abruptness and suddenness of the transition of thought, in such instances, exerts a peculiar power on the reflective action of the mind, and makes it more striking, more impressive, and more effectual. Recollection may thus light up the soul with the instantaneous gleam of a rekindled thought, or plunge it into the depths of a past grief; or it may arrest the will on the very brink of remembered evil. A long train of profound reflections may thus be suggested, which may exert an influence on the character of a whole life.

A mere flash of reflection has sometimes sufficed, by the instant recalling of scenes of childhood's innocent enjoyment, or the injunctions of parental wisdom and love to reinstate conscience on its rightful throne, and bring back the tempted to himself, or to restrain him from the first steps of a career of ruin. A remembered promise, pledging honor and truth, has sometimes risen up as a barrier against an approaching tide of overwhelming guilt. A verse of sacred Scripture, darting across the mind, has checked the hand already stretched out to do the deed of wickedness which no after tears of penitence could have sufficed to wash out.

But not as a *preventive* only does memory thus subserve man's highest interests: its recurring suggestions are not less frequently inspiring *prompters* to every form of virtue. To the dispirited traveler on the pathway of life, it comes, sometimes, as an inspiring angel, with messages of cheering and encouragement drawn from the remembered virtues of the struggling great and good who have gone before. It points him to "their footprints on the sands of time," and bids him "take heart again." It reminds him that his great reliance is not on the outward and the material, but on that "hidden strength" of which our greatest poet speaks so eloquently. The maxim or the motto which the guardian care of the mother or the teacher had engraven as a watchword on the tablet of the heart, in early years, recurs, sometimes, to incite to noble deeds or noble enduring, the man encompassed by difficulties and dangers before which he would otherwise have staggered. The "one, last, best effort, more," which wins the crown of victory, is that, not unfrequently,

which follows the backward glance of memory to the parting scene, and farewell words of a parent's blessing.

Memory as a Subject of Cultivation.—In either form, whether that of retentive remembrance or momentary recollection, memory furnishes the material, and solicits the action, of the whole class of reflective faculties. To the educator, therefore, the judicious cultivation and development of this capacity, in the minds committed to his care, becomes a matter of vital moment, that the impressible memory of the young may be rich in valuable resources, and strong for the aid of every good purpose, sound and healthy in its action, firm in its grasp, and prompt to yield up its acquisitions when in demand for intellectual emergencies.

The true teacher will be careful that this indispensable servant of the mind be not exhausted by overwork, that its strength be not expended on worthless material, that its receptive capacity be not crammed to unhealthful and unprofitable repletion, at the expense of inaction and inanity to all the other capacities of the mind. But of the appropriate modes of exercise for the cultivation of this faculty, we shall have occasion to speak more fully under the head of educational processes.

(2.) CONCEPTION: *Etymological Sense of the Word.*—The primitive signification of this term implies that the mind has the power of "taking" (*receiving, or forming,*) ideas "with," (*within,*) itself, whether on data furnished from without, and by the alchemy of mind, transmuted into intellectual forms, or on materials found within itself, originating in feeling or in thought, partaking of its own character, and wearing forms purely ideal. In the process of intelligence, *conception* presents itself as the counterpart of *perception*, performing, in the interior world of thought, an office similar to that of the latter in the domain of exterior observation.

Its Proper Acceptation.—The term "conception," in its full and proper acceptation, comprehends the action of the mind in the intelligent contemplation or cognition of any object or subject in the whole range of the ideal world. It applies to the recognition or creation of the forms of imagination and the figures of fancy, not less than to the ideas of pure intellection. In the former relation, it stands connected with the action of the expressive faculties, as discussed in a previous lecture; but it is in the latter sense, as a contemplative and reflective faculty, that we now regard it. In this connection, it approaches, sometimes to the sphere of memory, and draws from that source the materials on which it acts,—whether these were originally external or internal in their origin.

Different Views of this Faculty.—Contemplated in the light last mentioned, the faculty of conception has, by some eminent writers on intellectual philosophy, been considered as identical with *memory*; while, by others, its definite action on forms furnished by *imagination*, has been regarded as identifying it with that faculty. Hence, we read of the “conceptions of memory,” and the “conceptions of imagination.” A third class of authors treating of intellectual topics, evidently regard conception as simply an act of the understanding.

The unsatisfactory character of popular usage in our own tongue, as regards the application of language to mental phenomena, is strikingly exhibited in the several arbitrary senses in which the term “conception” is used, as suggesting imperfection, dimness, or remoteness in the objects or subjects of contemplation. We can not, therefore, rely on any consentaneous use of nomenclature as a guide to the character or action of the faculty in question. Adverting, however, to the highly suggestive etymological sense of the term “conception,” as it has been employed in the metaphysical vocabulary of all nations, for successive ages, we find the susceptible intellect figuratively represented by it as—when in the act of forming ideas—*impregnated*, or fertilized, not only from the various sources of intelligence furnished by the external world of perception and the interior spheres of feeling and imagination, but as possessing a *self-vivifying* power of creating and contemplating an inner world of its own, more or less analogous to that without, though formed of materials purely intellectual and spiritual;—a condition which is exemplified in the exercises of its own conscious intuition, in the sequences of thought, and in the processes of reasoning. Nor is the independent power of this faculty in any case more distinctly perceptible than when, borrowing the congenial aid of reason, it inspires with intelligence, and moulds into symmetry the fluctuating forms of imagination which hover in the ideal atmosphere.

This strictly interior power of the mind may be regarded as the first step in its consciously reflective action, in which,—not as in the partly involuntary condition of mere remembrance or recollection, it is comparatively passive, or works under a law of necessity,—but voluntarily and deliberately coöperates with impressions received from without, with a consciousness of their tendencies and of its own action. It is this power which virtually confers on man a world of his own,—an intelligent sphere of activity, independent, for the time, of the external universe in which he moves,—a sphere in which his higher intellectual and moral nature has its appropriate scope. The strength, the clearness, and the precision with which this faculty acts, determine his rank in the scale of intelligence and moral power.

Its Susceptibility of Cultivation.—In the relations of educational culture, the exercise of this faculty becomes a subject of deepest interest to those whose office it is to train the mind to true and effective habits of action. Nothing, indeed, can give a more impressive view of the benefits of proper cultivation, or of the susceptibility of this faculty to the influence of culture, than the contrast between the feeble and futile efforts of the child to form an adequate conception of the causes of the most ordinary phenomena of daily life, and the comprehensive grasp of conceptive intelligence with which the mature mind of man reads the great volume of facts and their relations, and interprets their most hidden laws. A similar contrast is exhibited to us in the wondering ignorance of the savage, contemplating the varying aspects of nature, and the man of science, to whom they present themselves as necessary results, thoroughly understood, and as verifications of philosophic theory.

The mere perceptions of the child or of the savage may often be more exact than those of the philosopher, because these depend on the freshness and vividness of sensation. But the *conceptive* power of the mind is, to a great extent, the result of the force of processes purely mental, and the skill and exactness with which these are conducted. In such operations, practice and discipline alone can yield perfection as a result; and for success in them the candidate must look to the sustaining aid and the crowning hand of education.

If we would form even the humblest idea of the mental value of the power of conception, we must refer to all that man has achieved in the acquisition of knowledge or the attainment of truth; we must advert to all the relations which he sustains to things lying beyond the sphere of sense, in the wide regions of opinion, of theory, and of sentiment; we must include his views of his own position in the universe, his views of the character of Deity, of the immortality of the soul, of the obligations of duty, of his social and civil life, and of all the institutions to which his conceptions of these various relations have given origin.

It is in these wider and higher references that conception, as a power of reflective intelligence, indicates its peculiar rank and office. Working by the blended lights of reason and of consciousness, it enables man to construct the fabrics of science and of character, by a consecutive progress of attainments in which every deposit becomes but a substratum for another in the series of an indefinite succession.

(3.) *CONSCIOUSNESS: Etymology of the Term.*—The etymological signification of this term invites our attention for a moment, to the peculiar suggestive value of the first element in the composition of

the word. Primitively, the meaning of this element is fully given by the equivalent term *together*, always implying a reference to *duality* or *plurality*. It ranges, accordingly, over the whole class of synonyms which may be grouped under the terms, "collation," "apposition," "union." In the use, therefore, of the term "consciousness,"—since the *root* of the word signifies *knowledge*, or intelligence,—the mind is represented as acting *together* with, or in *union* with, itself—that is, with *self-intelligence*. The prefix of the term, in this instance, accordingly, as in that of the word "conception," has the virtual significance of *inner*, *inward*, or *interior*, and suggests the idea of the mind acting on itself, on the objects of its own creation, or on the subjects of its own reflective conceptions.

Fitness of its Application.—There is a striking appropriateness, in this view, of the term "consciousness" as a designation for that power by which the mind becomes capable of momentarily detaching, as it were, from itself the idea of its contemplation, and working as a two-fold power; one effort of which is to hold up the ideal object, and the other to direct a wakeful and conscious attention to it, for some purpose of examination or reflective inquiry. The intelligent principle thus works—according to the interpretation of the term—*together* with, or in union with itself, in the compound or two-fold action of *conception*, and *attention*; the latter being introverted, so that the mind is aware of its own condition.

The peculiar fitness of the term in question becomes yet more distinctly apparent, when we advert to the common fact of experience, that, in the outward tendencies of the faculty of perception, the attraction of external objects is often so powerful and absorbing as to cause the mind to "lose its consciousness" in the contemplation of what it beholds, and to forget, for a time, its own existence, in the force of the attraction by which it is evoked, or the intensity of the excitement to which it is subjected, and which it temporarily identifies with the object of its attention. In the state of consciousness, on the other hand, the mind is *self-possessed*; it is *aware* of its own state of thought or feeling, and *voluntarily* dwells on the fact of introversion.

Different Opinions on the Nature of this Faculty.—Consciousness, as a term applied to the designation of a mental faculty of the reflective class, is, like many other terms in the nomenclature of intellectual analysis, a confessedly imperfect yet significant attempt to suggest a perfect recognition of an act or state purely internal. The imperfection here felt, attends more or less obviously, yet unavoidably, every attempt to define the action of mind,—that transcendent power

whose subtle agency often proves too fine for the grasp of its human representative, language, an interpreter whose terms are all, in consequence of the limitations of humanity, "of the earth, earthy."

The diversity of opinion among intellectual philosophers, therefore, on the nature of this power, is not surprising. Some would ignore its existence as a cognizable faculty, and identify it with the mere reflex act of attention; others elaborate its action in detail, so as to identify it with voluntary and prolonged reflection. Both these classes of observers evidently take the ground that it is dependent on the exercise, more or less active, of the will. But the painful act of consciousness in the experience of corporal or mental suffering, is often altogether involuntary, and resists, sometimes, the strongest efforts of the will, even in the loftiest moods of heroism itself; and the intellectual attraction of a mathematical problem, or a metaphysical question, will fascinate the conscious thinker, and draw him on involuntarily, from stage to stage of its processes, till, in the poet's language, he "forgets himself to marble."

Other authorities on topics of intellectual philosophy, have deemed it more rational to assume that consciousness is an inseparable attribute of intelligence,—necessary to its very existence. They represent it as the element which constitutes the dividing line between thought and mere reverie, between judgment and imagination, or, sometimes, between reason and insanity.

Educational View of this Faculty.—For the preliminary analysis which the intelligent conductor of education requires as his guide in the planning of his procedure, it is sufficient, perhaps, to take the acknowledged ground that consciousness is that state, act, or operation of the mind in which it is aware of its own activity. He will, from this view of the subject, derive two most important conclusions: (1,) that the vividness and distinctness of consciousness must always be in proportion to the clearness, exactness, and force of the ideas which are, so to speak, impressed on the mind from without, and solicit its conscious action as subjects of thought; and (2,) that the definiteness, the fullness, and the depth of consciousness, must always be in proportion to the power of directing and controlling the attention of the mind with reference to its own inward acts and conditions.

Intellectual and Moral Offices of Consciousness.—It is thus that consciousness assumes its true place as a reflective faculty, in the relations of intellect, as the power by which the mind learns to see clearly with its own inner eye, to define with accuracy the ideas which conception creates, to interpret nature's innermost secrets of causation, to follow the lengthening processes of reason, in the profoundest depths

of investigation, and so to construct the magnificent fabrics of pure science. The reflective power of consciousness becomes yet more impressive to us, when we regard its vast influence on the moral relations of mental action. It then reveals itself as an agent but a little lower than the divine element of *conscience*, and as the very condition of the paramount influence of that power over heart, will, action, and character. In the unconscious condition of childhood, and in the immaturity of experience, conscience moves with the light step, and the gentle hand and the soft accents of the guiding angel of Innocence. But it watches with a jealous eye, restrains with a firm hand, controls with the tone of command, or rebukes with the voice of reproach, the conscious agent who, in maturity of years, departs from the path of rectitude. But not in the stern monitions or the agonizing inflictions of remorse alone, does conscience act on consciousness. The sting and the lash are not its only implements of discipline. Conscience appeals to man's conscious power for good, when it uses "the spur which the clear spirit doth raise," and reminds him of his position "but a little lower than the angels," his resources of intellect, his moral ability, his relations of duty, his capacity of ceaseless progress, his desire to win the crown of excellence, his obligations to the Author of his being, and his aspirations after an immortality of glory.

Educational Culture of this Faculty.—The educator, therefore, while he would guard his pupils against that selfish and morbid consciousness which dwells exclusively on the condition of the individual, and keeps him forever in the abstracted mood of introspection and introversion, shut up in the cell of self, and withdrawn from usefulness to others, will use all salutary measures to give vigor and life and full activity to this powerful element of mental action and character.

(4.) REASON: *Explanatory Remark.*—The successive changes which, in the progress of time, are produced on the original meanings of words, will sometimes render a literal adoption of the primitive sense of any term an uncertain guide in metaphysical investigations connected with the action and phenomena of mind. A due regard, however, to the etymological structure of terms employed to designate the intellectual faculties, will always serve to suggest useful ideas for the guidance and direction of education. Such terms, it is not to be forgotten, had their origin in simple and primitive states of human life and character, and are therefore exempt from the uncertainty and ambiguity resulting from the mental condition of more advanced stages of society, in which opinion is refined, by false as well as true culture, into more subtle and more sceptical forms, and sometimes falls into the entangling web of sophistry and false judgment. The

primitive uses of language betray, it must be acknowledged, the historical childhood of man; but they possess, also, the truthfulness, the simplicity, and the directness of that stage; and their vivacious and figurative character always render them strikingly suggestive. In philosophic investigations connected with the analytic study of mind and the adaptation of modes of culture to mental discipline and development, the primitive signification of terms, whether it be literal or figurative, becomes, at least, an index to analysis, which, if faithfully traced, may lead to true and satisfactory conclusions on topics otherwise obscure and uncertain.

Etymology of the Term.—To apply this remark to the instance before us. Clearer conceptions and juster views of the faculty which we designate by the term "reason," would generally prevail, and would exert a corresponding influence on modes of mental culture, were the original meaning of the word adverted to in discussions connected with these subjects. The word "reason" is but the Latin scientific term "*ratio*," so familiar to the ear and mind of every teacher and every student of mathematics. It has merely undergone some slight modifications in passing from the Latin language, through the French, into our own. Its original sense, therefore, suggests the idea of *rate*, *measure*, or computation, as a conscious application, or act, of intelligence; and if we would trace the simplest and purest form of reason, we thus find it in the act of recognizing or constituting *rate*, or *ratio*, which in complicated processes, becomes *proportion*, or *symmetry*.

Reason characterized by the Definiteness and Certainty of its Action.—The idea suggested by the primary application of the term "reason," is that of *definiteness* and *exactness* of observation, carried even to the extent of examination by actual *measurement* or computation. No certainty of knowledge can be greater than what is thus intimated, when the inner action of intellect is verified by a direct appeal to objective reality attested by sense; and, in the legitimate uses of language, the measured exactness of verified observation is figuratively transferred to the decisions of judgment and the deductions of reason, in the comparison and examination of ideas and conceptions begun, continued, and ended, within the mind itself.

The processes of thought conducted on this firm ground, possess a definiteness which places the conclusions of reason in striking contrast with the comparatively vague and indefinite intimations of *feeling*, around which the boundary line of distinction can not with certainty be drawn, even in the most vivid states of consciousness. The ideas of reason stand thus contrasted, also, with those of *imagination*, which are often shadowy and indefinite, inexact, or inadequate, and

always comparatively fleeting and uncertain;—sometimes, unreal and false, the mere flitting phantoms of fancy. The purely intellectual conceptions of reason, as subjects of the mind's own inner *consciousness*, are, yet further, distinguished from the merely *perceptive* action of sense and understanding, in the relations of intelligence directed to the *external* world. Reason, working on data strictly mental, ever partakes of the certainty of *personal* knowledge and *conviction*, which, to the individual,—whatever it may be to others,—is, in its proper relations, the surest of all the grounds of mental action. Our senses, we are aware, may misinform us: our conscious experience can not.

Offices of Reason in Definition and Discrimination.—This faculty, by the measured accuracy of its action, becomes the means of *defining* our ideas and *discriminating* them in differential detail. It groups them in the *genera* and *species* of orderly *classification*, and *analyses* the complex into the simple, even to the minutest individual element of the compound. It thus enables the mind to search and scrutinize the obscure or the uncertain, till every object is brought out into the light of certainty and conscious knowledge. In these, as in all other forms in which this faculty is exerted, the appropriateness of the primary application of the term by which it is designated, is distinctly perceived. In all its operations, it is stable, sure, exact, to absolute certainty. It was in virtue of its authority that the great modern philosopher “carried,” as has been happily said, “the measuring line to the boundary of creation;” and all its inward and conscious exercises partake of the same exactitude.

Reason, an Authoritative Power.—When this faculty condescends to its humbler offices of recognizing the intimations of sense, and accumulating the deposits of knowledge, and maintains a comparatively quiescent, receptive, or passive condition, it bears the unassuming designation of “understanding;” as it is then regarded as merely furnishing the *groundwork*, or under stratum, of intelligence. But when it assumes the higher office of deciding on and determining the exact relations of thought, it is honored by the highly figurative appellation of “judgment”—a term the etymology of which implies the enunciation of *right*, or *justice*, and hence, whatever, also, is implied in its synonyms, *decree*, *sentence*, or *decision*. Reason, when thus occupied in comparing, measuring, or exactly estimating things or their relations, is, by the use of language, personified as the *judge*, whose office it is to *scrutinize*, *compare*, and *balance evidence*, so as ultimately to *decide* or *determine*, and give *judgment*, *sentence*, or *decree*, according to the usage of ancient times, when it was that officer's prerogative to discharge the office assigned to our modern juries, as well as

that still recognized as proper to him who presides in the court of justice.

When this master faculty of human intelligence soars to a yet higher pitch, and its action, whether "intuitive or discursive," embraces great and *general principles*, sees or traces the relations of *necessary* and *universal truths*, and announces the majesty of *causation* and of *law*, it resumes its wonted designation of *reason*,—a term too limited for the scope and grandeur of its action, and the dignity of its office, as man's highest functions, in the relations of intellect.

True, it fails whenever it would usurp the appointed place of *conscience*, and *reason* man into perfect rectitude, or when it presumes to supersede the guardian office of *faith*, and offers man the guidance of mere intellection to the recognition of a paternal God. But, limited as it is, by the conditions of humanity, it still is, within the sphere of pure intelligence, that which reflects in man the image of God, and to which, in healthy and normal conditions, all his other intellectual powers pay homage.

Reason as cognizant of Relations.—Reverting to the primitive sense of the term "reason," as recognized in the application of the word "ratio" to processes of measurement connected with time and space, and figuratively transferred to operations purely intellectual, we are reminded that, in all such processes, one object or subject is *referred* to another, with a view to determine or define a *connection* of some sort or other between them. This fact accounts for the usage in language by which reason is represented as the faculty which takes cognizance of, or traces, *relations* in general, or, in other words, refers one thing to another, for purposes of *examination*, *comparison*, or *investigation*, with a view to ascertain their *connection*, or their *independence* of each other, as an element of thought essential to the acquisition of knowledge or to the discovery of truth. The mind is thus introduced into a sphere of action coëxtensive with all the outward objects and inward subjects of thought, and expatiates, with the delight of conscious freedom and power, in the two great domains with which it is endowed as its heritage and birth-right; for reason, not less than imagination is an *excursive* faculty, designed to give amplitude and expansion to the being of man; and many of the grandest creations of the latter, are those which it achieves when following the sure and firm steps of the former, in its excursions into the unexplored.

Reason as an Inventive Faculty.—The reference of one object or idea to another, the comparison of one with another, or the discovered relation of one to another, yields within the mind itself, as a result, a

third idea, or conception, a creation of its own. Reason thus becomes a combining, creative, and inventive, (*finding*.) faculty, not less than imagination is, in its peculiar sphere; and, by following its well ascertained discoveries through their long and complicated successions of ever fresh-springing truth, attains, at length, the conscious power to move in new spheres of knowledge, created by its own activity, and in which it furnishes its own material, and erects its own structures. It is thus that it empowers man to fulfill the poet's condition of "erecting himself above himself." Reason, not less than its noble kindred powers, Faith and Imagination, is then justly said to "soar."

In the processes of investigation in which the mind pursues its quest of knowledge as the guide to truth, reason becomes the master key of intelligence, the paramount authority of intellect, the law which gives order and unity to man's intellectual being, the crown and glory of humanity in its distinctive supremacy over the lower tribes of partially intelligent nature.

Aberration of Reason.—When disease or passion has beclouded, or disturbed, or deranged this power, which heaven has ordained as the *executive* of its own first law of *order*, in the gradations of intelligence, man is then dethroned and discrowned; and, with the eye of his mind extinguished, wanders, like the blind champion of old, seeking some one to lead him by the hand.

Reason in the processes of Analysis and Abstraction.—When this faculty is occupied with the processes of collating and comparing, for purposes of discrimination, its action assumes the form of "analysis," (*loosening, detaching, or resolving*.) so as to simplify the objects or subjects of contemplation, and scan their utmost details of individuality, in character, that the component elements of the concrete may be distinctly recognized, in all their differential relations. Subjected to this process, the *genus*, or general class, is reduced to its component *species*, and these, in turn, to the *varieties* or the *individuals* of which they consist. Last of all, the scrutiny must be extended to the difference between individual and individual, or where still more minute examination is required, to the distinctive elements which may be found comprised within the unity of the individual.

Such, in our previous discussion of subjects involved in the theory of education, we found it to be the requisite action of the mind in the exercise of the *perceptive* faculties, when observation descends to the minutiae of difference on which true distinctions are founded. A similar operation goes on in the interior world of conception, when the *reflective* faculties are called into their peculiar province, when the complex ideas or thoughts of the mind are subjected to the processes of

scrutiny and analysis, and the qualities of objects, or of ideas, are, by an act of *abstraction*, (*taking away, withdrawing,*) considered separately, as if they had for the moment, an independent existence. One quality of an object, one attribute of a subject, is, by this concentrated and exclusive act of attention, "abstracted," (*drawn away,*) or detached, mentally, from the object itself, and from all the other qualities of which it is possessed. The mind is, in consequence of this act of "abstraction," enabled to contemplate more distinctly, or to examine more closely and discriminate more exactly, the given quality. The quality so discriminated may, in turn, become the groundwork of classification, or the commencement of a train of abstract reasoning on broad and general principles connected with the laws of nature and the truths of science.

Intuition.—The immediate action of reason by which it assents to self-evident and necessary truths, on mere "intuition," (*inspection or sight,*) without the aid of any intermediate or intervening thought for the discovery of sameness or difference, might, at first view, seem to be improperly introduced in a survey of the reflective faculties or of educational processes for development. But, the *intuitive* exercise of reason is, not unfrequently, the basis of its *reflective* action, and, sometimes, is the *authority* to which it appeals, when prosecuting examination and inquiry to the profoundest depths of research.

Processes of Inference and Deduction.—Reason, as the faculty by which one object or idea is referred to another, in virtue of some real or supposed connection existing between them, takes cognizance of *antecedence* and *consequence*; and, when this relation is, in given circumstances, observed to be uniform, reason, working by the great law of *analogy*, "infers," (*brings in,*) the *continuance* of this uniformity as a necessary principle or law of *order*. In such instances, this "inference," supported by the undeviating testimony of personal or accredited experience, becomes a firm *belief*, which identifies uniformity of antecedence with the power of *causation*, and uniformity of sequence with the character of *effect*. *Sequence* thus becomes the law of rational *connection*, and a security for the attainment of *truth* in matters of *theory* referring to the *external* universe.

In the consecutive *internal* acts of mind, reason gives "sequence" to the relations of *thought*, in exercises purely *discursive* and *intellectual*, by recognizing the dependence of one idea or conception on another, in the relation of *effect* to *cause*. From one defined antecedent idea the mind is authorized to "infer" another, as a *consequence*; from "premises," (*thoughts antecedent,*) to "deduce," (*draw down, derive,*) "conclusions," (*closes,*) results, or final consequences; and thus, by

giving *certainty* to *opinion* and *assurance* to *belief*, in relations purely *mental*, it forges the successive links of that golden chain of *intellectual necessity* which binds together the elements of the *moral* world.

Reason, in its processes of Generalization and Induction.—In the wider action of this sovereign power, it takes that highest course of which human intellect is capable; and, in tracing the relations of *causation*, aspires, by its power of *generalization* and its processes of *induction*, to announce and interpret the *laws* of the universe, and to read the evidences of a First ordaining Cause.

In these excursions, reason gathers in, from the vast field of analogy, *corresponding* facts and relations; and, in virtue of that pervading *unity* which comparison has enabled it to discover as existing among them, recognizes that spacious principle of *generality* coëxtensive with its own capacities of thought, by which it rises above the limits of the concrete and the particular to the contemplation of those abstract ideas and comprehensive principles which constitute the prime elements of intellectual and moral truth, and which bear the stamp of supremacy and the inscription of Law, human or Divine.

Not less impressive or sublime is the action of this august faculty of the human soul, when it puts forth its *constructive* power, and, aided by the scrutiny of patient experiment, it verifies the analogies of phenomena and of fact, “inducts” them, (*leads* them,) into their appropriate groups of *affinity* and *correlation*, plies them with its tentative, magnetic, aggregating power of “*hypothesis*,” (*theoretic, interrogative assumption*,) and, by careful *induction*, at last consummates the vast fabric of “*theory*,” (*intellectual vision*,) whose foundations are laid in the certainty of *knowledge*, and whose walls rise, in the symmetry of *truth*, to heights which inspire the mind with awe.

Ratiocination.—In the dimness of abstract conceptions, in the obscurity of abstruse relations of thought, or in the apparent conflict of contrasted truths, when the eviction of hidden causes, or when the detection of intermediate and reconciling principles, becomes essential to the conscious recognition of ideas, to the distinct conception of relations, or to the firm conviction of truth, reason comes to the mind laboring under *uncertainty*, and brings the aid of its *discursive* processes of *ratiocination*, in the form of *dissertation, argument, discussion*, and *debate*. Assuming the seat of *judgment*, it thus institutes *inquiry*, conducts *examination*, prosecutes *investigation*, *discriminates terms*, *scrutinizes allegations*, *compares* conflicting *arguments*, *weighs* opposing *evidence*, *judges* of *facts*, *rejects assumptions*, *exposes error*, *detects truth* or *falsehood*, and pronounces its authoritative and final *decision*, as the inevitable *law* of intellection.

Reason, as cognizant of Truth.—Reason, in its judicial capacity, traces, or recognizes and announces, the correspondence or the discrepancy of idea with object, thought with fact, conception with conception, principle with principle, proposition with proposition, sentiment with sentiment, opinion and statement with fact, language with thought, argument with argument, effect with cause. It thus, by the eviction of *truth*, produces in the mind the result of *conviction*; and *truth*, as the consummated and perfect result of the action of *reason*, in its cognizance of the ascertained relations of *knowledge*, demands, in virtue of the supremacy and authority of the faculty by whose agency it is discovered, the assent of the mind, in the form which we term *belief*;—not a bare comprehension or merely passive reception by the *understanding*, not the mere negative acquiescence or silent admission of the *judgment*, but the consentaneous recognition and adoption which come from the *voluntary* action of *reason*, uniting itself with the subject of its contemplation, and identifying with it all its own consequent action. Reason, therefore, has to do with all the preliminary processes by which truth is established; and in the moral not less than in the intellectual relations of thought, has, for its office, the sifting of *evidence*, the scrutiny of *testimony*, the weighing of *proof*; on the validity of all which, *belief*, as the normal and healthy tendency of the mind, is conditioned. In the yet higher sphere of Sacred truth, belief becomes subsidiary to the Faith which *trusts*.

Reason, as susceptible of Cultivation.—As the subject of disciplinary culture, this faculty presents itself to the educator as that to which his chief attention is due, in the relations of intellect, not only from its supremacy in the class of faculties to which it belongs, and the fact of its being the very constituent of intelligence, but from its peculiar susceptibility of development and training, and the extent to which it may be rendered clear, decisive, vigorous, and comprehensive, by appropriate exercise. No faculty reveals more distinctly than this the progressive character of man, as an intelligent agent, if we advert to its dim, uncertain, and feeble action in childhood, and its ceaseless growth in soundness, clearness, and vigor, as life advances to its maturity. But when we contrast the reasoning powers of such individuals as Newton, Locke, Butler, or Edwards, in manhood, with the mere germ of latent capability which they possessed in infancy, we perceive yet more distinctly what education may accomplish for the education and strengthening of this powerful element in the mental constitution of man.

The cultivation of this faculty becomes yet more important in its

results, when we advert to its value in the relation of morals. Reason is naturally the firm ally of *conscience*, in discriminating between *right* and *wrong*, and in instituting those reflective trains of thought by which man is arrested in the pursuit of sensual gratification, and called home to himself, in the conscious exercise of higher faculties, in the enjoyment of truer satisfactions, and in obedience to the rectitude which he feels to be the great law of his being. Reason, in co-operation with conscience, then becomes the regulating principle of his actions; raising them from mere obedience to *prudence* and *judgment*, and conservative *propriety*, to the higher influences of *self-intelligence*, *consentaneous action*, and *rational conformity* with the laws and conditions of *his own nature*, and of the Power by which those laws were ordained. Reason is the eye by which he learns to read the volume of revelation,—whether that written in the language of the “elder Scripture,” which speaks of the “eternal power and godhead of the Creator,” or that of the recorded Word which makes man “wise unto salvation.”

(5. and 6.) JUDGMENT AND UNDERSTANDING: *their Identity with Reason*.—It has been justly remarked by an eminent writer on intellectual philosophy, that, in arbitrarily multiplying the number of faculties attributed to the mind, we confuse our own views of mental action, and lose rather than gain by such uses of analysis. In the prosecution of our present inquiries, it will be recollected, that it has been uniformly our endeavor to keep in mind the absolute *unity* of intellection, under whatever apparent diversity of processes it conducts its action; and the preceding observations on *reason*, as a reflective faculty, have, it may have been perceived, presented the operations of *judgment* and *understanding* as virtually but different functions of *reason*. To venture on a figure drawn from the sciences of observation: *Reason* may be regarded as bearing the relation of “genus” to *judgment* and *understanding* as “species.” Reason surveys the whole ground of intellection, whether directed outward or inward; it works in the great field of *analogy*, and on the common ground of *correlation*, *cotendency* and *consistency*, in the universal sphere of thought. In its comprehensive action, it proclaims the *harmonies* of the universe. It has the power, therefore, of *investigating* and *proving analogies*, and, consequently, of *rejecting discordant elements*. Descending to this task, reason becomes, in the vocabulary of intellection, “judgment.” Stooping yet lower, to *trace* and *verify relations* of *humbler value*, or of *exterior character*, or processes of *passive reception of knowledge* or of *truth*, it assumes the lower office and familiar name of “understanding.”

Maintaining the justness of this definition of the faculty of reason, we would not, however, overlook the fact, so important to the right management of education, that the more closely we watch the operations of intellect, the more searching the investigation, and the more minute our analysis, we shall be the better prepared to minister to the manifold wants of the mind, and to its healthful development. The subdivision of *reason* into "judgment" and "understanding," if taken as merely a temporary assumption of *theory*, with a view to fuller provision for mental action and discipline, can not be objected to; and, indeed, the common branches of useful knowledge and of scientific acquirement which constitute the material and media of intellectual education, address themselves distinctively to that classification of the mental faculties which is commonly adopted or recognized. Of these we shall have occasion to speak, when discussing the modes and processes of culture. Nor can any detriment to a just view of mind as subjected to invigorating discipline, arise from adopting, for the time, that more comprehensive classification of the forms of mental action, which is now proposed. We shall pass, therefore, in our subsequent remarks, without further discussion concerning the actual or assumed *number* of the reflective faculties, to the consideration of the *main spring* by which, in the provisions of Creative wisdom, furnished in the human constitution, they are kept in *action*, so as to insure definite and salutary results.

(To be continued.)

XIII. LETTERS TO A YOUNG TEACHER.

BY GIDEON F. THAYER,

Late Principal of Chauncy-Hall School, Boston.

PRINTING has been styled, "the preservative art of all arts;" and *reading* what is printed is the means of communicating to the universal mind of civilized man whatever the press records.

What a leveller — perhaps I should say, what an equalizer — the capacity of reading is! No matter how lowly born, how humbly bred, how obscure the position in life of an individual, — if he can *read*, he may, at will, put himself in the best society the world has ever seen. He may sit down with the good and great men of antiquity. He may converse with Moses and the Hebrew prophets; with Jesus and his disciples; with Homer and Plato; with Shakspeare and Milton; with Fenelon and Newton; with Franklin and Washington; with all the writers in prose and poetry whose works have come down to us, and, through them, with the heroes whose deeds have become the admiration of men; with benefactors, whose acts of love and kindness to their race have proved them to be the sons of God. He may learn the lessons of wisdom that History teaches, the discoveries that Genius has achieved, the light that Science has shed on the world, and the inventions of Art by which the physical conveniences and comforts of man anticipate even his imaginary wants. He may learn how to live, — how to avoid the errors of his predecessors, and to secure blessings, present and future, to himself.

He may reside in a desert, far away from the habitations of men; in solitude, where no human eye looks upon him with affection or interest, — where no human voice cheers him with its animating tones; — if he has books, and can *read*, he needs never be *alone*. He may choose his company and the subject of conversation, and thus become contented and happy, intelligent, and wise, and good. He thus elevates his rank in the world, and becomes independent in the best sense of the term.

Reading, then, stands among the first, if not the very first, in

importance, of the departments of school education; and I propose to devote this letter to the subject of teaching it at school.*

Pursuant to the plan I have heretofore announced, I begin with the simplest details. The first step in teaching reading has usually been that of making the pupil familiar with the alphabet, and a large majority of teachers of the present time pursue this course. There is, however, a better mode, one that is far less irksome to the little learner, and which saves time, while it brings more of his mental powers into exercise. It is that of teaching by words, — the names of things, — with a representation of the object, engraved at each word; as, *man*, *cow*, *boy*, &c., attended by the appropriate figure. Every object familiar to the child's experience will at once be recognized; and its name, spelled in letters, will soon become to him identical with the thing itself. These may be multiplied to any desirable extent, and the form of the letters be by degrees introduced to the child's acquaintance.

When, by frequent repetition, he has learned these words thoroughly, he should be put to short and simple sentences, mainly composed of them, but without the drawings. His vocabulary will by this time have become somewhat extensive; his interest will have been awakened, and he will be prepared to take hold successfully of the ordinarily repulsive task of learning the names of the letters and their various powers. These may be acquired through the assistance of blocks or cards with the names and sounds printed on them, but will be learned with more facility and pleasure by copying them with chalk on the blackboard. Rude will be the work of the child at first; but let him be encouraged, and he will rapidly improve. The object is to make something that to his apprehension is an imitation of the letter in the book; other properties will follow in their natural order.

The method of spelling the words should be by the *sounds* of the letters which combine to form them, and not by their *names*. No difficulty will be found in giving the several sounds of the vowels, and, after a little practice, those of the consonants will be easily made; and the pupil will be agreeably surprised to discover of what simple elements the consonants are composed.

The last process in learning the alphabet is that of giving each letter its original name, and no inconvenience will be experienced from thus transposing the order of study. On the contrary, the preliminary steps taken will have furnished facilities for it.

When the alphabet, with the several sounds of each letter, has been

* So important was this part of education deemed by the Romans, that, if they wished to express their contempt of an individual, they would say of him, "He can neither swim nor read!"

perfectly learned, and the pupil begins upon new reading matter, require him, whenever he comes to a word that he cannot pronounce without spelling it, to spell by the *sound* of the letter in the case, and not by the *name*. Teach him to depend upon himself, in all cases embracing previous instruction upon the same or similar points. To prompt him, in every instance when he hesitates, is to impede healthful progress, to keep the mind feeble, and induce him always to lean on another for assistance, at the same time indulging him in a habit of mental indolence, always to be deplored.

I do not mean that a pupil is never to be told a thing but *once*; this would be preposterous. On the contrary, repetition, *repetition*, REPETITION! is the law in teaching the elements of language, as the thrice-inculcated law of Cicero, in regard to oratory, was "ACTION!" Still, I say, the pupil must *help himself*, as far as he has the ability.

A reproach to our schools, conveyed in the expression, "It was read in a *school* tone," ought not, after all that has been done for the training of teachers, to be deserved. I fear, however, that, with comparatively few exceptions, it is too well merited to justify any complaint against the charge. The fault begins in the primary school. The true idea of what reading is seems not to enter the minds of many teachers, and hence this bad habit. I understand reading to be nothing more nor less than *talking with a book in hand*. Hence it should be in practice simply an imitation of *talking*; and the very first words read, and all that follow, throughout the school life, should be given as if the sentiments were uttered in personal conversation. Instead of this, the scriptural injunction in our primary-school reading-books, "No man may put off the law of God," is usually read, No-ah — ma-an — ma-ah — poo-ut — o-off — the-ah — law-er — o-off — Go-ud. Here, then, the remedy should be applied. The child should be told to repeat the sentence without the book, and be required to go over and over again with it, until he utters it correctly. The teacher, of course, will give the proper reading of it after the pupil has made a faithful effort without success. Proceeding in this way, and never allowing an erroneous reading to pass uncorrected, the "*school* tone" will never obtain a footing in the classes.

I am aware that this will cost labor, a great deal of it; but it is worth all the labor you may find it necessary to bestow upon it. Your patience will often be severely tried, but you must never yield. Sometimes you may not be able to conquer without devoting the whole time of a class to a single individual. Never mind! Persevere! Try again at the next reading time. You will finally succeed, unless there exists in your pupil some organic defect. In such case, it would be

in the language of Job Pray, "workin' ag'in natur'," and perhaps your efforts would be unavailing. But even here, I would say, let the experiment be fairly and faithfully tried before giving up.

Akin to this is another difficulty you may have to encounter. The Irish make use of the rising inflection, in reading and speaking, in some cases, where we use the falling. With children of that nation you may find it a thing impossible to correct this habit. Inborn or inbred from the earliest period of vocal practice, it may not be possible to overcome the fault; still, I would not despair of it as a foregone conclusion, but would resolve on victory. This determination, once adopted, renders almost all things practicable.

Many writers on the subject have given *rules* for reading. They may be very well for adults, and especially for teachers; but I doubt whether, with some exceptions, they can be made very useful to inculcate on the pupil. Whatever the rules adopted in a school may be, *the pupils will read as the teacher does*, imitating all his peculiarities, whether correct or incorrect, whether beauties or deformities. He should, therefore, see to it that his own style — the paramount rule to his pupils — is the result of sound judgment and good taste.

To say that one must "keep the voice up at a comma, and let it fall at a period," and that we should "pause at a comma long enough to count one, and at a period while one might count four," is simply absurd, as invariable rules. This may be well enough in most cases, but the exceptions occur so frequently as to render the rule nugatory; and, besides, reading according to such rules would inevitably be most mechanical, stiff, inexpressive, and lifeless.

The grand, invariable rule in reading is, *read to the sense*. This involves explanation and *instruction* on the part of the teacher, which, with many, are wholly omitted. The lesson to be read should be gone over carefully by him at the time of its assignment; the obscure portions clarified, the classical, historical, political, geographical, and other allusions, explained; and the attention of the class directed to any words, difficult or uncommon, contained in the lesson. They should then be required to read it repeatedly and carefully, before the next class-time, seeking the meaning of every word they do not understand, and the proper pronunciation of those words about which they have any doubt. When they subsequently assemble for the class-reading, the teacher should examine them, to ascertain whether they retain all the facts connected with the lesson, which they are supposed to have acquired, and tell the story of the piece, in their own language, before they begin to read it from the book. They will then be prepared to do justice to the author and to themselves;

but *no one can, unless by accident, read appropriately what he does not understand.*

A good exercise in language is, to require the pupils to introduce synonyms for certain words in the lessons, to be read in the sentences in place of the original words. If these were previously indicated by the teacher, and marked by the scholar, those most suitable for the exercise might be selected, and the benefit proportionally increased.

Nothing serves better to secure the attention of the class than to allow the members to criticize each other; to do which most effectually, each one should signify, by raising the hand or other sign, that he has some error to speak of; and at the close of one pupil's portion, others, at the teacher's discretion, should be called on to make the corrections; and so on till every point has been taken up and set right. These corrections may embrace pronunciation, inflection, emphasis, the miscalling of words, tone, quantity, &c. The repetition of the portion thus criticized will furnish the means of judging to what extent the corrections have been beneficial.

I do not mean, in a foregoing remark, to say that *no* rules can be useful to the taught. There are rules, comprehensive in extent, and almost invariable in application, that may be advantageously insisted on; such, particularly, as indicate the tones of voice most appropriate to the expression of the various emotions of the mind, with appropriate rate, force, &c. These, it is true, embrace departments of the subject more advanced than many of the classes in school would readily appreciate,—those of *taste* and *feeling*; but, still, the judicious teacher need not despair of making all understand them in a reasonable time, if he have books adapted to the various capacities of the pupils.*

That only is good reading which renders the meaning of the author clear, forcible, and expressive,—whose *tones* would indicate the nature of the subject, even when the language was not understood. And this may be attained to by very young pupils, if well taught, and made to comprehend the lesson to be read. A pleasant story, or juvenile dialogue, a child reads with great gusto, and as naturally as he would have *spoken* the parts of the characters represented, had he really been one of them himself. And why? Because he understands it, and enters into the life and action of the scene described.

* It is to be regretted that, in many schools, notwithstanding the vast number and grades of reading-books,—many of them very good, and well adapted to the wants of the children,—the most ill-judged selections are made, if *selections* they may be called, when apparently taken without the exercise of a thought as to the appropriateness of the means to the end to be accomplished. This is an evil of magnitude, which committees ought to abate.

Any rules, then, that are promotive of such a result should be adopted and enforced. Children soon learn to comprehend the appropriate tones, rate, and force, expressive of cheerfulness, of merriment, and those of anger and scorn, and to imitate them with life-like truthfulness. They could also readily be taught to render appropriately those of affection, tenderness, pathos, sadness, grief, &c. Here, then, is a foundation for some valuable rules. Having had the nature of the piece explained to him, and being made to understand it, the pupil directly adopts the tone and manner that it requires. Is it of a pathetic character? — he reads it in a tone that excites a sympathetic feeling in others :

“ If you have tears, prepare to shed them now ! ”

“ Stay, stay with us ! Rest ! thou art weary and worn !
And fain was their war-broken soldier to stay ;
But sorrow returned with the dawning of morn,
And the voice in my dreaming ear melted away ! ”

Is it an expression of strong indignation ? — he reads in well-adapted tones :

“ Ay ! down to the dust with them, slaves as they are !
From this hour, may the blood in their dastardly veins,
That shrunk from the first touch of Liberty’s war,
Be sucked out by tyrants, or stagnate in chains ! ”

Is it an invocation in lofty and sublime poetry ? — he reads in steady monotone :

“ Hail, holy light ! offspring of Heaven, first born ! ”

Is it a familiar, merry ballad ? — he reads with lively voice :

“ John Gilpin was a citizen,
Of credit and renown ;
A train-band captain eke was he,
Of famous London town. ”

Is it a grand, patriotic resolution that is to be expressed ? — he renders it in tones that thrill on the nerves of his hearers :

“ I know not what course *others* may take ; but as for *me*, GIVE ME LIBERTY,
OR GIVE ME DEATH ! ”

And so of all the variety of themes and passions introduced into his reading lessons.

We know of rules, promulgated by some of the best elocutionists speaking the English language, that fail to make good readers. They

produce specimens of great artistic beauty ; they show how plastic is youthful humanity ; but they take all the *soul* out of the reading, and leave instead an image of marble, as polished and as *cold* !

I have, while writing this page, fallen, for the first time, on some lines so well adapted to my purpose, that I will venture to transcribe them. They are credited to LLOYD, and are found in Epes Sargent's excellent First Class Standard Reader, — a book admirably suited to the use of the highest class in our Grammar Schools, but not adapted to classes of a lower grade.*

“EXPRESSION IN READING.

1. 'T is not enough the voice be sound and clear, —
'T is modulation that must charm the ear.
When desperate heroines grieve with tedious moan,
And whine their sorrows in a see-saw tone,
The same soft sounds of unimpassioned woes
Can only make the yawning hearers doze.
2. *That* voice all modes of passion can express
Which marks the proper word with proper stress ;
But none emphatic can the reader call
Who lays an equal emphasis on *all*.
3. Some o'er the tongue the labored measures roll,
Slow and deliberate as the parting toll, —
Point every stop, mark every pause so strong,
Their words like stage-processions stalk along.
All affectation but creates disgust,
And even in speaking we may seem *too* just.
4. In vain for them the pleasing measure flows
Whose recitation runs it all to prose ;
Repeating what the poet sets not down,
The verb disjoining from the friendly noun ; †
While pause, and break, and repetition, join
o make a discord in each tuneful line.
5. Some placid natures fill the allotted scene
With lifeless drone, insipid and serene ;
While others thunder every couplet o'er,
And almost crack your ears with rant and roar.

* This book is prepared with great labor, good taste, and sound judgment ; and contains fifty-odd pages of “Introductory Remarks,” that few teachers could read without profit. It has, also, a copious “Explanatory Index,” of great value to pupils, if not to teachers.

† From this criticism I dissent. In a majority of instances, there must be a pause in reading, between the nominative case and the verb ; and this in proportion to the length of the nominative or nominative phrase. By its expression is improved, taste gratified, and the sense more fully developed.

6. More nature oft and finer strokes are shown
 In the low whisper than tempestuous tone ;
 And Hamlet's hollow voice and fixed amaze
 More powerful terror to the mind conveys [?]
 Than he who, swollen with big, impetuous rage,
 Bullies the bulky phantom off the stage.
7. He who, in earnest, studies o'er his part,
 Will find true nature cling about his heart.
 The modes of grief are not included all
 In the white handkerchief and mournful drawl ;
 A single look more marks the internal wo
 Than all the windings of the lengthened O !
 Up to the face the quick sensation flies,
 And darts its meaning from the speaking eyes ;
 Love, transport, madness, anger, scorn, despair,
 And all the passions, all the soul, is there."

Yes, true it is, a proper modulation is the great charm in reading. Without it, whatever beauties the reader may introduce, there must be a fatal lack.

Correct pronunciation, too, is an important element in good reading ; and although, without it, the sense may be expressed and the feelings moved, much of the pleasure of the hearer is lost. A coarse style of pronouncing degrades the reader, and gives one a low idea of his breeding and his taste. Fix, therefore, on some standard, and insist on its being the guide in your teaching. Walker's has been the most generally received, for the last fifty or sixty years, and still is, in the main, the most reliable. Smart's, to which many defer, is but a slight modification of Walker's ; and Worcester's — an authority of the highest respectability — is, perhaps, the best in present use in this country, as comprising nearly all the points of importance that are fashionable among the best speakers and peculiar to the other two eminent orthoëpists mentioned.

It will cost you infinite pains to fix this pronunciation as the habit of your pupils, because, in a large proportion of the families to which they belong, a coarse style is indulged in, which will do much to neutralize the example and most strenuous efforts of the teacher. But be not discouraged. Correct every mispronunciation perpetrated in school, whether in private conversation, in class recitation, in class reading, or in elocutionary exercises. In time, you will make your *mark*, which will tell with favor and advantage on your school.

Among the errors in pronunciation, current in our community, are those of giving the sound of *a* in far for that of *a* in lad ; as in grasp, last, transport ; — giving the long sound of *a* for the short sound, in alone, above, atone, and to the article *a*, as *ā* man, *ā* book, *ā* house ; — giving

the sound of double-*o* for long *u* [ew], in attune, revolution, constitution ; * — thrusting *u* into words where it does not belong, as elum, helum, whelum, for elm, helm, whelm ; — giving *er* for *o* or *ow*, in potato, fellow, window ; — *aw* for *re*, in more, deplore, restore ; † — *er* for *aw*, in law, raw, saw, — or rather adding *r* or *er* to the word, as lawr, law-er ; — *i* for *e*, in get, yet ; — *e* for *i*, in sit, stint ; — *u* for *e* or *a*, in silent, reverence, repentance ; — *u* for *i* short, in ability, facility ; — omitting the *d* in and, and the *r*, when not initial, in almost every word ; the *e* in belief, benevolent ; the *h* in whig, when, what ; the *e* in every, novel, counsel ; the *i* in Latin, satin, certain ; the *g* in present participles, reading, speaking, loving, &c.

Some of these inelegancies are so nearly universal, that persons — critics in language, too ‡ — are to be found, who would abandon the cases as hopeless, making no effort to correct the faults. To such despair the faithful teacher never yields, but, in proportion to the difficulty, nerves himself for the struggle. The faulty sound of the letter *u*, adverted to above, can be corrected, in any school, if the instructor is a man of taste and energy, and resolves in earnest that it shall be done. The same may be said of the much-wronged *r*. There is no occasion for indulging children in calling storm, *stawn* ; corn, *cawn* ; morn, *mawn* ; — nor of pronouncing burst, first, durst, as if spelled *bust*, *fust*, *dust*.

Children in school will do what they are constantly, perseveringly, and resolutely required to do ; and if these faults still adhere to them, the teacher is responsible.

Allow me to say a word as to the mechanical arrangement of your reading classes. Method, in trifles even, serves a valuable purpose, and is essential to success with the young.

If your pupils are sufficiently interested in their lessons to require no particular rank in class to induce fidelity, place them in the alphabetical order of their names. Require them always to *stand*, when reading, in a position of ease and gracefulness, the shoulders set back, the chest protruded, the book in the left hand ; every eye fixed on the lesson, and, as far as possible, allow nothing to be going on in the room that may divert the attention of any member of the class. Let the lesson be announced — page, subject, author, chapter, &c. — by some one designated by the teacher, sometimes at the head, sometimes

* This sound belongs chiefly to words in which the *u* follows *r* ; as in truth, rule, ruth.

† An effectual corrective for this, in teaching, is, in such words, to require the pupil to transpose the letters *re* in pronouncing, shortening the sound of *er* a little.

‡ “ HERMES,” in the Boston Transcript of June 26, 1857.

at the foot, and sometimes elsewhere. And, instead of the word "Next," when another pupil is to read, call on some one by name, standing near or remote from the preceding reader, and thus, without any regular order, till the lesson is finished; sometimes returning, again and again, if you see cause, to the same individual. You will thus be sure of the attention of every one, and each will have the advantage of instruction, not in his own portion merely, but in that of every classmate.

If time should not suffice for a regular and effective drill of every member of the class, do what you can *thoroughly*; sham nothing. To teach a class in reading properly is not the job of a few minutes; it should occupy from half an hour to an hour, according to the number of members, that each one may carry away from the exercise some new thought, some item of knowledge, at every lesson. You, of course, cannot do all this, with each of your classes, every day, unless your school is under the charge of several teachers for the various departments; but—following out this plan—when a lesson *is* given, it will be of some value to the learners.

Several years ago, the Board of Education of Massachusetts distributed a set of questions among the school districts of the Commonwealth, for answers from the teachers; and one of them was, "How many times a day do your classes read?" I thought then, and I think now, that, if those gentlemen expected a single teacher to give instruction in anything *but* reading, in a school of the average number of pupils and classes, it was preposterous to hint that more than one reading lesson a day could be given to each class, unless where the merest elements of school studies were taught. To make accomplished readers of a school of children is a rare achievement, and can only be done by much time and patient toil, and never where, from the unreasonable expectations of the directing powers, the teacher is tempted to slur over the lessons.

I have, in these remarks, very unsatisfactorily to myself, given some views of the importance of reading, and added some notions on the mode of teaching it. I find, on review, that it has been done in an imperfect and rambling manner; and were it not given in the form of a *letter*, in which department of composition large liberty is allowed, I should hardly venture to place it on the pages of the Journal, whose articles generally are so superior as literary performances. My aim, however, is not at fine writing, but rather to do something to aid inexperience in the business of developing, to the best results, the various powers of the young.

XIV. INSTRUCTION IN DRAWING.

[From the Connecticut Common School Journal, March, 1857.]

[WE take pleasure in giving to our readers the following communication from Miss Dwight, whose system of drawing has been received with much favor by some of our best teachers. We have long felt that the art of drawing was deserving of more attention in our schools, and we cordially welcome any efforts that may tend to secure more interest and better results.

Mr. Hart, a highly accomplished and successful teacher in Farmington, writes that he considers "Miss Dwight's system *most worthy of the attention* of those interested in education. It is a *common-sense* system. It is, in an eminent degree, a natural system, leading, as it does, directly to the study of natural objects, without the intervention of a mere *copy* of them." We commend the article below to the attention of our readers.—RES. ED., CONN. C. S. J.]

The important question, "how shall drawing be taught successfully in schools?" is now attracting the attention of educationists, which is a good sign of the times. By duly attending to it, they will find that, to teach drawing successfully, it must be taught systematically and scientifically, receiving the same care and attention as other studies pursued. When it is as well taught as others, the practice of the art will be found of great practical value, and not wanting in interest.

Let us suppose that a scholar wishes to learn geometry, after having attained the age of fifteen, and also to become an engineer. With this object in view, and without knowing the simple rules of arithmetic, he is placed under the care of a professed teacher, who first gives him an arithmetical class-book, with directions to copy the sums, and, from the key, to write down the answers. He then gives him the algebra, and follows with the problems of Euclid, all of which are to be copied in the same mechanical manner, without regard to the rules or principles of arithmetical calculation, or the laws of geometry. With such instruction, (for the same process is called instruction in regard to art,) will he be prepared for any practical application of the

science of geometry, or for any independent effort in the way of engineering?

Again, let us suppose that, at the same age, he presents himself for instruction in the art of written composition, not having yet learned to spell, or even to form a letter with the pen. The teacher first requires him to copy, *verbatim*, the lessons in the first reader, and then some finished orations. What will he have gained in the process? True, his tastes will have become somewhat cultivated; but, will he be prepared to write an original theme? Yet, this is the way that drawing is taught in our schools, and the people say, "Of what use is it?"

The love of drawing is a universal taste, which may be known from the fact that nearly all children love to draw. Those who are not pleased with the use of pencils and a box of colors are the exceptions. It would, therefore, require no effort to make it a regular study, commencing at eight or ten years of age. For the disinclination manifested afterward several reasons may be given. In the first place, acquiring the rudiments of the art after the taste has become a little cultivated is a drudgery. It is not more so with drawing than with music. The rudiments of all studies should be acquired at an early period. After childhood is past there is a feeling of dissatisfaction at the puerile efforts at skill, which naturally creates a disrelish for the pursuit. In the next place, drawing is made a perfectly mechanical lesson. The scholar has placed before him a picture of some object, or group of objects, of which he is to make a copy as well as he can. If his poor skill fails in the attempt, the teacher lends a helping hand, and the work is accomplished after a certain manner; and, if the natural taste for art is sufficiently strong, the scholar perseveres until he has acquired the ability to copy a picture without assistance. But, if the scholar have only a moderate taste for it, he finds no gratification in the pursuit, and, as no intellectual capacity is exerted or gratified, he gives it up in disgust, asking the same question, "Of what use is it?"

Yet, it is of use, even in this imperfection, inasmuch as it sometimes leads to the development of fine natural abilities, the cultivation of which is a source of profit and honor to the possessor. With common school training, the talent for other things is developed, and, if properly taught, the scholar finds himself capable of making the most of his natural gifts. Every talent, but that for art, is duly cultivated at school, or, at least, a foundation laid for it; and, why should this be made an exception?

In regard to the manner of teaching, the scholar should commence

young. Every teacher understands the difference exhibited in the capacity for acquiring rudimentary knowledge at the respective ages of seven and fourteen. Childhood is the period for acquiring rudimentary knowledge in every department of study. Then, there is no impatience felt at slow progress; no haste to get on to something apparently more attractive. And, to acquire perfect manual dexterity, either at the piano or the easel, the scholar must begin to practice in childhood. In the instruction of this branch as well as that of mathematics there is but one right way. Let the teacher first give the child some exercise in curves and circles, without reference to drawing from any model, at the same time holding his pencil properly. This requires that the wrist should rest upon the table, leaving the whole hand free for action. The drawing of curves in every direction, with the wrists so rested, will be found a perfectly easy and natural exercise of the hand. There is no better preliminary exercise than the drawing of a circle, guided by the eye; not to make one, and then another, and so on for twenty in succession, and leaving them imperfectly done; the scholar should correct and improve each one according to his ability; dividing it by straight lines into halves and quarters of circles, depending on his eye alone for guidance. This is all the preliminary practice required in straight lines. In drawing straight lines for this purpose, he does not find it irksome, for he has an object in view. On the contrary, nothing is more tedious or more useless than drawing straight lines merely for the exercise. The straight line may always be corrected by the ruler. The great point in practice is to make the curve, and this should be the first object aimed at; for, the infinite variety of curves required in the practice of art no instrument can define, no ruler can rectify.

The ability to draw a straight line has been considered a test of nativé capacity. This is one of the mistakes of ignorance. Let the teacher question the scholar in regard to the division of his circle, and if he can not see when one part exceeds the other in size as marked by his line, he has no eye for form, and will not progress by practice. If his eye is capable of measuring so as to detect a difference, it will improve by practice, and he will, in time, if made to depend upon his eye, learn to discriminate the nicest variation of curve. This is of first importance. Do not forbid measuring; but, encourage independent action and self-reliance in every effort.

The first step is to imitate some simple form which gives practice in the curve. The object itself is preferable to the representation of the same thing on paper; and, the scholar should, from the outset, be

accustomed to making his own representations of objects. If he does not begin with that, (and it is just as easy for him,) he does not know when to change. After having first drawn from prints, beginning with the imitation of form is just like commencing anew. From simple objects he should go on gradually to more difficult, always improving and correcting his drawings. The teacher should require him to correct his own work; point out the faulty part, then let him study the form of the object before him, carefully comparing his own imitation of it, correcting and improving his lines, until he has accomplished all that he is capable of doing at that stage of progress. This is the most important part of his exercise; and, to accomplish his task well, he must apply himself to drawing as to a study. The teacher should render assistance according to his judgment, and, by his own lines, show the scholar, if a better curve can be made than his own.

In this method of instruction the class will not fail to be interested. In one school, where the instruction given was limited to mechanical copying, the class anticipated the lessons with a feeling of dislike. Casts are now introduced as the models for study, and the scholars have become so much interested that the time given to the lesson is considered too short. They are interested because they feel that they are acquiring skill with the pencil, and really understand the value of the lesson to which the hour is appropriated.

[The following extract from a letter from Prof. Phelps, Principal of the State Normal School of New Jersey, in which a pupil of Miss Dwight has taught Drawing after her method, bears the strongest testimony in its favor.]

It gives me very great pleasure to bear unequivocal testimony to the excellence of the method of drawing which has been in use here during the past year. The progress made by our classes, in view of the limited period during which they have been under instruction, is altogether unexampled in my experience or observation. The lively interest exhibited by the pupils, and the genuine love for the study of art which this method has inspired, give it precedence over any other with which I am acquainted. Indeed, I believe Miss Dwight has developed the true idea, and that it is destined to work out a radical revolution in this important department of school instruction.

XV. CATECHISM ON METHODS OF TEACHING.

TRANSLATED FROM DIESTERWEG'S "ALMANAC," (*Jahrbuch*), FOR 1855 AND 1856,

BY DR. HERMANN WIMMER.

I. INTUITIONAL INSTRUCTION, (*Anschauungsunterricht*), BY A. DIESTERWEG.

1. *What is the object of intuitional instruction?*

To prepare the child who has just entered the primary school, for formal school instruction.

2. *What is therefore its external position in the course of instruction?*

It forms as it were the bridge from the liberty of home life to the regular discipline of the school; it is in regard to instruction, an intermediate between home and school.

3. *What is to be effected by it?*

The children are to learn to see and to hear accurately, to be attentive, to govern their imaginations, to observe, to keep quiet, and to speak distinctly and with the right emphasis.

4. *With what objects must this preparatory education deal; having in view a "formal" aim, but no acquisition of knowledge?*

Perceptible or perceived objects; hence its name. It has a two-fold meaning; real observation by the senses, especially by eye and ear,—and such management, by the teacher that the objects, their qualities and conditions, are made vivid interior perceptions.

5. *By what do we know that its end is attained?*

By the whole appearance of the children, and particularly by their correct and proper speech and pronunciation, which can not be valued too highly from the first beginning.

6. *What is the beginning of this instruction?*

After a conversation about father and mother, to gain their confidence, and after some directions concerning the mode of answering and behaving in the school-room, the first thing is to observe the room and its contents. The pupil is to be made acquainted with all around him; he must learn to see, to name, and to describe exactly, all objects in the room.

7. *What must be chiefly attended to from the first day?*

(a) A clear, emphatic statement in complete sentences. E. g. What sort of thing is this? This thing is a chair, etc.

(b) A comprehensive view of all qualities observed in an object, at the conclusion of each exercise. This is of the greatest importance in all instruction.

8. *What is the second step?*

Observation of the whole school, school-house, road, village or town, in their external qualities.

9. *The third?*

Observation of some of the animals in the place, and of man.

10. *What next?*

This depends on circumstances. In general, it may be said, that the result of this instruction may be secured by from four to six hours a week during the first year. The duller the children are, the longer it must be continued. It may be further extended to the trees and plants of the neighborhood, the trades and employments of the people in the place, clouds, weather, wind, fire, water, sun, moon, stars, etc.; in short, to all objects accessible to real observation. Accurate contemplation or description of models of mathematical bodies may also be very advantageous. The teacher should draw the streets and houses of the place before the eyes of the pupils on the blackboard; he may resort to "*Stäbchenlegen*," (laying down small sticks; see Diesterweg's *Kleinkinderschule*, (Primary School,) fifth edition, and Stangenberger's book;) he may use the picture tables; in one word, he may arrange any variety of useful exercises to attain the important end. It is least possible in this branch, to prescribe in books a regular and equal course to all.

Of the greatest importance, we may repeat, is the way in which the children speak and pronounce. A teacher who is unmindful of this, prepares trouble for his whole professional career. Instruction in teaching, if the teacher understands it, is at the same time instruction in language. It is not, however, instruction in grammar; yet it leads to the understanding of the language, and to attention to words and expressions in general. Not only the nouns, adjectives and verbs, but the prepositions and conjunctions also, should be managed without the mention of their names, but by using practical examples of them. It is not the object to explain these words, but to use them correctly by means of a variety of exercises.

The best manuals for the Intuitional Method direct such instruction, and the teacher shows his skill in the suitable choice of objects, and especially in the varied and attractive treatment of them. Less depends on the selection of what is to be discussed, than on the way in which the attention of the children is secured. If the proverb "Every way is good except the tiresome" be true any where, it is true here. As soon as the children get tired, the subject must be dropped. Success depends entirely on the activity of the children. This is true, indeed, of all teaching, but preëminently so where knowledge and technical ability are not aimed at, but only an awakening of the slumbering faculties, a "formal" end. Attention, liveliness, a desire to observe, and to answer, etc., are the measures for judging of success.

If the result is secured, i. e., if the pupil is prepared for learning, the teacher leaves this instruction and advances to study proper, which is likewise intuitional. That is, he proceeds always from facts, from real, undeniable and undisputable facts. The importance of this principle is not yet enough understood, nor has the subject been exhausted by teachers or educators.*

II. INSTRUCTION IN READING, BY HONCAMP.

Reading Writing together (Schreib-Lese-Unterricht.)

1. *Shall the first instruction in reading be begun in connection with the first instruction in writing?*

Most certainly, for reading and writing are most intimately connected.

* Harder, in his manual, (Altona, 1853,) differs from these views so far as he makes this instruction the basis of real instruction, and likewise real instruction itself. "But where matter dominates," says Kalisch, "pedagogical management and general cultivation is at an end; for to the teacher, matter is secondary."

2. *Was instruction in the former separated from the latter in olden times?*

From ancient times writing was accompanied by reading; but not until modern times, (since Graser,) has reading been connected with writing, in all its steps.

3. *Is this method according to nature?*

It is natural, because reading and writing are properly but two different sides of the same thing, i. e., of the written language.

4. *But is it not easier, first to practice the one, and not to practice the other, until the greater difficulties of the former are mastered?*

Quite the contrary. Reading and writing assist each other mutually, and experience teaches, that the first instruction in either, is made more efficient by their union.

5. *In what way shall they be connected?*

The teacher can either (analytically) view the spoken word as a sound, and then have it (synthetically) represented by the signs for the sounds, i. e., the letters, in which case writing is prior; or he may first view the written (printed) word as a representation of the sound, (analytically,) and then have it (synthetically) reproduced by pronouncing or reading—in which case reading is prior. We have, therefore, either a *Lese* (reading)-*Schreib* (writing)-*Methode*, or a *Schreib-Lese-Methode*,—(Writing-reading-method.)*

6. *What may be said in favor of the reading-writing method?*

Writing always precedes reading; the inventor of writing did it for reading's sake; he wrote first, and then he read. Hence, instruction in reading must be joined to instruction in writing.

7. *What may be said in favor of the reading-writing-method?*

In answering this question we take, not the place of the inventor of writing, but of him to whom he first communicated his invention; the inventor taught him first to read and then to write, and in like manner, according to nature, we must proceed now.

8. *Which method is to be preferred?*

It is nearly indifferent, either in regard to subject or result, whether we put the pupil in the more artificial place of the first inventor, or in the more natural place of the first pupil.

9. *What rules must be observed in the adoption of either?*

Reading and writing must always be intimately connected; the elements of the word must be found by analysis, and made the basis of study; and only such words and syllables must be read and written, as have a meaning for the pupil.

* Reading is always analytical, writing synthetical; but the method of teaching may be different. If reading be separated from writing, the proceeding may be

(1.) Synthetical; where the letter is given, and with it either (a) the name of the letter without the sound—*buchstabirmethode*, spelling method; or (b) the sound (*laut*) of the letter without the name—*lautirmethode*, phonetic method; or (c) the sound and the name of the letter, spelling and phonetic method combined, (*Wülfing's*, *Kawerau's*;) or

(2.) Analytical; where the pupil reviews the written (printed) matter as a whole, that he may resolve it into its elements. The whole is (a) a proposition or sentence, (Jacotot's method;) (b) a word, (Gedike's method;) or

(3.) Analytico-synthetical; the child, to become prepared for reading, is made to resolve sentences into words, words into syllables, syllables into sounds, and then the teacher proceeds by the combined method. See Jacobi's book on these methods; also Honcamp's "*Volksschule*," No. 10, p. 20.

In the *Schreib-Lese Methode*, (and vice versa.) it is well to give also the name of the sound and letter.

10. *Is it not requiring too much of a child, who has not yet mastered the mechanical part of reading, to ask him to think of the contents and understand what he reads?*

Not at all; for word and idea are one, and speaking and thinking are not to be disconnected. "Given the word, to think of its meaning," is not an operation which the pupil has to learn; he does it of himself and has always done it. But to speak, without joining an idea with it, the pupil has to learn, and that too in order to unlearn it afterward with much trouble.

11. *Why is it important never to read meaningless syllables and unintelligible words?*

Because the pupil will read in future as he is taught to read; therefore, he ought to get accustomed from the beginning to seek in all that he reads a proper idea. Every thing not essential, particularly all that would embarrass the first instruction, should be put off to a later time. It is not necessary to proceed from the easier sounds to the more difficult, for the child pronounces all with equal facility; but it is good to begin with the easier letters, so far as their form is concerned, for example, o, i, s, f.

Reading by itself.

Reading may be divided into (1,) mechanical; (2,) logical, (intelligent,) and (3,) æsthetical, (feeling.)

12. *Are these grades strictly to be kept asunder?*

No; reading must never be merely mechanical, without regard to the understanding; with logical reading, mechanical ability ought at the same time to be advanced; nor should reading ever be without feeling; and with æsthetical reading, both the mechanical and the logical processes should be practiced. The first belongs, in a common school, to the lowest class; the second, (logical,) to the middle, and the third to the highest class, i. e., they are preëminently to be attended to in those classes.

13. *Wherein consists the mechanical ability of reading?*

In a quick survey of the written or printed matter, and in the ability of representing a row of letters by the right sounds, syllables and words.

14. *How is this ability best acquired?*

By frequent class-reading, which must alternate with single reading, so that the former is always preceded by the latter, which must serve as a model. Single words and sentences are to be repeated, until they are readily pronounced. The teacher, by his accompanying voice, directs as to right pronunciation and accentuation.

15. *Wherein consists logical reading?*

In that the understood contents of a piece are emphasized in conformity with that understanding.

16. *When does the pupil understand the contents?*

When he knows the meaning of the words, and the meaning of their relations in the sentences.

17. *When does he understand the meaning of the words?*

When he knows the signification of the derived and compound words by the meaning of their elements, and when he well distinguishes between the proper and the figurative meanings of the same.

18. *Should the exercises in the formation of words, and such as help to understand the rhetorical figures, be practiced in the reading lesson?*

They should be combined with grammar, and occur in the reading lesson only so far as is necessary for understanding the words.

19. *When does the pupil understand the relations within the sentence?*

When he knows how one conception (of a word) refers to another; the different conceptions (words) to the speaker; one idea to another; and the different ideas to the speaker. It is sufficient for the pupil to understand these relations without having a conscious insight into them. An analysis of the conceptions and expressions belongs to the grammar, not to the reading lesson, in order not to spoil the pupil's enjoyment of the contents, etc., etc. (The rest has more particular reference to the German language.)

III. ARITHMETIC, (*Rechen-Unterricht*), BY A. DIESTERWEG.1. *What has brought arithmetic into the common school?*

The wants of daily life—material necessity. Its introduction was historically the first of those which caused a change in the organization of schools. (Rabanus Maurus, in the ninth century, recommended arithmetic and geometry, because they open mysteries, because the Bible speaks of cyphering and measuring, because we learn by it to measure the ark of Noah, etc.)

2. *Is this the only reason why the present common school teachers retain this instruction, and consider it indispensably necessary?*

Not at all. They have recognized in the right treatment of number, and of its application to daily life, an excellent discipline of the mind; the formal object is added to the material one.

3. *How do they compare in value?*

The formal object has the preference; in no case is it to be subordinate; the development of the mental powers is in every school the chief point. But they do not exclude one another; quite the contrary. The formal end is attained just so far as the matter to be understood is worked through.

4. *What motives decide on the choice and arrangement of the matter?*

First, the "formal" motive; i. e., regard to the mental nature of the children, the laws of human development; and especial regard to the individual nature of the learner; next, various external circumstances—differences of place and time, and of schools. The first motive is universally the same; it dictates the *management* of the number; the second directs the *application* of the number, or calculation.

5. *How far ought all to advance in arithmetic?*

The maximum can not be stated; nor the minimum either, at least in regard to the degree of formal development. It remains to point out the material minimum, and this requires every child to be able to solve the common problems of every day life. It is neither necessary nor possible, that all scholars should reach the same point.

6. *What is to be thought of prescribed rules and formulas?*

They are to be entirely annihilated. No operation, not understood in its reasons, should be performed, or learned. The scholar must be able not to demonstrate mechanically each operation, but to give the simple reasons which justify it to the mind. The right deductions from the nature of the number and of its relations, are to prove its correctness.

7. *Wherewith must instruction in arithmetic begin?*

With the numbering of real objects, (cubes, little rods, fingers, etc.)

8. *What inductive means are next employed, and how long is their use continued?*

The teacher next proceeds to the use of artificial means, as lines, points, cyphering rods, Pestalozzian tables, etc., and continues to practice the simple

changes of number with them, until the pupil has a perfectly clear idea of the numbers and of their quantities.

9. *What next?*

The teacher advances to the use of figures.

10. *What is the treatment of the number, with and without figures?*

The latter always precedes the former; the written or slate arithmetic everywhere follows mental arithmetic. Not only does the cultivating power of arithmetic lie in the insight into the relations of number, but also the wants of practical life demand preëminently skill in mental arithmetic.

11. *Upon what chiefly depends that skill?*

First on the ability in handling the decimal principle, (*Zehnergesetz*;) then on the ability to compare and analyze numbers.

12. *How do the exercises with so-called "pure," and with applied numbers, compare?*

The former always precede; application presumes ability in treating the pure number. This being attained, questions, problems and exercises follow; together with denominate numbers, and their application to life.

13. *Are the exercises with numbers from 1 to 100 to come in order after the four rules, (addition, subtraction, multiplication, division?)*

No. All operations ought to be performed successively with these numbers; the regulated uniformity of the operations comes later. (*Grube, Schweitzer, etc.*)

14. *Shall fractional arithmetic be entirely separated from instruction in whole numbers?*

No. No. 13 forbids it, and makes it impossible; even considered in itself it would be improper.

15. *Which points must be distinguished in practical problems?*

First, the understanding of the words.

Second, the relation of the question to the statement, or of the thing required to the thing given.

Third, the understanding of the way in which the unknown number depends on the number given.

Fourth, the finding of the unknown number from the given number; that is, the calculation, oral or written.

16. *What has the teacher to do in these four processes, when the pupil can not proceed of his own strength?*

In the first, the understanding of the words and things in their relations must be explained, and often directly given.

In the second, what is required must be well distinguished from what is given; the propriety of the question must be accurately considered.

The third point is to be brought out by means of questions from the teacher.

The fourth is an affair by itself, and is the pupil's concern.

An exercise is not complete and satisfactory, until the pupil is able to explain these four points, one after another, orally, and without any aid.

The teacher leads by questions, (by analysis;) the pupil proceeds by synthesis. The former proceeds from what is sought, the latter from what is given.

17. *How is talent for arithmetic to be recognized?*

Besides what has been said in No. 16,—by the independent invention of new methods of solving the problems, of peculiar processes, etc.

18. *In what way may uniformity in arithmetical instruction be gained?*

By solving each problem rationally, according to the peculiar nature of the

numerical relations occurring in it, and consequently, without admitting any external rule or formula, which on the contrary ought to result from the subject itself. Uniformity lies in the rational, transparent treatment, and, therefore, in the mind, not in the form. Good rules, etc., are not indifferent, but they must follow the observation of the thing.

19. *Which is the most simple, natural and appropriate form of managing the problems externally?*

Not the doctrine of proportions; it is too artificial, and too difficult for the common school; nor the chain rule, etc. The best form in slate arithmetic for the common school is the so-called "*Zweisatz*," the fractional form, (*bruchform*;) which every where requires reflection. (Scholz.)

20. *What is the value of the so-called "proofs" and abbreviations?*

The proofs are, with a rational method, superfluous; the latter are of little value. A well guided pupil finds them out himself, and if, in the highest class, some of them are pointed out to him, their origin, and thus their correctness, must be demonstrated at the same time.*

IV. GEOMETRY, (*Raumlehre*), BY A. DIESTERWEG.

1. *Is geometry required in the common school?*

No doubt, for it teaches the *forms* in which every thing appears; the shape of matter and the laws of those forms; the laws of space and of extent in space; the dependence of magnitudes and forms on each other.

2. *Why is such knowledge considered as a requisite for general cultivation?*

Because the whole mass of bodies, the universe, as well as man, exists in space; because without the knowledge of the qualities of space, man would be ignorant of that appearance of things which belong to their inmost nature; because geometry teaches how to measure lines, surfaces and bodies, which knowledge is very necessary; because without it man could not divine, that the distance and size of the sun, moon and stars, could be determined; and because he would even have no idea of the extent of his own abode, and of the mathematical, i. e., fundamental qualities of the same. All this is consequently requisite for general human cultivation, not to speak of its practical value, as well for female as male education, and therefore for the common school, the school of the people. Without it, not the most indispensable part, but an essential part, of education is wanting.

3. *What elements of geometry are to be taught in the common school? and in general what parts of it may be considered there?*

Space admits of "intuitive," (*anschauliche*;) and a demonstrative, (*begriffsmaessige*;) observation.

The intuitive faculty of man perceives immediately objects in space, bodies in their qualities and forms; with the sense of touch he perceives what opposes him in space, the body and its external form; the sense of sight assists him, by determining extent and distance, and by comparing and measuring them. These are operations of *external* intuition. The intellect abstracts the *differentia* of the bodies, and fixes the pure, mathematical form; and thus aids the *interior* pure, or mathematical intuition. Moreover, the logical intellect, perceiving the

* No school can do without an arithmetical text-book. Hence it sufficed to give here the principles. These contain the measure by which we have to judge of the value of the text-book.

dependence of magnitudes on each other, their mutual conditions, the inference of the one from the other, deduces and concludes.

The intuitive part of geometry is that elementary part which is proper for the common school. But thereby is not meant, that the pupils should not learn the dependence of one thing on the other; this even can not be avoided, it comes of itself; but according to the degree of ability, quicker and deeper with one than with another, and one school will make more progress in it than another. But the power to be immediately employed is the faculty of observing—first, the exterior, and then, and preëminently, the interior. The conclusions connected with that observation result therefrom spontaneously; the intellect works without being ordered. Therefore, in geometry, as every where—a fact, ignorance of which, causes much merely repetitious and lifeless teaching, as well as intellectual dependence and immaturity—the teacher ought to lead the scholar to immediate, true and vivid perceptions.

The strict or Euclidean geometry, with its artificial proofs, is not fit for the common school, nor does it prosper there.

4. *What is more particularly the subject of geometrical instruction in the peoples' school?*

The qualities of (mathematical) lines, surfaces and solids.

5. *What method is to be pursued with it?*

The point of starting is taken in the physical body; and from this the mathematical one is as it were distilled.

The order of single precepts or propositions is, as has been said, as much as possible *genetical*. Pedantry and anxiety are here, as every where, prejudicial. The method, always intuitive, requires originality, i. e., the evolving of every thing learned from some thing preceding; aims at immediate spontaneous understanding of one thing *through* the other.

6. *What is the immediate purpose of this instruction?*

To understand the qualities of lines, plains and bodies; to measure and calculate them.

7. *What instruments are used by the pupil?*

Pen and pencil, for drawing; compass and scales, for measuring; the usual measures of lines, surfaces and bodies, for calculating.

V. NATURAL HISTORY, BY ED. HINTZE.

1. *What method should be used in teaching natural history?*

The method of instruction is the mental development of the pupil by means of the material development of the object. The method is, therefore, essentially a *process* made by the teacher. Since there can be but one such development, there can be but *one* method.

2. *Which is that true method?*

The one true method is named from the principle contained in it; it is the developing method.

3. *Wherein consists this developing method?*

In development there are three steps; observation, (*anschauung*,) conception, (*vorstellung*,) and generalization, (*begriff*,) Such is the progress of the method. Every where teaching begins with *facts*, and therefore in this case with the observation of natural objects. Of these, individual action and growth must be shown, and the general law of nature thence inferred. In this way and only in this, the pupil is taught according to nature, since he proceeds from immediate observing and knowing to perceiving and understanding.

4. *What mode of teaching is to be used?*

That one which develops by questioning, (*die fragend-entwickelnde*.)

5. *Is this mode practicable in all three courses, (set down by Hintze elsewhere with regard to the capability of the scholars)?*

In the first course, questioning is predominant; on the second, "*der vortrag*," i. e., proper teaching and explaining must be joined with it; on the third again, questioning predominates. In all good instruction questioning is predominant, and with it conversation with the whole class.

6. *What have we to think of lecturing?*

Lecturing is no form of instruction at all; it is a rocking chair for teacher and pupils; the former has easy work, whilst the latter stare and dream.

7. *What ought to be required of the pupils?*

Their first and chief object must be to learn to *see* right; then follows right reproduction; and the necessary result is right understanding.

8. *What is the value of learning by heart?*

In all instruction nothing must occur which is not understood, and merely learnt by words. One fact well understood by observation, and well guided development, is worth a thousand times more than a thousand words and sentences learnt by heart without understanding. A well guided pupil has nothing to learn by heart particularly; what is understood, is remembered for life.

9. *Shall the pupil use a text-book?*

For natural history it is useless. The good teacher does not depend on it, the bad one has a good means to cover his inability, and the scholar has nothing but a dry skeleton.

The teacher must have mineralogical, botanical and zoölogical collections, and, if possible, a microscope.

10. *What must the pupil do at home?*

Write out and draw what has been treated in school—in proportion to his time—in a brief, concise and neat manner. Besides, the well directed pupil will voluntarily and eagerly occupy himself with nature, look with interest and intelligence at plants, stones, etc., and collect them.

11. *How does an able teacher distinguish himself in this study?*

The able teacher takes pains with his school every where, and particularly in this branch; all energy, punctuality and vivacity, must be applied here, if instruction is not to be a dead and dry mechanism.

12. *What distinguishes a painstaking (*strebsamen*) teacher?*

The able teacher is found out at school, the painstaking one at home. There are certain branches which are soon done with. But this is not the case with natural history; he who is devoted to it, must follow its own path of progress. The teacher must never cease to study, to make excursions, experiments, collections, etc., to search, to listen, to observe and investigate.

13. *What characterizes the inspiring (*geistanregende*) teacher?*

He is distinguished by a happy development of sound talents, love of study, and devotion to his vocation. By force of application every one may acquire the necessary knowledge, for nature is every where. If the able teacher shows himself at school, the painstaking teacher principally at home,—there flows from the inspiring teacher every where something that indeed can not be completely gained by study and application; but an earnest will accomplishes a great deal. Besides, it is true, that as under the hands of Midas every thing was changed into gold, so in the hands of an inspiring teacher every thing

becomes enlivened. As the creative mind every where works attractively, so particularly in natural history, zeal, application, love and devotion, spring up spontaneously in the pupils.

VI. NATURAL PHILOSOPHY, BY A. DIESTERWEG.

1. *Should natural philosophy be studied in the common school?*

Certainly. Shall the children in the common school learn nothing of weather and wind, of thermometer and barometer, of the phenomena of light and air, of rain and snow, dew and hoar-frost, fog and clouds, lightning and thunder? shall they see the aëronaut, travel by steam, and read telegraphic news, without knowing the how and the why? Shall they remain ignorant of the constituents of food, and of the process of their stomachs and their lungs? Or is it sufficient to read of all this in the Reader? He who answers those questions in the affirmative, is either himself an ignoramus or a misanthrope, and he who affirms the last knows nothing of the way in which real knowledge is acquired.

2. *What do we begin with? and when does the proper instruction in natural philosophy commence?*

As every where, with showing single phenomena, with intuitive contemplation, with oral representation of what has been observed, and reflection thereupon.

We begin with it in the intuitional instruction of the lowest class. The instruction in geography and natural history develops further the faculty of intuition, and in the highest class the proper instruction in this branch commences.

3. *On what portions of natural philosophy are we to lay stress?*

On all such as belong to the knowledge of phenomena, within the pupil's sphere; the knowledge of the most common things is the chief point.

By this principle we make our choice; we omit, therefore, all that is remote, invisible, and incapable of being made visible; all that can be demonstrated only by mathematical proofs; and keep within the field of immediate observation, stops with those things which every one may know by observation and experience, and show such things, as are not obvious, by experiments with simple and cheap apparatus.

4. *What method is to be used?*

To say nothing of the regard for the individual quality of the pupil, the method depends on the nature of the subject, and on the way in which man naturally acquires his knowledge. Every where man is surrounded by natural phenomena; they happen before his eyes. These, therefore, must be opened, in order to observe apprehendingly, to remember what has been observed, to fix the succession of phenomena, and what is common in a series of similar ones; not only to learn the facts, but also the laws by which they happen, and finally, by reflection, to discover the hidden causes.

Natural philosophy belongs to the inductive sciences, i. e., to those which begin with the knowledge of single facts, abstract from them the law of the process, and then in inverse order, deduce the phenomena from the causes.

The way, therefore, prescribed by the nature, as well as the history of natural philosophy, is, that which proceeds from observation and experience to rule and law, if possible, advancing to the cause, (the so-called regressive method.)

5. *What is the aim of this instruction?*

The knowledge of the most essential phenomena, by which man is surrounded, and the ability to explain them, that is, to state in a simple way their causes.

Most important is the knowledge of all that refers to weather, and we expect, therefore, from a graduating pupil, correct answers to the following questions:

What is the temperature of the air in the different months of the year? Which is the maximum and minimum of heat in our country, and when do they usually occur? What is the corresponding state of temperature in other countries? What are its causes? How do the winds originate, where do they come from, and go to? What are the principal currents of air on the globe? Their causes? What weather is caused by the winds in our country? To which winds is our country chiefly exposed, and why? Origin of fogs and clouds? What is dampness? What causes rain? These and similar questions come so near home to man, that it would prove enormous dullness, if he did not ask them himself, and reflect, on answering them. No doubt that such stupidity is still frequent; but no one will doubt what is the indispensable duty of the common school in the premises.

VII. ASTRONOMY, BY A. DIESTERWEG.

1. *Is instruction about the nature of the universe about astronomy, expedient?*

Most certainly; we require the same from every man. To any one who does not admit that this is requisite, I address the following questions: Has that man an idea of the work of the Creator, and of his relation to both, who is ignorant of astronomy? or even, is he a man? No; he is like a brute confined to a narrow sphere, and has not even learned to make the right use of his upright stature, and of his sense for the universe, the eye; he has not enlarged his faculty of observing beyond the smallest compass, satisfied the inborn desire of knowledge, developed his intellect; he might be compared to a mole that closes its eyes to the light. We justly pity the poor man who has had no opportunity to learn the wonders of the starry sky; we despise him, if he has neglected an opportunity; we blame indignantly whatever would prevent his acquiring that sublime and elevating knowledge.

2. *What should every body know of the universe?*

He should know of infinite space, its laws, the qualities of the sun, the moon, and of our solar system, the relation of the planets to the sun, the position of the earth relatively to the same, its rotations and all that result therefrom, as years, seasons, day and night, in short, the substance of popular astronomy.

3. *How is the pupil to learn this?*

By observation—not by books; for from these we get empty words, hollow notions and phrases; books may at best assist the preceding instruction, but they can never replace it—ask among the “educated” people, what ideas they have in this respect, though they have heard of all and can talk of all. The true, vivid and moving ideas of the great subjects in question are exclusively acquired by an intuitive, developing instruction.

4. *What, therefore, is the teacher to do?*

He stimulates the pupil to observations; he makes him conscious of what has been observed, by illustrative questions and conversations; he draws his attention to the sublime phenomena of the sky by day and night; he talks over with him such observations as can be made daily all the year round on sun and stars; he fixes these observations in good order, and in clear, well defined propositions. This is the first step. Scientifically expressed, the pupil advances to the point of view—of what appears to the senses—of *spherical* astronomy.

This point being attained, considerably and firmly, (we must know first what *appears*, before we learn what *is*.) then reflection follows, whether the things really are such as they appear. The pupil advances from appearance to essence or nature. This step is very important, not only in astronomy, but in *all*

things, and astronomy, for the very reason that it furnishes the clearest and greatest example of this important progress in human education, is of inestimable value. The pupil learns the nature of the things; his perceiving is raised to knowing. Disorder becomes order, variety uniformity, and chaos rule and law. *One* power reigns in the universe, every thing obeys his laws, and every where there results order, harmony, development, life; and each heavenly body becomes a part of the universe in its infinite sublimity and brightness.

It is worth while, not only to hear or to read of that, but to know and to understand it. The pupils now advance to *theoretic* and the *physical* astronomy.

At last there commences the construction of the whole, at least of our solar system, out of the centre. From the beginning, instruction proceeds from the periphery, from the point on which the pupil stands; the individual is himself the centre, around which every thing is grouped, and to which every thing is referred; the observation is *subjective*. Afterward, it is made *objective*, and man recognizes himself, the human race and the globe, as a part of the infinite universe.

5. *What has the teacher to attend to more particularly?*

This necessary instruction being still uncommon, we may give here several suggestions:

(a) He excludes every thing that can not be brought to sight.

(b) He goes always from observation and experience over to reflection and deduction. Astronomy is an inductive science; hence teaching follows the inductive method. The teacher does not "*dociren*," (teach or lecture,) he guides; he does not say one single sentence that could not be found by the pupils themselves; for such as can not be found by them—except historical notices—are not fit for them.

(c) He fixes the results in the most definite and pregnant expressions.

(d) He brings the things observed, thought, spoken of, to view on the blackboard, and directs the pupils to similar representations. But he does not begin with drawing, this is secondary to the finding of perceptions. He employs every where the pupil's imagination; astronomy is an excellent means to lead it on a sure and safe way. Drawing proves the correctness of the ideas, therefore it should not precede. If the pupil makes a correct drawing, it is the surest proof of his having viewed and reflected right.

(e) He abstains throughout from any use of models, (telluria, lunaria, etc.) They serve afterward as proof, but they may be entirely done without. Who uses them in the beginning, is wrong; who requires the pupils to transfer that which is represented by those models, to the universe, requires what is impossible; nobody succeeds. The value of models, even of the best, is very much confined. They show the apparent things better than the real; but even for the former they are not necessary. The teacher may sometimes, by means of a larger and smaller globe, a candle, etc., represent every thing needed. But the perception and representation of what is going on in space, even with shut eyes, is what is indispensable, because it is the principal thing. Whoever does not succeed so far, does not really know or understand.

He who wants to know more, may read my "*Astronomical Geography*," (*Astronomische Geographie*,) fifth edition, Berlin, 1855, 1½ thaler. (We may add, that this book of Diesterweg's is universally considered as a master-piece of method.—Ed.)

(Continued in Number XI.)

XVI. EDUCATIONAL MISCELLANY AND INTELLIGENCE.

GERMANY.

[A portion of the following intelligence, suggestions and statistics as to education in Germany, were communicated by Dr. WIMMER, for insertion in the previous number of the Journal.—Ed.]

PRUSSIA.

NEW REGULATIONS RESPECTING COMMON SCHOOLS.

The three "REGULATIVES," as they are called, for the common schools in Prussia, of the 1, 2 and 3 October, 1854 concern, the first, the Normal Schools, the second the "preparanden-schulen" or Pro-Seminaries, the third the elementary schools of but one class, or, with other words, the common village school with one teacher.

The principle on which these regulatives are based, is that the common school (volkeschuls,) "has to prepare for real life according to its given and existing relations, and not, *vice versa*, that life is to be formed after the school." The wants of this actual life are the only measure for the future activity of the common school. Not the possibility of the successful promotion of civilization, (bildung,) by the one or the other element of education, by this or that method, has to decide henceforth on its being admitted in the common school, but merely the well-known and unavoidable wants of those classes of population, for which the school has to provide the principal, if not the only education. Those measures have indeed special reference to the village schools, but they are at the same time to be regarded as "fundamental" for all other common schools in town and country. Even there they are first to be acted upon completely, before further and higher steps are allowed. The regulatives are not a transitory, but an important *turning point* in the whole system of common school education in Prussia.

"The movement of ideas which for a long time has been going on in common school education, is in many and important respects brought to an end. It is now high time to do away with what is superfluous and erroneous, and in its stead to proscribe now, even officially, what has been felt long since as necessary by those who know and value the wants of a truly christian education, and has been found really useful by faithful and experienced teachers. As the whole age has arrived on a boundary where a decisive turning rotation has become necessary and real; so the school, unless it will perish by clinging to the past, must enter fresh and refreshing into the new career. The elementary school, in which the greatest part of the people receive the foundation, if not the whole, of their education, has not to serve an abstract system or an idea of pedagogical science, but has to prepare for practical life in church, family, vocation, community and state. The understanding and the practicing of their contents, and an education through them is the aim. The method is merely a means without value in itself: the "formal" education flows itself from the understanding and practicing of these justified and enlisted contents. Henceforth in the elementary school, a right selection and strict limitation of the subjects of inspection, as

well as a good organization of the school are rather to be attended to, than the invention and application of new methods. "For the elementary schools which are divided in several parallel or graded classes, the same principles so far as they regard character and tendency of elementary instruction, are every where and without variation to be applied, and have to form the only basis for the plan of lessons, than to be enlarged in their extent."

In the plan of lessons proposed, of the 26 hours of instruction, no time is set apart for *geography*. "Perfect learning of the *contents* of the *Reader*, (text-book,) and ability to write them clearly, and in connection to do this with one's, i. e., the pupil's own words is required." "If the circumstances admit to have 6 hours of instruction on the full days, (Monday, Tuesday, Thursday, Friday,) 3 hours more may be applied to 'vaterlandskunde,' (knowledge of Germany and Prussia,) and 'naturkunde.' If no such particular hours can be made out, the communication of the necessary knowledge of the kind must be given in explaining those sections of the reader, which point thereto. But where there are particular lessons, a good reader will also suffice with regard to the material knowledge; yet then in connection with the reader, instruction in geography may be made more lively by the use of maps, and may more apply to the self action of the children."

As to *history*, the chief reliance must likewise be laid on the reader. The new readers contain already no longer "history," but simply "pictures" from the history of the fatherland and particularly of Prussia, (vaterlandskunde.)

As to *grammar*, the regulatives "exclude from the elementary school separate instruction in the same," and say that theoretical knowledge is not required from children. Thus Kellner's analytical method, in which grammatical instruction has the *Reader* as its centre, will become the general one. (K. is a province school counselor in Prussia, and the reviewer of the grammatical part in Nacke's pedagogical Jahresbericht.) [Kellner says: If grammar can not be entirely excluded from our common schools, it must however not occupy the first place or give exclusively form and contents to the instruction in the mother tongue; but it has to serve simply as a means for easier understanding, and to give those few rules and principles which are indispensable as basis of the practical abilities, i. e., reading and writing. Instruction in the vernacular language has to lean upon nature and the natural development of the faculty of speaking, and must aim at teaching language by immediate use and intercourse, and principally at arousing and confining by the same taste, "sprachgefühl," (literally the feeling of language, i. e., the immediate perception of what is right and proper.)]

The aim of instruction in the *normal schools* is to be the "education and ability required from the teacher of a common elementary school of one class." Included is a simple and futile instruction in "vaterlandskunde," limited to the boundaries of the elementary school, so, however, that the pupil teachers become masters of that branch in all respects. With this view the geographical contents of the *Reader* are to be attended to. "General history is no longer to be taught in normal schools, because the pupil teachers have not the necessary knowledge of other preparatory branches, nor the time sufficient for a thorough study. Therefore only the history of Germany shall be taught thoroughly and earnestly, with a particular regard for the history of Prussia, and for that of the province. Every where a regard for the history of civilization must prevail, and all must be done in a Christian spirit." The most necessary communications from

general history shall be "connected partly with the Bible, partly with German history in biographies of great men and events." Of course, it must be based on geography.

Whatever the regulatives contain with respect to religious instruction, in which they are very particular, is omitted here.

Prange, the reviewer of geography and history in the Pedagogical Jahresbericht, thinks that the results of this new system will be seen in the normal schools in half a dozen of years, but that it will take longer to observe them in the common schools.

The regulatives have found many adversaries, e. g., in Low's *Monatsschrift*, etc., but the most inimical is Diesterweg, who has published three pamphlets against them. Other regulatives of a similar import, i. e., for a stricter and more defined elementary instruction, have been given in Hesse-Cassel, Bavaria, Mecklenburg, Wurtemberg, Nassau, and may be expected throughout Germany.

PLAN OF LESSONS IN GYMNASIA OR CLASSICAL SCHOOLS.—A late decree of the Prussian government in relation to schools fixes the following plan of lessons for gymnasia:

CLASSES.	I.	II.	III.	IV.	V.	VI.
Religion, (weekly),	2	2	2	2	3	3
German,	3	2	2	2	2 }	2
Latin,	8	10	10	10	10 }	10
Greek,	6	6	6	6	—	—
French,	2	2	2	2	3	—
History and geography,	3	3	3	3	2	2
Mathematics,	4	4	3	3	3	4
Natural philosophy,	2	1	—	—	—	—
Natural history,	—	—	2	—	(2)	(2)
Drawing,	—	—	—	2	2	2
Writing,	—	—	—	—	3	3
Total hours per week, 30	30	30	30	30	30	28

"As instruction in Hebrew, singing and gymnastics, is given out of the ordinary school hours, those lessons are not included in the above plan." "Dispensation from studying Greek is only allowed in towns where there is no higher burgher or real school; since in such a case the gymnasium must serve general purposes. Such pupils are, however, to be notified that a knowledge of Greek is indispensable for passing the examination for admission to the university, (*Abiturienten-examen*.)" "Natural history is to be taught in classes V. and VI., only when there is a very able teacher for it." "In other cases geography may be taught instead, with as much natural history introduced as possible. The same is permissible in class IV."

Another decree, (April 10, 1856,) recommends to the principal of the higher burgher schools a more frequent and methodical learning of words, not alphabetically, but according to analogy. If the pupils are not advanced enough to be introduced formally into etymological studies, they should receive instruction orally in the derivation of words.

REFORM OF THE NORMAL SCHOOLS.—The government has determined on a reform in the normal schools, and has called on the provincial school counselors to take the advice of the most distinguished principals of real schools on some of the points.

EDUCATIONAL EXPENDITURES FOR 1856.

Permanent Expenses.

For Ministry* of Public Instruction and Worship,....	98,000	thalers.
“ Provincial† school boards,.....	58,478	“
“ Universities,.....	478,990	“
“ Gymnasias and real schools,.....	312,060	“
“ Elementary schools,.....	418,226	“
“ Arts and sciences,.....	185,345	“
“ Improving condition of teachers,.....	174,978	“
“ Aid in building schools and churches,.....	194,762	“
“ Consistories of church and school,.....	54,920	“

Extraordinary Expenses in 1856.

For special grants to teachers in gymnasias,.....	10,000	thalers.
“ “ “ common schools,...	35,000	“
“ “ poor artists and scholars,.....	1,000	“
“ “ new buildings, (gymnasias,)....	44,000	“
“ “ teachers’ seminaries,.....	53,800	“
“ “ orphans,.....	50,000	“
“ “ building,.....	250,000	“

Total expenditure by department, (about \$3,123,040,) 4,123,119 thalers.

In the expenditures for arts and sciences, are included the sum of 22,821 thalers for the *Royal Academy of Sciences*; 24,813 thalers for the *Royal Library*; 20,350 thalers for the *Architectural Academy*; 42,800 thalers for the *Institute of Engineers*; 14,138 thalers for the Agricultural and Horticultural Academies.

EDUCATIONAL STATISTICS FOR 1856-57.

UNIVERSITIES.—There are 7 universities, with 5,741 students, in the winter term of 1856-7, viz.: 1,543 in (993 Evangelical and 650 Catholic,) theology; 1,422 in law; 736 in medicine; 1,118 in philosophy, and 822 in other departments.

GYMNASIA.—There are 128 gymnasias, and 27 pro-gymnasias, with 37,000 students, recognized and aided by the government, besides a number of private institutions of nearly the same grade of instruction.

REAL SCHOOLS.—There are 71 real schools, with 20,931 pupils, supported mainly by tuition, besides a large number of burgher, or public high schools, in the large towns and cities, aided by municipal grants. Several of the real schools are large, and crowded beyond the accommodation provided. The first school of this class in Berlin, was established by Hecker, in 1747, and exists in association with the Royal Frederick Wilhelm Gymnasium. One in Berlin, which was opened in 1852, with 18 scholars in 3 classes, has 790 pupils in 16 classes, under 23 teachers. Another, opened in 1832, with 63 pupils in 3 classes, has now 600 pupils in 13 classes, and 20 teachers. Most of the real schools have risen by the side of a gymnasium, and have the same principal. In some cases they occupy the same building, and have parallel courses of study. Fifty-two of this class of schools have a right to graduate scholars for admission to the higher schools of science and art, such as the Academy of Architecture, and the School of Engineers. Their pupils of the second class, if fit for the first,

* Minister Friedrich von Raumer, and a council of ten members.

† Each, (7,) province has a school board, consisting of the president of the province, a director of the scholastic department, and 3 to 5 school counselors. Each province is divided into 2 to 5 government districts, with a small board of counselors.

are admitted one year in the military service; (often have to serve three years.)

HIGHER BURGHER SCHOOLS.—There are over one hundred of the town high schools, which belong to the system of primary instruction, although they rank in some respects with institutions of secondary instruction. There are about 15,000 pupils in these schools.

PRIMARY SCHOOLS.—There are about, (we have not the last tables before us,) 25,000 primary schools, with 34,000 teachers, and 2,500,000 pupils.

NORMAL SCHOOLS, OR TEACHERS' SEMINARIES.—There are 46 normal schools, for the preparation of teachers for the public primary schools, besides 3 schools for the training of female teachers, and for governesses.

SCHOOLS OF SCIENCE AND ART.—Besides 24 provincial schools of art, there are the *Institute of Arts* in Berlin; an *Architectural Academy*, with 11 professors, and two courses each of two years; an *Institute for Engineers*, with two classes, and 14 professors; two *Agricultural Academies* at Eldena and Missan; one *Horticultural Academy* at Potsdam.

SPECIAL SCHOOLS FOR THE BLIND, DEAF-MUTES, IDIOTS, ORPHANS, JUVENILE DELINQUENTS, &c.—There are twenty-three institutions for deaf-mutes, eight for the blind, one for idiots or feeble-minded children, fifty for orphans, seventy-one, (small family schools,) for vagrant and criminal children, a large number of "children's gardens" for very young children of poor families, where the mother is obliged to go out to work during the day.

SUPPLEMENTARY SCHOOLS.—There are in the principal towns a large number of supplementary schools, (*fortbildungs-anstalten*.) to continue the education of the schools into adult life. In three schools of this class in Berlin, there were 1,159 pupils. Among them were 7 master workmen, 162 journeymen, 595 apprentices, 151 merchants, and 191 artists. These schools are maintained by a small charge on each pupil.

TEACHERS OF GYMNASTICS.—Female teachers of gymnastics have henceforth to pass an examination before a board, consisting of a school counselor, of the principal of the Central School of Gymnastics in Berlin, and of a physician.

PROTESTANT FEMALE SEMINARY IN DROYSSIG.—In 1852 a seminary, founded by Prince Schönberg, was opened with one course of instruction extending over two years, open to forty females, between the ages of seventeen and twenty-five years, who wish to prepare themselves for teachers in public schools; and, another course, of the same extent, for same number, not under eighteen years of age, wishing to become governesses. Board and tuition for the former amount to less than forty-five dollars; and, for the latter, less than seventy-five dollars per year. There is a boarding school, for girls of the wealthier classes, connected with the seminary.

HIGHER GIRLS' SCHOOLS.—There are 135 high schools for girls, corresponding to the real schools, or burgher schools, for boys, in Prussia. With three of these schools there are courses of instruction for females who wish to prepare for teaching.

SCHOOL FOR GOVERNESSES IN BERLIN.—Connected with the *Louisenschule*, opened in 1811, there is a class for the gratuitous instruction of nine females to become teachers, and of nine more to be trained as nurses.

HOLSTEIN.

Real School in Rendsburg.—The pupils of the lower classes, (IV., V., VI.,) are prepared for the proper real school, or for the gymnasium, (classical school,) hence in IV., two lessons in Greek.

	Class.	Class.	Class.	Lower Classes.		
	I.	II.	III.	IV.	V.	VI.
Religion,	2	2	2	3	4	4
German,	2	2	2	2	4	4
Danish,	2	2	2	2	—	—
French,	3	4	4	2	2	—
English,	3	4	3	2	2	—
Latin,	2	2	2	6	6	6
Greek,	—	—	—	2	—	—
Mathematics,	6	4	4	2	—	—
Arithmetic,	—	1	2	3	5	5
Natural Science, 5	—	5	4	2	2	2
Geography,	1	1	1	4	4	5
History,	3	3	3	—	—	—
Writing,	—	—	1	2	2	3
Drawing,	2	2	2	2	1	1

Singing taught 4 hours, and *gymnastics* four hours; in all 12 teachers.

HANOVER.

PLAN OF LESSONS IN PUBLIC HIGH SCHOOL FOR GIRLS IN HANOVER.—14 teachers, (4 females,)—192 pupils, distributed in eight classes.

CLASS.	VIII.	VII.	VI.	V.	IV.	III.	II.	I.
Number of pupils,	26	28	37	35	35	34	19	18
Average age,	7 $\frac{3}{4}$	9 $\frac{1}{3}$	10 $\frac{1}{4}$	12	12 $\frac{3}{4}$	14	15	16
Religion,	2	4	4	4	3	3	3	3
German Language,	6	6	5	5	5	5	3	3
German Literature,	—	—	—	—	—	—	2	2
French Language,	—	—	4	4	3	3	4	4
English Language,	—	—	—	—	3	3	4	4
History,	—	—	2	2	2	2	2	2
Geography,	—	—	—	2	2	2	2	2
Observation,	—	—	—	—	—	—	2	2
Natural History,	—	—	2	2	2	2	—	—
Natural Philosophy,	—	2	—	—	—	—	2	—
Arithmetic,	4	4	4	3	2	2	2	2
Writing,	4	4	4	2	2	2	—	2
Drawing,	—	—	—	2	2	2	2	2
Singing,	—	—	—	2	2	2	2	2
Needle Work,	4	4	4	4	4	4	4	4

REAL SCHOOLS.—There is but one real school in the capital; the Chambers making an annual grant of 13,000 thalers for its support. But, in order to advance "real" or scientific studies, twenty-five real teachers were assigned to the gymnasia; and, in fourteen of these institutions, parallel real classes were organized. In four gymnasia the real scholars are separated in the fourth year, and in six they are separated only in certain studies. The number of real scholars has increased, and in fourteen gymnasia they exceed the classical pupils; making it necessary to convert the pro-gymnasia into higher burgher schools.

WEIMAR.

STATISTICS.—In the Grand Duchy of Weimar there are 571 public schools, with 841 teachers, and 44,030 pupils; besides 55 private schools, with 31 teachers. The gymnasium in Weimar has 191, and that at Eisenach 84 pupils.

SAXONY.

REAL SCHOOLS.—In Saxony there are but 3 or 4 real schools; although, in Plauen and Zittau, there are parallel* real classes joined to the gymnasium, (classes. II. III. and IV.)—in which—

Latin is taught in 3 to 4 hours.
French taught in 4 hours.
English taught in 3 hours.
Mathematics taught in 4 hours.
Arithmetic taught in 1 to 2 hours.
Natural Philosophy in II. and III. in 2 hours.
Chemistry in II. in 2 hours.
Natural History in 1 to 2 hours.
Drawing in 4, (in II., i. e., the highest optional.)
Geometrical Drawing in 2 to 5, (in II. and III.)
German in 3 to 4 hours.
History in 6 hours.
Geography in 2 hours.
Religion in 2 hours.

PUBLIC EXAMINATION AT DRESDEN, (Oct. 27th, 1856,) OF TEACHERS APPOINTED TO ANOTHER PLACE.—The Committee consisted of a Counselor of the Consistory, as Chairman, the Principal of a Teachers' Seminary, and of a Burgher School in Dresden.

I. WRITTEN EXAMINATION.—8-12 O'CLOCK.

a. *Pedagogical Composition*: what shall we think of giving particular laws to be obeyed by the children in school, and with regard to school?

b. 4 *Arithmetical Problems*: 1. $1\frac{5}{12}$ cwt. were lost of 7 cwt. 31 lbs. 13 ounces, $2\frac{2}{7}$ drams; if the loss amounts to $31\frac{1}{2}$ thalers, what was the whole worth? 2. To fill the space of a cubic mile, (1 mile, 24,000 feet,) with bricks, each 1 f. long and $\frac{1}{2}$ foot broad, 1000 laborers want 6,400 years, if they work 300 days a year, 12 hours a day, and if each laborer lays one brick in a second; how thick is such a brick? 3. A man had to pay for several ducats bought, $9\frac{1}{8}\frac{1}{8}$ agio, $32\frac{4}{5}$ thalers; what was the value of a ducat, when he afterward gave them away for 33 thalers, $22\frac{1}{2}$ ngr. (30 ngr. equals 1 thaler.) 4. A. had to pay B. 300 thalers, after 3 months, and 1,500 thalers, later; the whole, however, was paid after 10 months, without loss for either party, what time were the 1,500 thalers to be paid?

2. PRACTICAL EXAMINATION.—3-4.

The (4) examiners, one after the other, catechised on Psalm 143, 2; Ps. 143, 5; Ps. 143, 6; Ps. 143, 10.

3. ORAL EXAMINATION.

1. *Dogmatic*. How the narrative of *Moses' birth* is to be treated in school, and what *precepts*, according to the different ages of the children, can be drawn from it?

* The "Hohere Burgerschule" is not satisfied with such *parallel* classes in gymnasia, but requires independent schools, on an entirely separate plan.

The following is the plan of lessons in *languages* as required by Mager the late editor of the "Pedagogical Revue," for a real gymnasia:

	Lower.	Middle.	Upper Classes.
	VI. V.	IV. III.	II. I.
German.....	6....6	5....5	4....3
French.....	8....7	6....6	4....3
English.....	—....7	6....6	4....3

2. The written compositions and the catechisations are criticised.
3. *Psychology*. What is the soul? Whence does it appear that the soul has faculties? Tell the chief faculties of the soul, and their formations, (representations,) ideas, desires, sentiments, etc.
4. *Geography*. Africa.—Its situation with regard to the other parts of the globe, to the zones, and its boundaries? Countries of Africa?
5. *History*. What has happened in Africa? More particularly with regard to Egypt, Carthage,—the Punic wars, etc.?
6. Criticism of the arithmetical papers.

SCHOOL OF MODERN LANGUAGES.—The *Modern Gymnasium*, (private,) at Leipzig, was conducted by its late director, Hauschild, (now Superintendent of the evangelical schools of Brunn,) on the following principles of instruction:

1. The easier languages first. (Genetical method.)
2. Each language, at commencing it, pursued in a measure by itself; or at least, with from ten to twelve hours a week, of instruction. (Concentrating method.)
3. Progress according to the pupil's ability. (Calculating method.)
4. Intuitive instruction. (Pestalozzian method.)
5. Associating geography and history. (Vogel's method.)

According to these principles, the boy passes from the elementary into the German school, (because he is a German boy.) When ten years old, he advances to the English school, and in his twelfth year, to the French.* When fourteen years old, he enters the gymnasium, or real school.

THE SCHOOL OF FORESTRY AND AGRICULTURE, at Tharand, near Dresden, contains, (1857,) in the former department, 26 Saxon and 27 foreign pupils; in the latter, 18 Saxon and 42 foreign. Among these foreigners are 3 Hungarians, 1 Transylvanian, 2 Servians, 1 Galician, 1 Spaniard, 2 Swiss, 4 Norwegians, 2 Russians, and 2 Americans.

TEACHERS' MUTUAL AID SOCIETY.—The Association of Saxon Teachers, for mutual help in sickness, embracing 1,575 members, report for 1855, that 130 members had been assisted during the year out of the funds of the Association, which is made up by a small annual rate on each member, according to his salary.

GYMNASTICS.—In the burgher schools of Leipzig, the pupils receive systematic instruction in gymnastics.

COMMERCIAL SCHOOLS.—The Commercial School in Dresden, founded in 1854, by the Merchants' Association, has 185 pupils, divided into two sections; one for the mercantile apprentices, who are obliged to attend for two years, and has 7 teachers. There is a similar school at Leipzig, and another in Nuremberg, with 329 pupils.

THE PESTALOZZIAN ASSOCIATION in Saxony has 2,486 members, and gave assistance last year to 244 orphan children of teachers, in 117 families.

PLAN OF STUDIES IN THE ROYAL INDUSTRIAL SCHOOL, (*Gewerbschule*,) AT CHEMNITZ, SAXONY.

This Industrial School ranks higher than any other school of that name, and is very nearly a Polytechnic Institute. We have heard but one complaint, viz.: that

* In Gutbier's private school in Munich the boys pass from German into Italian, then into the French, and finally into the English school.

the pupils, from 14 years of age upward, had too much work; they have to take notes in their many lessons, and have to work them all out neatly and accurately. The following plan is taken from the programme of 1857, preceded, as usual, in the schools of a higher grade, by a treatise—this time on German orthography.

SECTION A comprises those pupils who are preparing for a trade in which machines of complicated construction are used, and who pass through a course of four years. A a, comprises such as are preparing for a mechanical branch, *e. g.*, construction of machines, spinning establishments etc.; A b, such as prepare for a chemical branch, *e. g.*, manufacturing sugar, porcelain, etc.

SECTION B comprises pupils who prepare for a trade chiefly chemical, and without complicated machinery; and who, therefore, do not receive the instruction in mechanics and machine building; and who remain but three years; *e. g.*, future dyers, soap-boilers, tanners, etc.

SECTION C comprises such as prepare for agriculture; and who also stay three years.

CLASS IV.

1. *Arithmetic*: 6 lessons a week, with Tellkamp's *Vorschule der mathematik*. *Special Arithmetic*: formation of numbers, numeral systems, whole numbers, fractions, geometrical proportions, reduction. The four rules, application of geometrical proportions, rule of three, etc. etc. *General Arithmetic*: the four rules with letters, involution and evolution, algebraics, fractions, simple equations, problems.

2. *Geometry*: 4 hours; lines, angles, triangles, rectangles, polygons, sequents, tangents, circles, similarity of triangles, of polygons, lines in and on the circles, area of regular polygons and of circles, equality and proportion of surfaces, contents of figures.

3. *Natural Philosophy*: 4 hours, with Müller's text-book. General introduction, outlines of astronomy, physical geography, climatology, doctrine of heat, magnetism and electricity.

4. *Natural History*: 4 hours; in summer, botany with particular regard to such plants as are important for common use; outlines of the physiology of plants. In winter, zoölogy with outlines of anatomy and animal physiology.

5. *Drawing*: 6 hours; from geometrical bodies, plaster models, etc., after Dupuis' method; with pencil or chalk, chiefly in colors.

6. *Geometrical Drawing*: 4 hours; plane drawing, on a given scale, of bodies between two planes of projection in different position, single or combined; construction of screws,—always connected with exercises in painting with Indian ink.

7. *German Language*: 4 hours; with Götsinger's grammar. In IV., b, 2 lessons for orthographical and stylistical exercises, 1 for oral exercises, and 1 for grammar. In IV., a, where the admitted pupils are better prepared in this respect, 2 lessons in grammar, 1 oral and 1 for composition.

CLASS III.

a. *Studies common to all pupils of this class.*

8. *Arithmetic*: 4 hours; equations with several unknown quantities, diophantine problems, equations of the second degree, logarithms, logarithmic equations, arithmetical and geometrical progression, interest on interest, &c.

9. *Geometry*: 4 hours; stereometry, plain trigonometry, application of algebra to geometry.

10. *Mercantile Arithmetic*: 2 hours for denomination C. of pupils, only in winter.

11. *Natural Philosophy*: 3 hours; acoustics, optics; solid, liquid and aerial bodies.

12. *General Chemistry*: 5 hours; inorganic chemistry, chemical elements, etc. Organic chemistry; the more important vegetable and animal matter, as fibre, starch, sugar, organic acids and bases, oils, colors, bones, flesh, blood, milk, etc., and their products of decomposition, (fermentation, distillation, etc.) their

* Chemnitz has a population of about 50,000 inhabitants, and is the chief manufacturing town of Saxony.

qualities, production and use; their relation to living vegetables and animal bodies.

13. *Architecture*: 2 hours; the fundamental rules for all classes of architecture; principal combinations; chief parts of buildings, their laying out and proportion; construction of ovens, tile-kilns, lime-kilns, malt-kilns, etc.

14. *German*: 4 hours; two hours in grammar, two in oral and written exercises, alternating with reading of dramatical pieces. The less advanced pupils have two more lessons in spelling and reading.

b. *For Section A.*

15. *Doctrine of Projection*: 5 hours; Projection of simple lines, planes and bodies, etc., etc.

16. *Practical Geometry* and

17. *Drawing of Plans*, (*planzeichnen*.) in summer, one afternoon, practical exercises in surveying; in winter, two lessons in practical geometry, and two in drawing plans.

18. *Drawing*: 4 hours, as in class IV., but with the addition of light and shade.

Besides, A b, has four lessons in No. 21, with the omission or diminution of No. 18.

c. *For Section B.*

19. *Mechanical Technology*: 2 hours; with Karmarsch's text-book.

20. *Mineralogy and Geognosy*: 2 hours; the former in summer; the latter in winter, both with especial regard to agriculture and trade.

21. *Practical Exercises in Chemistry*: 8 hours, in winter.

The pupils of this section also attend, in summer, No. 18. Nos. 16 and 17 are optional for them.

d. *For Section C.*

22. *Cattle Breeding*: 2 hours; General portion, anatomical and physiological introduction, hygiene, breeding and feeding.

23. *Nursing of Plants*: 2 hours, in summer; General portion; influence of climate and soil on the development of cultivated plants; raising, propagating and diseases of plants; means of cultivating, sowing, nursing, gathering and preserving.

Besides, the pupils of this section have in summer two lessons in No. 18, the excursions No. 40, Nos. 16, 17, 20, and, if sufficiently prepared, No. 21 for two hours in winter.

CLASS II.

a. *In common.*

24. *German*: 4 hours; two lessons in German literature; two oral and written exercises, reporting, etc.

25. *Architectural Drawing*: 2 hours; for sections B and C only in one half year. Drawing of architectural details, copying and sketching of plans.

b. *For section A.*

26. *Analysis*: 4 hours; for A b, only in summer. Figured numbers, higher arithmetical series, equations of the third degree, combination, quadration of functions (?); binomial, exponential, logarithmetrical, goniometrical, and cyclometrical series, Taylor's series, value of 0-0, greatest and least value of the functions, methods of the least squares.

27. *Spherical Trigonometry and Analytical Geometry of the places*: 3 hours; only for A a.

28. *Mechanics*: 5 hours.

29. *Drawing of Machines*: in summer 6, in winter 4 hours

30. *Descriptive Geometry*: 3 hours; only for A a.

31. *Drawing*: 4 hours; partly from plaster models, partly from copies. Besides, A attends 19, and A b also 20. Moreover, A a partakes in 2 weekly lessons, A C in 6 of technical chemistry, (No. 32,) A C, with diminution of No. 29, and possible omission of No. 31, attends the exercises of No. 33.

c. *For Section B.*

32. *Technical Chemistry*: 6 hours; review of all chemistry. It is chiefly intended to fix and enlarge the chemical knowledge and judgment in all directions; at the same time every thing important for application is prominently considered,

and a representation given of the important chemical manufactures, and of those trades which are based on chemical principles—this being included in the exposition of the reflective elements, *e. g.*, the manufacturing of clay ware, in speaking of clay, etc. Moreover the principal merchandises and products are here spoken of as fuel, coloring matter, food, etc.

33. *Practical Exercises in Chemistry*: 8—12 hours, as in III. Besides, the pupils of this section attend 19, and optional 29 and 31; and also, if it appears advantageous for them, 12 and 20.

d. For Section C.

34. Doctrine of *soil and manure*: 2 hours; the various circumstances that influence the soil, classification of soil according to the Saxon mode of valuation, natural and artificial sorts of manure, their effect and application.

35. Nursing of *plants*: in summer 3, in winter 2 hours. Especial part: culture of useful plants, including meadows, vines and orchards, with a short sketch of forestry.

36. *Cattle Breeding*: 2 hours; especial part: cattle, horse, sheep breeding, and with less details, that of goats, fowls, fish, silk-worms and bees.

37. *Agricultural Machines*: 2 hours.

38. *Farming*: 3 hours; in general; requisites of farming, organization and management of a farm, Agricultural book-keeping, Agricultural valuation.

39. *Agricultural Architecture*: 1 hour, in winter, regarding the buildings, barns, stables, etc.

40. *Agricultural excursions*, in company of a teacher, and *experiments of cultivation* in the fields and gardens of the establishment. Time not fixed.

41. *Knowledge of Machines and Technology*: 4 hours; in summer, description of the chief motors and parts of machines, and of the manufacturing of wood and iron.

42. *Agricultural Chemistry*: 4 hours; in winter.

Besides, the pupils of this section attend 29 two hours a week; especially for drawing agricultural utensils and machines; No. 16 and optionally 17; No. 33 in summer four times, in winter 4—8 times, and No. 32 for three hours.

I. CLASS—SECTION A.

43. Knowledge of *Machines*: 8 hours.

44. *Drawing of Machines*: 8 hours for A a, 4 for A b.

45. *Mathematics*: 3 hours only for A a. Theory of higher equations, analytical geometry of space.

46. *Perspective*: 2 hours only for A a. Perspective representation of points, lines, plains and bodies, with the shade of the sun and of lamps, etc.

Mineralogy and Geognosy, (No 20.) only for A a.

Technical Chemistry, (32,) A a; 2 hours in summer. The pupils of A b, have finished it in the second class.

47. *Analytical and Theoretical Chemistry*: 3 hours; only for A b. The qualitative analysis reviewed and completed, the quantitative analysis of weight and volume treated more accurately, weight of atoms, their relations to crystal forms, to volume and specific weight, etc.

Practical exercises in chemistry, (33,) A b, in 12 hours; A a, 2—4 hours in summer, 4 hours in winter.

The pupils of this class attend German, (24,) 2 hours, 19, 25, (in summer,) and 31, (in general only A a, 2 hours,) and optionally, No. 16.

Besides, all the pupils of the school have opportunity to learn,

48—51. *French*, in four classes, 3 hours a week. The pupils are admitted to that class for which each of them is fit.

52—54. *English*: in three classes; 3 hours.

55. *Commercial Book-keeping and correspondence*: 3 hours.

56. *Embossing* in clay, one afternoon in every week.

57. *History and Geography*: in IV., 4 hours, which all pupils not sufficiently advanced in those branches must attend.

58—59. *Manufacturing Drawing*, (fabrikzeichnen,) neat, destined for such as work at Chemnitz in manufacturing establishments, but which may be attended also by proper pupils of the Gewerbschule, 4 hours in the evening, in two sections. In the lower, (11 pupils with three of the middle school,) drawing in general is taught; in the upper, (41 p.,) the pupils are practiced in drawing or sketching of ornaments concerning their particular trade, etc.

Besides, the principal, Professor Schnedermann, (teacher of chemistry,) there are 16 teachers, three of whom bear the title, professor.

In I there are 9 pupils for the full course—4 for single branches.

“ II “ 37 “ “ 5 “

“ III “ 65 “ “ 6 “

“ IV a “ 42 and in IV b 40.

With the Gewerbschule, is joined what is called, BAUGEWERKENSCHULE, *i. e.* a school for carpenters and masons, (journeymen,) lower class : 29 pupils.

Arithmetic : 6 hours from the first rules as far as quadratic equations.

Geometry, 4 hours ; *General Architecture*, 8 hours ; *Lineal and ornamental Drawing*, 4 hours ; *Doctrine of Projection*, 4 hours ; *German*, 3 hours. Upper Class, 31 pupils.

Mechanical Physic, 6 hours, with particular attention to architecture. *Doctrine of construction*, 6 hours ; *Sketches of Architectural Plans*, 4 hours ; *Modeling*, 6 hours ; *Embossing*, 4 hours ; *Drawing*, 4 hours ; *Perspective*, 2 hours ; *German*, 2 hours. and a so-called

Mechanische Baugewerken and Werkmeister schule.

Third class : 18 pupils ; (Miller's machine builders, locksmiths, etc., journeymen.) *Arithmetic*, 6 hours ; *Geometry*, 4 hours ; *German*, 3 hours ; *Drawing*, 4 hours ; *Geometrical Drawing*, 8 hours ; *Natural Philosophy*, 4 hours.

Second class : 17 pupils.

Mathematics and Mechanics, 12 hours ; *Machine Drawing*, 8 hours ; *Surveying*, 4 hours ; *Mechanical Technology*, 4 hours ; *Model Drawing*, 4 hours ; *German*, 3 hours.

First class : 13 pupils.

Machines, 8 hours ; *Mechanical Drawing*, 8 hours ; *a*, construction of rails, 4 hours for railing ; *b*, spinning and weaving, each in 4 hours ; *c*, construction of pipes and wells, 4 hours ; *Drawing*, 4 hours ; *Embossing*, 4 hours ; *Model Drawing*, 4 hours ; *Book-keeping*, 2 hours.

SUNDAY SCHOOL IN CHEMNITZ.—There is a Sunday school in this large manufacturing city, with 1284 students, arranged in 40 classes, viz.:

13 classes in Drawing,	with.....	440 pupils,
10 “ Writing,	“	396 “
4 “ Writing,	“	121 “
2 “ Reading,	“	48 “
1 “ Natural Philosophy,	“	20 “
3 “ Composition,	“	110 “
1 “ History,	“	25 “
1 “ Geography,	“	25 “
1 “ Book-keeping,	“	34 “
1 “ English Language,	“	12 “
2 “ French Language,	“	23 “
1 “ Stenography,	“	30 “

The expenses of the school amounted in 1856 to 1.500 thalers.

NEW REGULATIONS RESPECTING NORMAL SCHOOLS.—The department of public instruction has issued new regulations for the normal schools, in the same general spirit of the Prussian regulations, but not quite so conservative.

HONOR TO A SUCCESSFUL TEACHER.—Dr. Georgi, director of the Institution for the Blind in Dresden, has been presented with the Danebrog order, by the King of Denmark—the institution with that at Paris having been reported as the best in Europe, by a commission appointed to examine all in different countries.

BURGHER SCHOOL AT LEIPSIK.—This school embraces in its organization two burgher schools, and a real school, under Dr. Vogel as principal, assisted by one vice-principal, 70 male and 8 female assistants. In 1800 there were 2511 pupils in 53 classes. The real school had 174 pupils, under 12 teachers, and two “ candidates,” as assistants. These candidates, have passed favorably their examination as teachers in high schools, and are now teaching for one year on trial before they can be appointed to a place as principal.

AUSTRIA.

EMPLOYMENT OF CHILDREN IN PUBLIC EXHIBITIONS.—Children have been forbidden to be employed in theatres and other public exhibitions. Several decrees from the ministry of instruction indicate educational progress, especially in the real schools.

GALICIA, with a population of 5,100,000, has more than 3000 common schools, 67 higher schools, 55 institutes, and 62 charity schools.

THE TYROL contains 1030 German, and 812 Italian schools.

HUNGARY contains 8,190 common schools; of which 3,500 are Magyar, 2,600 Slavonic, 900 German, 240 Romanic, and 950 mixed. Much is being done to improve the school system, particularly by the establishment of new schools for girls.

PESTH has a complete real school of six classes, and also a school fund of \$70,000.

BAVARIA.

The Public Real Schools of Nuremberg consist of,—1. A provincial industrial school, with 163 pupils; 2. An agricultural school, with 93 scholars; 3. A polytechnic school, with 200 students; 4. A city commercial school, with 300 pupils; 5. The royal school of arts.

INFANT SCHOOLS IN MUNICH.—There are five infant schools, (besides two in the suburbs,) attended by 780 children, who are educated and fed.

A SCHOOL OF HISTORY has been attached to the University of Munich, under the direction of Prof. Sybel.

FRANCE.

CITY SCHOOLS IN PARIS.—There are in Paris 277 city schools, with 50,542 pupils, supported at an annual expense of 1,323,400 francs.

FRANKFORT-ON-THE-MAINE.

STATISTICS.—Frankfort has 1 gymnasium; 7 protestant, 4 catholic, and 2 Israelitish public schools; 38 private schools; 3 infant schools; a school for the deaf and dumb, and another for the blind.

BADEN.

GYMNASIA AND REAL SCHOOLS.—There are in the Grand Duchy, out of a population of 1,356,953, 1,074 pupils in the gymnasia, and 1,872 in the real schools. The real school of Heidelberg has 14 teachers and 219 pupils, of whom only six are in the highest class.

HAMBURG.

KINDERGARTEN.—Doris Lütken, a pupil of Froebel, has a *kindergärten*, in two sections: I. For children of from three to six years, who come at 10 A. M. and remain until 2; and, II. A transitory class, for children of from six to eight. There are two courses: the first in learning to read; the second lasts to the eighth year, when the boys graduate, and the girls enter the school of the institution. Lessons in this second course: Monday, 9-11, stories from history, and writing; 11, singing and plays; 12, dinner; 1, reading; 2, handiwork. Tuesday, 9-11, drawing, writing, and arithmetic; 11, gymnastics and plays; 1, reading. Wednesday, 9-12, geography, writing, paper-work, and plays; 1, reading. Thursday, as Monday; together with biblical narratives. Friday, as Tuesday. Saturday, as Wednesday, with natural history.

There are four other public *kindergärten* in the city. Elsewhere public *crèches* are very rare.

Tuition and board, at Keilhan, (institution of Mesdames Froebel and Midden-dorf for young ladies,) one hundred thalers for six months, one hundred and eighty for a year.

GRAND DUCHY OF HESSE.

NORMAL SCHOOL FOR JEWISH TEACHERS.—An association has just been formed for erecting a Jewish normal school.

ITEMS.

THE NINTH GENERAL ASSEMBLY OF GERMAN TEACHERS, convened this year in Frankfort, on the 3d, 4th, and 5th of June, was attended by 422 teachers, 212 of whom were from Frankfort, and most of the rest from the neighboring states; the two Hesse, 83; Nassau, 50; Baden, 9; Bavaria, 9; Austria, 4; Saxony, 1; Wurtemberg, 6; Thuringia, (the Saxon duchies,) 12; Waldeck, 4; Hanover, 1; Brunswick, 2; Oldenburg, 2; Coethen, 1; Lübeck, 2; Hamburg, 4; and 13 from places in Germany not named. There were also in attendance, 1 from England, 2 from France, 1 from Switzerland, and 1 from Sweden. Lanekhard of Weimar, the editor of the "Reform," (the new educational quarterly,) was in the chair. A discourse of Director Frohlich of Berne, on the homesickness of Germans in Switzerland, on their educational propaganda, and on the institutions of learning in that country, seems to have excited the greatest and most general interest. Lanekhard also spoke on instruction in drawing. No debates. Next year the assembly will convene in Weimar.

SCARCITY OF TEACHERS.—In Kiel, (*Holstein*), teachers for the common schools are in such demand, that pupils in the "preparanden," (preparing for admission to the teachers' seminaries,) are employed. In the district of Potsdam, (*Prussia*), the school authorities have been compelled, from the scarcity of teachers, to arrange a half-yearly seminary course for young men from 19 to 30 years of age. In some of the cantons of Switzerland, upwards of one hundred teachers have abandoned their schools for other vocations, on account of insufficient salaries.

DAILY AND YEARLY EXPENSES OF A SCHOOLMASTER.—The German School Gazette gives the following items of the expenses of a German schoolmaster, father of three little children, with a fixed income of \$135.00, (180 thalers, besides a house, (with three rooms,) and a small additional income as sexton:

Fuel,	\$15.00	Charity,	\$1.50
Clothing,	22.50	Postage,	2.25
Widow tax, (annuity for,)	1.50	Stationery,	2.25
Personal, " . . . . .	.87½	Books,	3.00
Emeriti, " (for invalid teachers,) . . . . .	.75	School tax,	1.50
Fire insurance,	1.50	Burial fund, . . . . .	.87½
Communal tax, . . . . .	.87½	Amusements,	3.00
<i>Annual Expenses:</i>		Total, \$57,37½	

Daily expenses, (besides above,) × 365 = \$113.15, viz.:

Bread,	\$0.10	Sugar,	\$0.00.5
Butter, . . . . .	.02.5	Soap, . . . . .	.00.8
Milk, . . . . .	.01.25	Light, . . . . .	.01.25
Dinner, . . . . .	.12.5	Pocket money, . . . . .	.01.25
Coffee, . . . . .	.01.25	Total, Daily, about 32 cents.	

Total of Annual and Daily Expenses, \$170.52½

EXPENSES IN ETON COLLEGE IN 1560.

AN ACCOUNT OF THE EXPENSES OF THE TWO BROTHERS, MR. HENRY AND MR. WILLIAM CAVENDISH, SONS OF SIR WILLIAM CAVENDISH, OF CHATSWORTH, KNIGHT, AT ETON COLLEGE, BEGINNING OCTOBER 21ST, 2D ELIZABETH, 1560. (From a contemporary manuscript.)

The following curious document, illustrative of the manners as well as of the school-boy expenses of the time, is taken from the *Retrospective Review*, vol. xvi., p. 149.

Mondaie the xxist of October.

In primis bread and beare . . . . .	. vid.	
Boylid mutton and pottage . . . . .	. vd.	
One breast rost mutton . . . . .	. xd.	
One lytull chekyn . . . . .	. iiiid.	
It. for fyre morning and evening in ther chamber ther . . . . .	. iiiid.	
Apud cenam duo filii Fraune. Knolles milit. ibi fuerunt.		
	} iis.	vd.

Tewseday xxii^d of October.

It. for Thomas Folow dynner at the inne the same day . . . . .		. iiiid.
Note that M ^r . Henry and M ^r . W ^m . Cavendysh his brother, w ^h ther man, dyd begonne ther bord at one Rye. Hilles the xxiii ^d day of October, and must pay for them twayne xs. and iis. iiiid. for ther man wekely, over and besydes the woode burned in ther chamber.		
It. the Frydaie the xxv ^t of the same p ^d for eight yardes black fryse at . . . . .		. xiiis.
It. for the making of the same ii gownes . . . . .		. xvjd.
It. the xxvii ^d day for ii qwere whyte paper . . . . .		. viiid.
It. rec. from M ^r . Fletwod ii yardes fryseado at viiis. the yard.		
It. p ^d for iiiii yardes black cotton at viiid. the yard	iis.	. viiid.
It. for the makyng of ii fryseado coates . . . . .		. xxjd.
It. for iiiii duss. buttons to y ^e coates . . . . .		. xvjd.
It. for iii yardes jane fustion	iis.	
It. for canvas to lyne the bodies . . . . .		. viiid.
It. for iii yardes cotten to lyne the same dubletts	iis.	
It. for sylk to styche the same dubletts and makyng lowpes for the holes		. xiijd.
It. for iiiii duss. black sylk buttons for ther dublets . . . . .		. xvjd.
It. for cotton wolfe for the sleeves . . . . .		. iiiid.
It. for makyng the same dubletts . . . . .		. xxjd.
It. for ii yardes fyne earse [Kersey] at xjd. the yard	vis.	. viiid.
It. for one yarde carse to lyne ther hose . . . . .		. xiiid.
It. for ii yardes cotten to lyne the sloppes . . . . .		. xvjd.
It. for one lynen clothe to lyne the same hose . . . . .		. xiiid.
It. for one oz. di. [½ ounce] sylk to styche the same hose	iis.	. vid.
It. for makyng the same hosen	iis.	. iiiid.
It. p ^d for ii combes to my masters . . . . .		. iid.
It. for a breykfast for the cumpanye of formes in the scole according to the use of the scole . . . . .		. vid.
It. the xxix ^t for ii payr showes for M ^r . Henry and M ^r . W ^m . agaynst All Hallowtyde . . . . .		. xvjd.
It. p ^d for the sawlyng of ther old showes . . . . .		. ixjd.
It. p ^d for one payr of knyffes . . . . .		. vid.
It. p ^d for Lucian's Dialogues . . . . .		. iiiid.
It. p ^d for ii penn ^s and cornetts . . . . .		. xd.
It. geven to a man to see bayre bayting and a camell in the colledge, as other sehollers dyd . . . . .		. iiiid.
It. p ^d for ii duss. threde poynts . . . . .		. vid.
It. p ^d for ii payr furred gloves w ^t strynges at them . . . . .		. vd.
It. for the Kyages Grammar	}	sent by M ^r . Fletwod.
It. Mareus Tullius Offic.		
It. Fabulæ Æsopi		
ii bokes of wax light		
It. the xvi ^t day of November p ^d for carryage of the chamber stuff from the warff . . . . .		. iiiid.
It. p ^d for whyte and black threde . . . . .		. id.
It. to an old woman for swepyng and makyng cleane the chamber . . . . .		. iid.
It. p ^d for makyng a key . . . . .		. vid.
It. p ^d for xl tenter hokes to hang the chamber . . . . .		. iiiid.
It. p ^d for mending M ^r . Henry's showe . . . . .		. id.

It. the xxiiii ^t day of November p ^d for iii pound cotten candell	ixd.
It. for iii loode wodde ii bylletts iiis. viiid. and the iii fagot iiis.	
M ^d that Mr. Henry and Mr. W ^m . Cavendysh his brother, and ther s ^v ant, did begon ther bord in the colledge xxv ^t day of November, an ^o supradieto.	
It. p ^d for eyght claspes and holders of ireons for my m ^r feld bedde	xiiid.
It. the xv ^t day of December for ii pond candell	vid.
It. the xx ^t day of December for ii qwere whyte papur for the gentlemen to write uppon	viisid.
It. p ^d for ii payr showes for Mr. Henry and Mr. W ^m . Cavendysh agaynst Chrystenmas	xviisid.
It. p ^d the xxi ^t of December for a cople say gyrdells	iiisid.
It. p ^d for one Isope Fabulls	iiisid.
It. p ^d to my oste Hyll for iiiii wekes bord of Mr. Henry and Mr. W ^m . Cavendysh, and ther s ^v ant, endyng the xx ^t day of November	liis. iiisid.
It. for quarterydge in penne and ynke, brome and byrche	vid.
It. p ^d the xx ^t of Januarie for ii pond candell	vid.
It. p ^d the xxvii ^t day of Januarie for ii payr showes for Mr. Henry and Mr. W ^m . Cavendysh	xvid.
It. p ^d the same day for one qwere whyte paper	iiisid.
It. p ^d the xv ^t day of Februarie for one pond candell	iiid.
It. p ^d for di. elne [half an ell] fyne holland to mend the gentlemen sherts w ^t	xiiid.
It. for di. elne course Holland to be lynyng for ther collers	ixd.
It. for the woman's paynes in doying the same eyght sherts	xiiid.
It. the xi ^t day of M ^c he p ^d for ii qwere whyte paper	vd.
It. the xx ^t day of M ^c he for one pond candell	vid.
It. p ^d for neldes [probably needles]	ob.
It. p ^d for ii payr knytte hose for Mr. Henry and Mr. W ^m . Cavendysh	xxd.
It. p ^d for ii payr of showes agaynst Ester for Mr. Henry and Mr. W ^m . Cavendysh	xvid.
It. for ii duss. threde poynts for them	vid.
It. p ^d the last day of M ^c he for quarterydge, viz. byrche, brome, and ynke	vid.
It. p ^d for tewe duss. black sylk bottenes for mending the doublets	vid.
It. p ^d the xx ^t day of Apryll for menyng both ther showes	iiid.
It. p ^d the fyrst day of May for whyte threde and blak	id.
It. p ^d the xviii ^t of May for ii payr showes agaynst Wytsonyde for Mr. Henry and Mr. W ^m	xviiid.
It. p ^d the vi ^t day of June for sawlyng of one of Mr. Henry's showes	iiid.
It. p ^d for one qwere whyte papur the xii ^t of June	iiid.
It. p ^d the xxiii ^t of June for Mr. Henry and Mr. W ^m . ther quartorrydge, viz. byrch, brome, and potaticio, also lyght	xd.
It. p ^d to my oste Hyll, for one quarter comens endyng the xxii ^d of May xiiis.	iiisid.
It. p ^d for my lytul masters washeng for the same quarter	iiis. iiisid.
It. p ^d to the bursers of Eyton Colledge for one quarter bord dew at the anunciation of our Lady last	iiis. xiiis.
It. p ^d for one gyrdell to Mr. W ^m . Cavendysh the iiiii ^t of Julye	iiid.
It. for menyng both their showes	iid.
It. p ^d for ii payr showes for Mr. Henry and Mr. W ^m . his brother the xxvi ^t of Julye	xvid.
It. p ^d for a Tullies Attycum for Mr. W ^m	iiid.
It. p ^d for one quere whyte papur	iiisid.
It. p ^d the xxviii ^t of September for one lb. candell	iiid. ob.
It. p ^d for ii payr of showes for Mr. Henry and Mr. W ^m . his brother at Mychalmas	xvid.
It. for ther quarterydge in penne, ynke, byrche, and brome	vid.
It. p ^d the viii ^t of October for sawlyng of ii payr of my lytull mayster's shoes	xiiid.
It. p ^d the xx ^t day of October for ii bunches of wax lyghts	id.
It. p ^d xxiii ^t of November for the bord of Mr. Henry and Mr. W ^m . and ther man for one moneth bord	xxiiis.
It. to a carter to carry the stuff to the watersyde	iiisid.
It. to Frenche of Wyndsore for carryeng the stuff to London	vis.
	£. s. d.
Summa totalis	xii. xii. vii.
By your ladyship at Eaton	iii. xviii. x.
By Mouzsole	ix.
	Li. s. d.
Summa totalis of all the whol payments	xxv. xi. v.

VII. CONTRIBUTIONS TO THE LITERATURE OF EDUCATION.

SCIENCE AND RELIGION. A Sermon delivered in Albany during the session of the American Association for the Advancement of Science, by Mark Hopkins, D. D. Albany. 1856. 52 pages.

RELIGIOUS BEARINGS OF MAN'S CREATION. A Discourse delivered in Albany during the session of the American Association for the Advancement of Science, by Edward Hitchcock, D. D., LL. D. 35 pages.

RELATIONS OF SCIENCE AND RELIGION. A Discourse delivered in Albany during the session of the American Association for the Advancement of Science, by Rt. Rev. J. H. Hopkins, D. D., LL. D. Albany. 1856. 30 pages.

HANDS: BRAIN: HEART. An Address delivered before the Mass. Charitable Mechanics Association, on occasion of the Eighth Exhibition, Sept. 24, 1856, by Rev. F. D. Huntington, D. D. Boston. 1856. 35 pages.

TRUANCY AND ABSENTEEISM. A Special Report of the Commissioner of Public Schools on Truancy and Absenteeism in Rhode Island, made by order of the General Assembly at its May session, Providence, 1856. 28 pages.

LIBERAL EDUCATION. An Address delivered before the Union Literary and Philaethean Societies of Hanover College, at the Annual Commencement, August, 1856, by James C. Moffat. Philadelphia. 1857. 24 pages.

THE WEST: ITS CULTURE AND ITS COLLEGES. An Oration delivered at the Annual Commencement of Iowa College, Davenport, Iowa, July, 1855, by George F. Magoun. Davenport. 1855. 34 pages.

RELIGION AND EDUCATION. An Oration delivered at the Commencement of Iowa College, Davenport, Iowa, 1856, by the Rt. Rev. Truman M. Post, D. D., of St. Louis. Davenport. 1856. 27 pages.

SOCIETY AND RELIGION. A Sermon for California, delivered on Sabbath evening, July 6, 1856, at the installation of Rev. E. S. Lacy, as Pastor of the First Congregational Church, San Francisco, by Horace Bushnell, D. D. Hartford L. E. Hunt. 1856. 32 pages.

INAUGURATION OF THE DUDLEY OBSERVATORY, at Albany, August 28, 1856 139 pages. Albany. 1856.

PROCEEDINGS AT THE RECEPTION AND DINNER IN HONOR OF GEORGE PEABODY, ESQ., of London, by the citizens of the old town of Danvers, Oct. 9, 1856; to which is appended an Address by Hon. Rufus Choate at the Dedication of the Peabody Institute, with the exercises at the laying of the Corner Stone. Boston. 1856. 195 pages.

DOES THE COMMON SCHOOL SYSTEM PREVENT CRIME? Newark. 1856. 20 pages.

THE TEACHER. Moral Influences employed in the Instruction and Government of the Young. A new and revised edition. By Jacob Abbott. New York: Harper & Brothers. 1856. 353 pages.

DEMANDS OF THE AGE ON COLLEGES. Speech delivered by Hon. Horace Mann, President of Antioch College, before the Christian Convention, October 8, 1854. New York: Fowler & Wells. 1857.

THE MEANS AND ENDS OF UNIVERSAL EDUCATION. By Ira Mayhew. New York: A. L. Barnes & Co. 1857. 468 pages.

COLLEGE EDUCATION AND SELF EDUCATION.

A Lecture delivered in University College, London, introductory to the Session of the Faculty of Arts and Laws. By David Masson, Professor of Literature, University College, London.

Scope of Education.—The business of education, in its widest sense, is co-extensive with a man's life: that it begins with the first moment of life, and ends with the last; and, that it goes on not alone in buildings like that in which we are now assembled, but in every combination of place, company, and circumstance, in which a man may voluntarily station himself, or into which he may be casually thrust.

I will here understand education as a process extending only over that preparatory period of life which, with young men, may be supposed to close about the twentieth or twenty-fifth year. And, I will also understand the word as referring chiefly to those means, whether organized or casual, by which, during that period of life, knowledge is acquired and accumulated.

The School of the Family.—The first school in which a man is bound to learn, and in which every man does, in spite of himself, learn more or less, is the school of his own ancestry, parentage, and kindred. There is no man, however strong his character, and however migratory his life, in whose mature manner of thought there are not traces of impressions produced on him by the family faces amid which he first opened his eyes, the family joys or griefs with which his childhood laughed or sobbed, the family stories and traditions to which his childhood listened. Happy they to whom this has been a kindly school; the homes of whose infancy have been homes of peace, order, and courtesy; over whose early years just fatherly authority and careful motherly gentleness have watched; in whose experience there has been no contradiction between the sense of right and the ties of blood; and who can look back upon progenitors, remembered for probity, courage, and good citizenship, and round among living kinsmen well placed and well respected in the world. This is not the common notion of pedigree. That man were, indeed, little better than a liar who, counting high historic names among his ancestors, should pretend to be careless of the fact; but, the kind of pedigree of which we speak is to be found in the humblest lineage of the land; and, at this hour, over broad Britain, there are, as we all know, families neither rich nor noble, to have sprung from which, and to have been nursed on their unrecorded fireside legends, would, for the purposes of real outfit in life, be better than to have been born in a castle and had the blood of all the Plantagenets. And yet, on the other hand, even those,—and they are many,—to whom this school of family and kindred has been a hard school, may there, also, have received many a powerful and useful lesson. Men do learn very variously; and there is an education of revolt and reaction, as well as of acquiescence and imitation. The training received in the school of family and kindred may not have been a genial or promising one; it may not be from the past in his own lineage that one can derive any direct stimulus or inspiration; the home of the early education may have been one of penury, chill, and contention; a veritable picture of a household, with its household gods broken; and yet, even so, the culture may have been great and varied,—albeit, sometimes, a culture of strength at the expense of symmetry.

The School of Locality.—I have always felt disposed to attach a peculiar

reverence and a peculiar sense of value to that arrangement, institution, or whatever you choose to call it, common to most societies, which we in Great Britain designate by the term neighborhood or parish. That every man should be related, and should feel himself related, in a particular manner, to that tract of earth which he is taught to regard as his parish, the assigned local scene of his habitation and activity on this side the grave, seems to me a natural and beautiful arrangement, which our political system would do well to respect, use, and consecrate. The limits of this smallest and most natural of territorial divisions may be variously defined. You may figure a parish as a tract of earth containing and supporting two thousand inhabitants, the ideal of a rural parish; or, you may figure it as a tract of earth underlying the sound of a particular church-bell. That this smallest of territorial divisions should merge and fit into larger and still larger divisions,—the district, the county, and so on,—is also necessary and natural; but, that a man's closest relations ought to be with his own parish and neighborhood, that it is with the natural and social phenomena lying around him on this piece of earth that he is bound primarily to make himself acquainted, and that all the elementary requirements of his life ought to be provided for by apparatus there set up, seems to me sound doctrine. For a man not to be so locally related during at least a portion of his life,—for a man to be shifting about in his youth from place to place, not remaining long enough in any to root his affections among its objects and details,—seems to me a misfortune. In point of fact, however, few are in this predicament. Removal from one's native place is common enough, and is becoming more common; but, almost all,—including even those exceptional persons who, having been born at sea, are reputed to belong to the parish of Stepney,—are located, during some part of their lives, in some one district, with the whole aspect and circumstance of which they become familiar, and which they learn to regard as native ground. Now, it is important to remark that there is no district, no patch of the habitable earth, in which a man can be placed and bred, but there are within that spot the materials and inducements toward a very considerable natural education. Nay, more, there is, to all ordinary intents and purposes, no one district in the natural and artificial circumstance of which there is not a tolerable representation and epitome of all that is general and fundamental in nature and life everywhere. Take Great Britain itself. Every British parish has its mineralogy; every British parish has its geology; every British parish has its botany; every British parish has its zoölogy; every British parish has its rains, its storms, its streams, and, consequently, its meteorology and hydrology; every British parish has its wonders of nature and art, impressive on the local imagination, and, in some cases, actually exerting a physical influence over the local nerve; and, though these objects and wonders vary immensely, though in one parish geological circumstance may predominate, in another botanical, and in a third hydrological or architectural; though in one the local wonder may be a marsh, in another a rocky cavern, and in a third an old fort or a bit of Roman wall; yet, in each there is a sufficient touch of what is generic in all. Over every British parish, at least when night comes, there hangs,—splendid image of our identity at the highest,—the same nocturnal glory, a sapphire concave of nearly the same stars. Descend to the life and living circumstance of the community, and it is still the same. There is no British parish in which all the essential processes, passions, and social ongoings of British humanity, from the chaffering of the market-place up to madness and murderous revenge, are not proportionately illustrated and

epitomised. There is no British parish that has not its gossip, its humors, its customs, its oracular and remarkable individuals, its oddities and whimsicalities, all of which can be made objects of study. Finally, there is no British parish that has not its traditions, its legends, and histories, connecting the generation present upon it with the world of the antique. And, with some modification, it is the same, if, passing the limits of Britain, we extend our view to foreign lands and climes. The circumstance, physical, artificial, social and historical, of a district in Italy or in Spain, is largely different from the corresponding circumstance of a district in Britain; much more so the circumstance of a district in South America or Hindostan; and yet, generically, there is so much that is common, that, after all, a person educated in the midst of Italian or Spanish circumstance, has about the same stock of fundamental notions of things as an Englishman has, and that a Hindoo jest will pass current in Middlesex. Every man, then, learns a vast deal,—a large proportion of our surest knowledge is derived,—from this education which we all have, in spite of ourselves, in the school of native local circumstance. It appears to me that, in our educational theories, we do not sufficiently attend to this. It appears to me that, among all our schemes of educational reform, perhaps the most desirable would be one for the organization and systematic development of this education of local circumstance, which is, at any rate, everywhere going on. This, I conceive, is the true theory of the "teaching of common things." Every child born in a parish and resident in it, ought to have, as his intellectual outfit in life, a tolerably complete acquaintance with the concrete facts of nature and life presented by that parish; and, in every parish, there ought to be a systematic means for accomplishing this object. Every child ought to carry with him into life, as a little encyclopædia, a stock of facts and pictures collected from the scene of his earliest habitations and associations; ought to be familiar with that miscellany of natural and artificial circumstance which first solicited his observation in the locality where he was brought up; from its minerals, and wild plants, and birds, and molluscs, up to its manufactures, its economics, its privileges and by-laws, and its local mythology or legends. A reformed system of parochial education ought to take this in charge, and to secure to the young some instruction in local natural history, local antiquities, local manufactures and economics, and local institutions and customs. Meanwhile, in the absence of any systematic means of accomplishing the object, we see that everywhere healthy boys do, by their own locomotion and inquisitiveness, contrive to acquire a stock of concrete local fact and imagery. We see them roaming over the circle of their neighborhoods, singly and in bands, ascending hills, climbing trees and precipices, peeping into foundries, workshops, and police offices, peering, in short, into every thing open or forbidden to them, and, in the most literal sense of the phrase, pursuing knowledge under difficulties. And, here, accordingly, in addition to constitutional difference and the difference of family schooling, is another source of the intellectual diversity we find among grown-up men. The education of local circumstance, as we have said, is by no means necessarily a narrow education; all that is general and essential everywhere, whether as respects the main facts of nature or the habits and laws of the human mind, is repeated in miniature in every spot. Kant never slept out of Königsberg; and Socrates never wished to go beyond the walls of Athens. Yet, on the other hand, difference of local educating circumstance is one of the causes of difference of intellectual taste and style in mature life. No two districts or parishes are precisely alike in their suggestions and

intellectual inducements. Some localities, as we have said, allure to geology, others to botany, others to fondness for landscape and color, others to mechanics and engineering, others to archæology and historical lore. Of those supposed three hundred youths, for example,—even omitting such of them as had been born and brought up abroad, amid scenes, and a vegetation, and costumes, and customs, aye, and under constellations different from our own,—hardly any two of the British-born would be found trading intellectually, so to speak, on the same stock of recollected facts and images. Some might have been born on the sea-coast, and the images most familiar to their memories would be those of rocks, and shingle, and a breaking surf, and brown fishing boats, and gulls dipping in the waves, and heavy clouds gathering for a storm.

“ I see a wretched isle, that ghost-like stands,
Wrapt in its mist-shroud in the wintry main ;
And now a cheerless gleam of red-ploughed lands,
O'er which a crow flies heavy in the rain.”

Others might have been born and bred in sweet pastoral districts, and the images most kindly to their fancy would be those of still green valleys, and little streams flowing through them, and flocks, led by tinkling sheep-bells, cropping the uplands. Others might be natives of rich English wheat flats; others of barren tracts of hill and torrent. Some might have been born in provincial towns, where the kinds of circumstance peculiar to street-life would preponderate over the purely agricultural or rural; others might be denizens of the great metropolis itself, with its endless extent of shops, warehouses, wharves, churches, and chimneys. In large towns, and, above all, in London, it is needless to say, the fact to be noted is the infinite preponderance of artificial and social circumstance over that of natural landscape, and its infinitely close intertexture. The spontaneous education there, accordingly, is chiefly in what is socially various, curious, highly developed, comic, and characteristic. So strong, however, is the instinct of local attachment, that natives of London do contract an affection for their own parishes and neighborhoods, and an acquaintance with their details and humors, over and above their general regard for those objects which claim the common worship of all. In short, however we turn the matter over, we still find that a large proportion of the most substantial education of every one consists of this unconscious and inevitable education of local circumstance; and that, in fact, much of the original capital on which we all trade intellectually during life is that mass of miscellaneous fact and imagery which our senses have taken in busily and imperceptibly amid the scenes of their first exercise. In the lives of most men who have become eminent, whether in speculative science or in imaginative literature, a tinge of characteristic local color may be traced to the last. Adam Smith meditated his “Wealth of Nations” on the sands of a strip of Fifeshire sea-coast, and drew the instances which suggested the doctrines of that work to his own mind, and by which he expounded them to others, from the petty circumstance of a small fishing and weaving community close by. And, in Shakspeare himself, widely as his imagination ranged, it will be found that, in his descriptions of natural scenery at least, large use is made of the native circumstance of his woody Warwickshire, with its elms, its willows, its crow-flowers, daisies, and long-purples. However migratory a man has been, and however thickly, by his migrations, he may have covered the tablets of his memory with successive coatings of imagery, there are times when, as he shuts his eyes, all these seem washed away, and the original photographs of his early

years,—the hill, the moor, the village spire, the very turn of the road where he met the solitary horseman,—start out fresh as ever. Nay, more, it will be found, (and this is a fact of which Hartley and his laws of the association of ideas have never made any thing to the purpose,) that perpetually, underneath our formal processes of thinking, apparently independent of these processes, and yet somehow playing into them and qualifying them, there is passing through our minds a series of such unbidden reappearing photographs, a flow of such recollected imagery.

The School of Travel, Books and Friendship.—Under the head of the education of travel I include, as you may guess, all that comes of migration or change of residence; and my remarks under the former head will have enabled you to see that all this, important and varied as it may seem, consists simply in the extension of the field of observed fact and circumstance. All the celebrated effects of travel, purely as such, in enlarging the mind, breaking down prejudice, and what not, will be found to resolve themselves into this. If I pass now to the education of *books*, here also I find that the same phrase,—extension of the field of circumstance,—answers to a good deal of what this education accomplishes. Books are travel, so to speak, reversed; they bring supplies of otherwise inaccessible fact and imagery to the feet of the reader. Books, too, have this advantage over travel, that they convey information from remote times as well as from distant places. “If the invention of the ship,” says Bacon, “was thought so noble, which carrieth riches and commodities from place to place, and consociateth the most remote regions in participation of their fruits, how much more are letters to be magnified, which, as ships, pass the vast seas of time, and make ages so distant to participate of the wisdom, illuminations, and inventions, the one of the other!” In these words, however, there is a suggestion that the education of books consists not alone in the mere extension of the field of the concrete. Books admit us to the accumulated past thought, as well as to the accumulated past fact and incident of the human race; and, though much of that thought,—as, for example, what comes to us in poetry,—consists but of a new form of concrete, (the concrete of the fantastic or ideal,) yet a large proportion of it consists of something totally different,—abstract or generalized science. It is in the school of books, more particularly, that that great step in education takes place,—the translation of the concrete into the abstract, the organization of mere fact and imagery into science. It is in conversation with books, more particularly, that one first sees unfolded, one by one, that splendid roll of the so-called sciences,—mathematics, astronomy, mechanics, chemistry, physiology, moral science, and politics, with all their attached sciences and subdivisions,—in which the aggregate thought of the human race on all subjects has been systematized; and that one first sees all knowledge laid out into certain great orders of ideas, any one of which will furnish occupation for a life. This great function, we say, peculiarly belongs to books. And what shall we say of the education of *friendship*? In what does this consist, and what does it peculiarly achieve? It consists, evidently, in all that can result, in the way of culture, from a closer relation than ordinary with certain selected individuals out of the throng through which one passes in the course of one's life. It is given to every one to form such close sentimental relations with perhaps six or seven individuals in the course of the early period of life; and these relationships,—far easier at this time of life than afterward,—are among the most powerful educating influences to which youth can be subjected. Friendship educates

mainly in two ways. In the first place, it educates by disposing and enabling one to make certain individual specimens of human character, and all that is connected with them, objects of more serious and minute study than is bestowed on men at large; and, in the second place, it takes a man out of his own personality, and doubles, triples, or quintuples his natural powers of insight, by compelling him to look at nature and life through the eyes of others, each of whom is, for the time being, another self. This second function of friendship, as an influence of intellectual culture, is by far the most important. There are, of course, various degrees of friendship, and various exercises of it in the same degree. There is friendship with equals, friendship with inferiors, and friendship with superiors. Of all forms of friendship in youth, by far the most effective, as a means of education, is that species of enthusiastic veneration which young men of loyal and well-conditioned minds are apt to contract for men of intellectual eminence within their own circles. The educating effect of such an attachment is prodigious; and happy the youth who forms one. We all know the advice given to young men to "think for themselves;" and there is sense and soundness in that advice; but, if I were to select what I account perhaps the most fortunate thing that can befall a young man during the early period of his life,—the most fortunate, too, in the end, for his intellectual independence,—it would be his being voluntarily subjected, for a time, to some powerful intellectual tyranny.

Book Education.—All our schools, all our colleges, all our libraries, almost every thing, in fact, that we recognize as an educational institution, with the partial exception of recently founded industrial schools and schools of practical art, are but a machinery for forwarding what may be called book education. Here, however, we must make a distinction. This extensive machinery of book education, which is set up amongst us, consists of two portions. One portion has for its object simply the effective teaching of the art of reading, with its usual adjuncts; another has for its object the guidance of the community in the use of that art when it has been acquired. Let us say that the first function is performed by the *schools* of the country, and that the second is reserved for the *colleges* of the country. This does not exactly accord with the fact, many of our so-called schools going far beyond the mere teaching of reading and writing, and undertaking part of the duty we have assigned to colleges; and, many of our so-called colleges, alas! having devolved upon them too much of the proper drudgery of schools.

Teach a man to read and write perfectly, and the rest, generally speaking, is in his own power. He is no longer a Helot; you have put him in possession of the franchise of books. With this possession, and with such access as he may have to libraries, he may be any thing he pleases and has faculty for. By reading in one direction, he may make himself a mathematician; by reading in another, he may become an adept in political economy; by reading in many he may become a variously cultured man. The accomplishment of perfect and easy reading in one's own language is, after all, the grand distinction between the educated and the non-educated. There are, indeed, degrees and differences among those above this line; but, between those above it and those below it there is a great gulf.

Self Education.—Once in possession of the franchise of books, a man, as we have said, has, generally speaking, the rest in his own power. There is no limit to what, with talent and perseverance, he may attain. He may become a

classical scholar and a linguist; or, he may grow eminent in speculation and the sciences. We have instances in abundance of such perseverance; and we have a name for those who so distinguish themselves. A person who, availing himself of the spontaneous means of education afforded by the other great schools, which we have enumerated,—the school of family, the school of native local circumstance, the school of travel, and the school of friendship, and having, also, somehow or other, been put in possession of the franchise of books,—conducts the rest of his book education himself, and conducts it so successfully as to become eminent, is called a self-educated man. Society often distinguishes between self-educated men and men who are college-bred,—that is, who have not only been taught to read and write in plain schools, but have had the benefit, for a certain period of their more advanced youth, of that higher pedagogic apparatus which directs and systematizes reading, and, to some extent, supercedes its use by imparting its results in an oral form. Now, the question has been raised, whether this higher pedagogic apparatus,—whether colleges, in fact,—are really of so much use as has been fancied; and, whether it would not be enough if, in these days, pedagogy were to stop at the first stage,—that of thoroughly teaching the mechanical art of reading,—and were then to turn the youth of a community so instructed loose upon the libraries and the miscellaneous teaching of life. This question is gaining ground, and not without apparent reason. Of the men of our own day who are eminent in station, influential in society, and distinguished in art, science, and letters, there are many who have not received what is generally called an academic education. I have only to glance round among those who are at present conspicuous in the various departments of British literature, and I find not a few who never studied in any university. And so, if I look back upon the past. The very king, the unapproachable monarch of our literature was a Warwickshire man, who had little Latin, less Greek, and, perhaps, no mathematics. True, the larger number of those examples of intellectual eminence attained without academic education, would be found to be not properly self-educated men, in the precise sense in which we are now using the term, but, to some extent, college-bred. Over Great Britain, and in England in particular, there are hundreds of public schools and private seminaries which do, though not to the same length as the great universities, perform the functions, as we have defined them, of colleges; and, it is in these that by far the largest proportion of young men, even of well-circumstanced families, are educated. Shakspeare was taught at the grammar-school of his native town, where the boys at this day wear square academic caps, whatever they did in his; so that the proper measure of Shakspeare's education, even scholastically, is that he was carried as far on by the pedagogy of his time as at least ninety-nine per cent. of his contemporaries. Perhaps the number of self-educated prodigies, in the present restricted sense of the term, is not so great as supposed. Still, there are examples of eminent men, self-educated even in this extreme sense of the term; that is, of men who, having received absolutely nothing from formal pedagogy but the plain faculty of reading and writing, if always that, have acquired all their subsequent book education privately for themselves.

Educational office of Colleges.—The question simply is whether, when a community has, by one set of educational apparatus called schools, put its young men in possession of that faculty of reading and taste for the same, which are the key to all the knowledge contained in books, it may then leave them to their own private perseverance, according to their inclinations and opportunities;

or, whether finer results may not be attained by handing them over, at this point, to another and a higher kind of educational apparatus, called colleges, which will take charge of them a few years longer, assist them in their first inroads upon the vast mass of thought and knowledge accumulated in books, and, in part, supersede and supplement that method of acquiring knowledge by oral instruction.

In the first place, then, colleges fulfill this important function, that they guarantee to society a certain amount of competency in certain professions, in which previously guaranteed competency is necessary. The professions most ostensibly in this predicament are those of law, theology, and medicine; but, there are numberless other professions for the efficiency and respectability of which a certain amount of attested general acquirement, as well as of special professional training, in those who engage in them, is absolutely requisite. This function of insuring society against the intrusion of quacks and ignorant pretenders into important professions, is performed, as well as it admits of being performed, by colleges. Before a man can legally practice medicine, for example, it is required that he shall have attended courses of lectures, not only in what appertains to medical science but also in those general subjects which enter into a liberal education. And so, in various ways, and under various forms of regulation, with other professions.

It is not only with a view to professional qualification that persons are the better for being detained, whether they will or not, in places where knowledge is systematically administered. Indolence, love of amusement, preference for the pleasant, the trivial, and the immediate, over what is important, substantial and lasting, are besetting sins even in manhood, but in youth they are especially natural. If a body of young men, fresh from school, were turned loose upon the huge library of printed literature, to find their way into it and through it as they liked, many of them, doubtless, would prove insatiable readers; but, it is questionable whether many of them, of their own accord, would choose the right directions, or would pursue their reading beyond that point where toil and patience began to be requisite. But, what is clearly wanted is a kind of intellectual generalship, if we may so speak, that shall muster youth in front of the masses of literature which have to be pierced through and conquered; drill them; infuse a bold spirit into them; point out to them the proper points of attack, the redoubts where glory is to be won; and, while leaving them as much scope as possible for individual energy and inclination, lead them on, according to a plan, in regular order and column. This duty is undertaken by colleges. There young men are assembled in classes, the business of which has been arranged, however imperfectly, according to an idea of the best manner in which knowledge may be partitioned. They are obliged to be present so many hours a day in the selected classes, and there to hear lectures on various subjects deliberately read to them, whether they will or not; and thus, as well as by the discipline of examinations and the like, certain orders of ideas as well as certain intellectual tendencies are worked into them which they could not otherwise have acquired, and which place them at an advantage all the rest of their lives. That I have not exaggerated this use of colleges I believe observation will prove. I believe it will be found that many of our first speculative and scientific minds have derived the special tendencies which have made their lives famous from impulses communicated in colleges. I think, also, it will be found that strictly self-educated men,—of course I except the higher and more illustrious

instances,—do not, as a body, exhibit the same tenacity and perseverance in pushing knowledge to its farthest limits as academic men of equal power. Their disposition, in most instances, is to be content with what I will call proximate knowledge,—that which lies about them and can be turned to immediate account. It is in current politics, in general literature, and in popular matter of thought, that they move and have their being; upon the laborious tracks of abstract science, or difficult and extreme speculation, they do not so often enter. Or if, occasionally, we do see a self-taught geologist, a self-taught botanist, or a self-taught mathematician, then, not unfrequently, there is an egotistic exultation over the labor gone through, and an exaggerated estimation of the particular science overtaken in its relations to the whole field of knowledge. There is too much, so to speak, of the spirit of the private soldier, whose idea of the field is but the recollection of his own movements. There are, I repeat, examples of self-educated men of so high an order as to be free from these faults. Still, I believe what I have said will be found, in the main, correct. Nay, abroad in society generally there is, I believe, too much of that spirit of contempt for the high, the profound, and the elaborate, in the way of speculation, which the worldly success of half taught men of good natural abilities is calculated to foster.

Even supposing that men could map out the field of knowledge for themselves, determine at a glance into what great orders of ideas the past thought of the human race could be best distributed for the purposes of study, and spontaneously go to work upon these in the right spirit, still, in the detailed prosecution of any study by means of books, assistance would be necessary. Accordingly, one use of colleges is that they direct and systematize reading. The art of recommending good books, and of leading on from one book to another, is one of the most useful qualifications of a teacher, and it may be carried to extraordinary perfection. Perhaps, indeed, we do not sufficiently attend to this function of colleges; perhaps we do not sufficiently attend to the fact that, since colleges were first instituted, their place in the general system of education has been greatly changed. When colleges were first instituted, books were scarce, and difficult of access; men were then their own encyclopædias; and, every Thomas Aquinas, Duns Scotus, or other ornament of a university, was bound to be a walking incarnation of the *totum scibile*. Hence, a course of lectures in those days was expected to be,—whatever might be its other merits,—a digest of all accessible information on the subject treated. Now, however, that there exist, on all subjects, books which it is impossible for even the best living thinker wholly to supersede, such lectures of a mere digest and detail are out of place; and, the business of teachers is rather to direct the reading of the pupils, and to reserve their original disquisitions for those points where they can hope to modify and extend what has been previously advanced.

Quite as much now as in those remote times when colleges were first set up in Europe they afford to youth that highest of all educational privileges, the chance of coming into personal contact with men either of original speculative power in their several departments, or of unusual fervor and enthusiasm, kindling into zeal all that come near them, and imparting life and fire to all that they touch. I have spoken of the wonderful efficacy of this influence casually encountered in society; but, it is the very nature of colleges to concentrate it and make it accessible.

Finally, I believe there is something in the oral method of conveying knowledge.

whether after the tutorial or after the professorial fashion, but, perhaps, most effective in the latter, which fits it to perform certain offices of instruction far better than they could be performed by private communion with books. I will not enlarge on this topic. I will only say, that it appears to me that the forms and circumstantialities of oral teaching are such that any thing in the shape of a general doctrine or principle is far more expeditiously and impressively inculcated, in this mode, through the ear, than it can usually be taken in through the eye; and that, consequently, any science, such as political economy, the proper teaching of which consists in the slow infiltration into the minds of the pupils of a series of such general doctrines, one by one, as well as those parts of all sciences which consist of massive single propositions, can be best taught by lectures and examinations. Curiously enough, this is precisely that function of colleges which, after the revolution in our educational system, caused by the increase of books, would still, at any rate, be reserved for them.

[The views of the efficiency of oral or professorial teaching, so felicitously expressed by Prof. Masson in the above extracts, are held by Prof. Vaughan, in his pamphlet entitled "*Oxford Reform and Oxford Professors.*"]

The type is a poor substitute for the human voice. It has no means of arousing, moderating, and adjusting the attention. It has no emphasis except italics, and this meagre notation can not finely graduate itself to the needs of the occasion. It can not in this way mark the heed which should be specially and chiefly given to peculiar passages and words. It has no variety of manner and intonation, to show, by their changes, how the words are to be accepted, or what comparative importance is to be attached to them. It has no natural music to take the ear, like the human voice; it carries with it no human eye to range, and to rivet the student, when on the verge of truancy, and to command his intellectual activity by an appeal to the common courtesies of life. Half the symbolism of a living language is thus lost when it is committed to paper; and, that symbolism is the very means by which the forces of the hearer's mind can be best economized, or most pleasantly excited. The lecture, on the other hand, as delivered, possesses all these instruments to win, and hold, and harmonize attention; and, above all, it imports into the whole teaching a human character, which the printed book can never supply. The Professor is the science or subject vitalized and humanized in the student's presence. He sees him kindle into his subject; he sees reflected and exhibited in him, his manner, and his earnestness, the general power of the science to engage, delight, and absorb a human intelligence. His natural sympathy and admiration attract or impel his tastes, and feelings, and wishes, for the moment, into the same current of feeling; and, his mind is naturally, and rapidly, and insensibly strung and attuned to the strain of truth which is offered to him.

One peculiarity and advantage, too, in this mode of communication, attends a comprehensive lecture, which is not shared by a book. All who hear it, must hear it at the same moment; it affects a large number of individuals at the same time; it, therefore, becomes straightway more or less a topic of conversation or conversational debate, in which the comparison and contribution of impressions tends to diffuse, and, in some degree, equalize, the benefit; especially in an academical city, where the dispersed audience quits the lecture-room to meet again in the halls and common-rooms of the university within a few hours.

XVIII. NOTICES OF BOOKS.

1.—*Knowledge is Power; a view of the productive forces of modern society.* By CHARLES KNIGHT. Revised and edited with editions by DAVID A. WELLS, A. M. Boston: Gould & Lincoln. 12 mo. pp. 503.

An entertaining and valuable exposition of the infinite mastery which organization and invention have given to men over the masses, the forces, and the life, of the unintelligent creation. Few books of so small size contain so many startling details and generalizations explicative of the force of mind, and of its actual victories over matter, in production and almost in creation.

2.—*The Rural Poetry of the English Language; illustrating the Seasons and Months of the Year, their Changes, Employments, Lessons, and Pleasures, Topically Paragraphical; with a complete Index.* By JOSEPH WILLIAM JENKS, M. A., lately Professor of Languages in the Urbana University, Ohio. Boston: John P. Jewett & Co. Cleveland, Ohio: Jewett, Proctor & Worthington. New York: Sheldon, Blakeman & Co. 1856. Royal 8vo. pp. 544.

This royal octavo volume, beautifully illustrated printed and bound, is a monument of well-directed labor on the part of Prof. Jenks to bring the chief rural poetry of the language together in an attractive form. As a prize or a gift for Christmas, or New Year, or Birth-day, it is worth a dozen of the volumes usually presented on such occasions. Although we have most of the poetry in other volumes in our library, we would gladly purchase this, to have ready access to the elaborately prepared and copious topical index at the close of the volume.

3.—*My Schools and Schoolmasters.* By HUGH MILLER. Boston: Gould & Lincoln. 1854. 12 mo. pp. 537.

This is the plainly told and intelligent story of Mr. Miller's own life. It is well known that he has risen by his own exertions—and the task is much more difficult in Great Britain than in America—from being merely a day-laborer at stone-cutting, to a recognized and high position as a man of science and a writer; and we have here his own detail of his aspirations and struggles, and the various agencies and helps by which his education and character have been achieved.

4.—*Recollections of a Life-Time, or Men and Things I have seen: in a series of Familiar Letters to a Friend.* By S. G. GOODRICH. 2 vols. New York: Miller, Orton & Mulligan. 1856.

We anticipated great pleasure in the perusal of a work of this description from the varied experience and ready pen of Peter Parley, and we have not been disappointed in the glance which we have been able to give through these well-filled volumes. We shall recur to them again for extracts.

5.—*Bacon Essays; with Annotations.* By RICHARD WHATELY, D. D., Abp. of Dublin. From the Second London Edition. New York: C. S. Francis. 1 vol. 556 pages.

This edition,—the text of Bacon and annotations of Whately,—is every way one of the most remarkable books in the language, and should be in every library, and be read by everybody.

[We are obliged to postpone other Notices to our next issue, when we will try to clear our table of books received.]

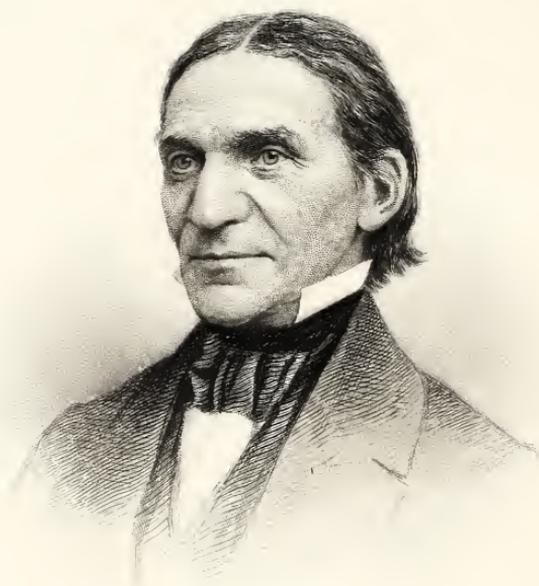
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*Yours truly,
C. Peirce*



[Faint, illegible handwritten text]

I. MEMOIR OF CYRUS PEIRCE.

BY REV. SAMUEL J. MAY.

CYRUS PEIRCE, for fifty years a teacher in schools of different grades, and, for eight years, a "teacher of teachers," as the first Principal of the first Normal School in the United States, was born August 15th, 1790, in the town of Waltham, Massachusetts, the youngest of twelve children of the same parents. He spent his boyhood at home, on the retired farm, which his father and ancestors, for several generations before him, had cultivated. His physical constitution, hereditarily sound, was confirmed by the pure air, wholesome food, genial sights and sounds, early hours of retirement and rising, and by a due participation in the toils and the sports of country life. He enjoyed the good influences of a well-ordered family, and of a steady, judicious parental discipline.

At a very early age, he was sent to the district school, and went through the dull routine then usually pursued with little children. The only intimation we have been able to gather from his childhood, that was at all prognostic of his manhood, is that, when only five or six years of age, he thought his teacher was not judicious, was not teaching him as much as she should, nor giving her instructions in the best manner. He intimated that, at some future time, he should himself keep school, and then he would show how it ought to be done. Very probably, some impression, made upon his mind at that early day, did give the direction to his course in life.

Perceiving his inclination to thoughtfulness and study, his parents determined to give him a collegiate education. Accordingly he was sent to Framingham Academy, and afterward was placed under the tuition of Rev. Dr. Stearns, of Lincoln, at that time reputed to be a thorough scholar.

In 1806, Cyrus Peirce entered Harvard College. There he soon gained, and, to the end of his course, maintained the reputation of a pure, upright young man, a faithful, indefatigable student, and an accurate, though not a brilliant recitation, scholar. One of his classmates has favored me with the following account of him at that time:

The uniform success of Cyrus Peirce, in whatever he undertook, was owing to his singular fidelity and perseverance. No one could have been more faithful,

patient, persevering, than he was. Whatever the subject of study might be, his mind took hold of it with a tenacious grasp, and never let go, until he had reached a satisfactory result. In this particular, I have never known his equal. The action of his intellect was rather slow, but he investigated thoroughly and reasoned soundly. I therefore always considered his statement of facts, unquestionably true; and his opinions as entitled to especial regard. His very studious, as well as reserved habits, kept him much of the time in his room. At recitations, from which he was never absent, no one gave better evidence of a faithful attention to the exercises, in whatever department they might be. He always showed,* when "taken up," that he had "got the lesson." Yet, owing to his great modesty, his slow utterance, his entire lack of the faculty of "showing off," he did not pass for half his real worth as a scholar. He was thorough in whatever he undertook. He was inquisitive and candid. The exact truth was his object; and he patiently removed every obstacle in the way of his attaining what he sought.

During his Sophomore year, in the winter of 1807-8, Cyrus Peirce commenced his labors as a school-teacher, in the village of West Newton, the same town, and not far from the very spot, to which he came, nearly fifty years afterward, to close his career, and crown his brow with the last of those unfading laurels, which encircle it, in the eyes of all who have felt or seen his influence as a *Teacher of Teachers*.

In order to appreciate duly the value of his services, one must know what was the character of our common, especially our rural district schools, *fifty years ago*. Those who commenced their education since maps and globes were introduced; since the exclusive right of Dilworth's and Webster's Spelling Books, and Morse's Geography, and Daboll's Arithmetic, to the honor of text-books, was disputed; since blackboards were invented, or belts of black plastering, called blackboards, have come to be considered indispensable in our school-rooms; those who commenced their education since Josiah Holbrook's, and such like simple apparatus, intimated to teachers how much more intelligible and attractive, visible illustrations are than verbal descriptions,—how much more easily any thing which is understood is grasped by the mind, and held in the memory; especially those who have commenced their career since Warren Colburn made so plain, so self-evident, "the recondite powers and mysterious relations of numbers,"—showed how much of Arithmetic may be learnt from one's own fingers,—how many problems may be solved without having "learnt the rules,"—solved by the intuitive deductions of any mind that understands the premises; those who did not live until after Horace Mann, Henry Barnard, William Russell, William A. Alcott, Alonzo Potter, S. S. Randall, Samuel Lewis, Warren Burton, and their zealous fellow-laborers, had awakened the community throughout New England, New York, Ohio, to the consideration of

* Throughout his college course, he made himself master of every lesson but one, at the time; and that one he learnt afterward.

the inestimable importance of common schools ; of the indispensable necessity of convenient, light, airy, warm, well-ventilated school-rooms, comfortable seats and desks, suitable text-books and blackboards, maps, globes, apparatus ; and, more than all, well-prepared, skillful and amiable teachers ; in short, those whose "school days" began within the last twenty-five years, can have little idea of the character of our common, especially our country district schools, at the time Cyrus Peirce commenced his labors.

Thanks to the gentleman last named in the above list of distinguished friends of education and school reformers, thanks to Mr. Warren Burton, there has been preserved a most truthful and graphic picture of "The District School as it was." In the volume bearing this title, written by Mr. Burton twenty-five years ago, he has given accurate, lively sketches of methods, scenes, and characters, that were common in the schools, as they were when he was a child, and not wholly extinct when he took his pen to delineate them. His book has been republished several times in this country, and once in England. It should never be out of print, nor be wanting in any of our public or private libraries, but kept at hand, that the children of this and coming generations may be informed, how many more, and how much greater, are the advantages provided for them, than were enjoyed by their parents and grand-parents, when young ; so that they may be prompted to inquire who have been their benefactors, that they may do them honor. Then, I am sure, few will be found to deserve a higher place in their esteem, than the subject of this memoir.

Immediately on leaving college, in 1810, Mr. Peirce accepted an invitation, from an association of gentlemen at Nantucket, to take charge of a private school. He taught there two years very successfully, and gained the entire confidence and sincere respect of all who witnessed his impartial regard for those committed to his care, and his scrupulous fidelity to every duty he undertook to discharge. But at that time his heart was set on another profession. So, in 1812, he returned to Cambridge, to complete his preparation for the Christian ministry. For three years he prosecuted his theological studies, with an assiduity not surpassed, it is believed, by any one, who ever dwelt within the walls of Harvard. He seldom allowed himself more than four hours out of the twenty-four for sleep ; and he preserved his health by strict attention to his diet and exercise. He never ate and drank merely to gratify his appetite, but to keep his body in the best condition to subserve the action of his mind. Every subject that came up for consideration, in the course prescribed, he studied until he was satisfied that he had arrived at *the truth*. Many of the dogmas

taught in the churches before that day, he was led to distrust; but he rejected nothing hastily. If he, like most other young men, could give no sufficient reason for the faith of his childhood, he dismissed nothing from his mind, which he had been taught to believe, until he could give a satisfactory reason for dismissing it. He was most scrupulously conscientious. He was severe in his demands upon himself; and, wherever truth and right were concerned, not indulgent to others. Yet am I assured by those who knew him best, that he was cheerful, amiable, tender in his sensibilities, and very companionable.

After three years thus spent in theological studies at Cambridge, Mr. Peirce was persuaded to return to Nantucket, and resume the work of a teacher. His former patrons had not found another, who could adequately fill his place. During his previous labors in their service, he had given them intimations of ability and skill in the work of teaching, which they were anxious to secure for the benefit of their children, even at a much greater cost.

Under this second engagement, Mr. Peirce continued at Nantucket three years, laboring as the teacher of a private school, with great success, and to the entire satisfaction of most of his pupils, and all of their parents. In 1818 he left, and commenced preaching.

Up to this period Mr. Peirce was not only strict in his government, but severe in his discipline. In the outset of his career, he very naturally resorted to those instrumentalities that had hitherto been most confidently relied on. Until after the first quarter of the present century, corporal punishments of children, by parents and schoolmasters, were matters of frequent occurrence. I could fill more than all the pages that will be occupied by this memoir, with narratives stored in my memory, or preserved in files of old newspapers, or in the Criminal Court Records, of cases of cruel chastisement of children,—girls as well as boys,—by ferules, rattans, cowhides, stocks, pillories, imprisonment, privation of food, and so forth. Little do they realize, who have been born within the last twenty-five years, how much they may have escaped of suffering, as well as of weariness at school; and how much they have gained from the greatly improved methods of teaching and governing, that have been devised since the commencement of that period. And it ought to be told them, that to no individual are they, and the coming generations, more indebted for these improvements than to Mr. Peirce. When he commenced the work of a schoolmaster, the idea of managing a school without corporal punishment had hardly dawned upon the mind of any one. On Nantucket especially, the people were familiar, in the whaling service, with severe bodily chastisements; and the proposal to manage “a

parcel of boys," without any thing of the sort, would have been deemed preposterous. It was reasonable and proper that the young pedagogue should begin with the regime then most approved. And it was natural for Cyrus Peirce to try faithfully what he tried at all. I can therefore believe that, in good faith, he did, when an inexperienced young man, inflict some chastisements that, at any time since 1830, he would utterly have condemned. It is not easy for those, who have only seen and enjoyed the excellent schools on Nantucket within the last twenty-five years, to conceive of them as they were in 1810, when Mr. Peirce first went there. His work was really that of a pioneer. If he did any good there, it was done by first establishing order, a regular and punctual attendance, prompt and exact obedience to rules, and faithful, hard study as *indispensable in a school*. If he effected this by means of severe appliances, uncalled for at the present day, when better views prevail, they were then so much matters of course, that most of his early pupils, from whom I have received letters, have not alluded to his severity as censurable. Indeed, only one has even mentioned it. They all bear witness to his exceeding strictness,—but only one tells me of any inflictions of severe bodily chastisements.

Mr. Peirce was careful to prescribe a reasonable task to his pupils, one that would try their powers, as he thought they ought to be tried in order to be improved; and then he was unyielding in his demand for the exact performance of it. Not partly right, but "wholly, precisely right," was what he always required. "Study enough will make a pupil master of any thing he is capable of learning," was one of his maxims. "Boys who can study, but will not study, must be made to study," was another. Order, "Heaven's first law," he deemed indispensable in a school; and he enforced it: he would have it. He excused no intentional deviation from it; even accidental violations were not readily deemed excusable. Carelessness was to be blamed, punished. His pupils were sent to him to be improved; to acquire valuable knowledge, and to form good habits, mental, moral, physical. He was determined their parents and the community should not be disappointed through any remissness of his; and that his pupils should not be allowed, for the sake of any present self-indulgence in idleness or fun, or through carelessness, to cheat themselves of that information, or of those excellencies of character, which they ought, in childhood and youth, to secure for the benefit of their whole lives, here and hereafter. He adopted, at first, the so-called "good, old method" of governing a school, and making boys obey and learn; the method, which, it was taken for granted in that day, Solomon meant to

commend, when he said, "He that spareth his rod hateth his son." And in this, as in every thing else, "whatsoever his hands found to do, he did with his might." But corporal punishments were not then the characteristic of his school.

One of the contemporaries of the gentleman, who alone has made any mention of his severity, gives me the following account of the commencement of her acquaintance with Mr. Peirce :

It was in 1815, that myself and another girl, each under sixteen years of age, were wending our way to the academy, where Mr. Peirce presided, to become his pupils. We had conceived a strong prejudice against the man, expecting to find him an austere, hard master, rigid and exacting ; who would not be satisfied with our best efforts, and would be unmerciful to our failings. Under this strange, very wrong impression, we strengthened each other, as we went ; and met him well braced,—resolutely determined, if he did not suit us much better than we expected, that we would leave his school, and that too, speedily.

In the course of that memorable forenoon, he questioned his new pupil upon the branches of learning in which she presumed herself to be quite a proficient ; and, without intimating that he meant to do so, made her fully sensible of her ignorance. Coming, last, to the subject of grammar, and finding her deficient in that also, he gave her to parse the following sentence,—“What I know not, teach thou me.” She took the hint. She appreciated the delicacy, and began to love the man, whom a few hours before she expected to hate ; and to reverence one, “whose small head could carry all he knew.” My correspondent adds :

I shall always look back to the time passed in Mr. Peirce's school, as one of the best and happiest periods of my life. He inspired me with new views, new motives, a new thirst for knowledge ; in short, he opened an almost new terrestrial world to me ; and, over and above all, he was the one who awoke in my mind a deep interest in religion. Exact, cheerful obedience to all the laws of God, he made appear to me a most reasonable service. My understanding was convinced, my feelings were enlisted, and, by judicious management and careful nurture, he led me onward and upward, until I sincerely think, I obtained, through his ministration, “that hope which is an anchor to the soul, based upon the rock of ages.” I shall, therefore, always love and respect Cyrus Peirce, as my spiritual guide and father.

Very similar to the above are the testimonies that have been given me, in letters or orally, by hundreds of the pupils of Mr. Peirce, from the beginning to the end of his career. He kindly, yet effectually made them sensible of their ignorance, and of their moral deficiencies. He satisfied them of his ability to teach them more than they knew, and to lead them in the way to eternal life. He prescribed to them tasks that they were able to perform ; he gave them rules of moral conduct, to which it was right that they should conform themselves ; and he never remitted any of his demands. He held them steadfastly to the exactly true and right. Precision was the characteristic of all his dealings, and all his requirements. His methods of inducing

his pupils to study, to get their lessons and recite them well, changed as he grew wiser by experience, and learnt more of the nature of the human mind and heart. But the object he aimed at, and the spirit that animated him, were the same, from the beginning.

About a year after his return to Nantucket, Mr. Peirce married Miss Harriet Coffin, of that place. She had been for several months one of his most distinguished pupils; and everywhere, ever since, she has been his most intelligent, devoted, effective helpmeet. He could hardly have accomplished all he has, in the cause of education, if he had not been blessed with such a wife.

In 1818, as has been already stated, Mr. Peirce left Nantucket and commenced preaching. In the course of the following year, he was ordained and settled as the minister of a church, in the town of North Reading, Massachusetts.

Eight years he lived there, faithfully discharging all his parochial and social duties. He was universally acknowledged to be a man of singular integrity and purity of life. His preaching was sensible, earnest and direct. As in the school-room, so in the pulpit, his main object was the discovery and the inculcation of the truth. He would tolerate no violation of it in word or deed. He dwelt less upon the dogmas of his sect than upon the precepts of Christ and his Apostles; always holding up the life and death—the character of Jesus—as the illustration of that godliness to which all men ought to aspire.

Mr. Peirce saw, and did not fail to show, how far the men of his generation, even the most zealously professing Christians, fell short of the stature of Christ. He deeply felt the need of reform, and that it should begin in the so-called house of God. He was among the first to embrace the opinions of the apostolic Worcester, respecting the custom of war; and he assiduously inculcated the pacific spirit of the Gospel, which has been quenched by the ambition of Christian nations.

So, also, the cause of Temperance, the principle of *total abstinence* from intoxicating drinks, is indebted to him, as one among its earliest, most consistent advocates. He was in advance of his generation, and therefore shared somewhat in the unpopularity, the obloquy, the hardships of the pioneers in the moral world. Not being an easy, attractive public speaker, those who were annoyed by his uncompromising demands of personal conformity to the example of Christ, could the more easily divert from him the attention of many, whom he longed to benefit. He came to feel, as very many faithful preachers have been made to feel, that he was spending his time and strength to too little purpose. He suspected that he was not called to preach, so

much as to teach. Yet more was he persuaded that it would be easier to prevent the children from becoming vicious, than he had found it to reform those who had contracted bad habits of action or thought. These considerations, operating together with some theological disagreements between himself and a portion of the people, magnified, if not aggravated, by the heated controversies which were so rife in that day, brought him to the determination to relinquish his ministerial profession. At the expiration of eight years, therefore, he resigned his charge in North Reading, and returned to "school keeping," as that which should thenceforward be the business of his life.

He was earnestly solicited to return again to Nantucket, and resume his labors there. But he was induced rather to unite with a relative, Mr. Simeon Putnam, in the conduct of a school at North Andover. His views of the true methods of teaching, and still more of governing pupils, had undergone some essential changes during the eight years of his retirement, owing to the observations he was continually making, all that while, as a diligent supervisor of the schools in Reading. But his colleague adhered to the old methods and appliances. Their discordance on these and other points was embarrassing to them both. Therefore, after four years of arduous toil at North Andover, he listened to the repeated and earnest solicitations of those who had appreciated his former labors on Nantucket, and, in 1831, removed once more to that island. I can not express the very high esteem generally entertained for Mr. Peirce, throughout that community, better than in the words, which I am permitted to quote from a gentleman of great respectability, and long official standing. "There has been no period," said he to Mr. Peirce, in 1830, "since you left the island in 1812, when you could not have had a school here, of any number of pupils that you would have undertaken to teach, and at any price you would have thought it fair to charge."

This was not the exaggeration of a friend. His return was most cordially welcomed. He immediately found himself at the head of a large and lucrative school, in the instruction and management of which, for more than six years, he was every way eminently successful. During the whole of that period, he scarcely ever found it necessary to apply corporal punishment of any kind. He had come to regard it as the "last resort," and a very sad one, arguing some deficiency of the requisite qualifications in the teacher, as well as uncommon perversity in the pupil. He relied upon other means, higher persuasions, moral influences. How sincerely he was respected and loved by his pupils of that period, the best of them, if not all, may be inferred

from the following extract from a letter I have received from a gentleman, now at the head of a most beneficent educational institution in Massachusetts :

It is twenty-three or four years since I was one of Mr. Peirce's pupils, on Nantucket. His name has ever been, and ever will be, fragrant in my recollection. His was the first school that I really loved to attend; and he was the first teacher for whom I felt a positive affection. * * * Mr. Peirce was eminently successful in discovering whether a pupil comprehended what he was endeavoring to learn, or the language of the lesson he was reciting. Under his method of teaching, I first began to understand what I was about at school. He would not allow us to conceal our ignorance, or seem to know what we did not. He would probe us through and through, and expose our superficialness. Because I began to understand my text-books, I began to feel the exhilarating love of learning for its own sake. I had been to school all my days before; but it had been, until then, a mechanical work to me. I can distinctly recollect this blessed change in my mental condition. It was a new birth. A dispensation of intellectual and moral life and light came upon me. Mr. Peirce seemed to me to *see through* a boy,—to read his thoughts,—to divine his motives. No one could deceive him; and it always seemed exceedingly foolish, as well as mean, to attempt to deceive him, because he was so evidently the best friend of us all. I can see him now,—moving rapidly but without noise about the school-room, always alive to the highest good of every one; quickening our pulses, every time he approached us, by some word of encouragement; inspiring us with the determination necessary to attain the object at which he pointed.

Mr. Peirce was very skillful in discovering the mental aptitudes of a pupil, and drawing him out in the direction in which he was most likely to attain excellence; thus exhibiting a boy's powers to himself, making him conscious of the ability to be somebody, and do something. I can not give you particular examples, nor narrate to you any single events in the history of that part of my life, which was blessed by his direct influence. The hours I passed in his school-room at Nantucket are the sunniest in the memory of my school days. But the elements entering into the enjoyment and profit of those days, blend together in my memory, and lose their distinctness, as the colors of the rainbow shade into each other.

This most excellent private school Mr. Peirce continued to teach for six years; assisted at first by his admirable wife, and afterward by others, whom he had likewise educated and trained for the work of teaching. It is said of General Washington, that "he evinced his wisdom and skill not more in what he did himself, than in his selection of those, to whom he committed the execution of any important duty." A similar praise is due to Mr. Peirce. He never would employ an assistant, whom he did not know to be thoroughly competent and heartily disposed to teach well. "No man," he would say, "can shift off any of his responsibility. A teacher is bound to make it sure, that all the instruction given in his school shall be thorough, exact: 'Qui facit per alium facit perse,'" and he would do all the teaching himself, unless he could find others, who would do a part of his work as well as, or better than, himself. He was, therefore, always blessed with able assistants, when he had any. Among those who aided him, at the time of which I am now writing, was Miss Maria Mitchell, who had been his pupil, and who has since attained a world-wide fame as an astronomer.

All the while Mr. Peirce was conducting so beneficently and acceptably this private school, he was exerting himself assiduously to effect the better organization and appointment of the public schools of Nantucket. Indeed he was alive to all the true interests of the community, in which he then intended to spend the residue of his earthly life. He suggested, or promptly encouraged and generously assisted, various plans of social improvement. He took so active a part in the temperance reform, as to incur the charge of fanaticism. Intemperance was then a very prevalent vice upon the island. Some use of intoxicating drinks was assumed there, as everywhere else, in that day, to be a necessity; and it was claimed that even a pretty free use of it should be readily excused in those who were exposed to the hardships and ennui of long whaling voyages. Mr. Peirce was among the first to discover the utter delusion, that had got possession of the people, respecting the use of ardent spirits. He satisfied himself that alcohol, in whatever form it might be disguised, contained no nutritious qualities, imparted no enduring strength, but only stimulated those who drank it to undue and therefore injurious efforts, which impaired their vital energy. He therefore espoused the principle of *total abstinence*; and not only commended it by his example, but urged it with great earnestness upon all, in private conversations and in public speeches. On one occasion, in a very large meeting, surrounded by his fellow-townsmen, most of whom had been addicted to the use of ardent spirits more or less, some of them excessively, Mr. Peirce exposed, with the utmost plainness, the evils they had brought, and were then bringing upon themselves and their dependents, by that indulgence; and then declared that so deplorable were the effects produced everywhere throughout that community, and the country, by spirituous liquors, that he could and would no longer give his countenance to the use of them in *any* measure, on *any* occasion, for *any* purpose. "No," said he, with an emphasis and solemnity that made his audience tremble, "if my life could be saved by no other instrumentality than that of spirituous liquor, I would forego it and die, in testimony of my dread and abhorrence of this enemy of the health, peace, and virtue of mankind." This was the noble, the holy spirit, which animated the Apostle Paul in regard to the same vice. Some scouted, mocked him as a fanatic; but others were deeply impressed, lastingly effected by his words and his example.

Mr. Peirce, however, was known and made himself felt on the subject of education, more than on any other. He had come to be an *authority*, on all questions pertaining to schools. In pursuance of his urgent advice, in accordance with a plan devised mainly by him, at

length the public schools of Nantucket were so arranged, in relation to one another, that all the benefits of classification could be secured in them. Primary, Intermediate, Grammar, and a High School constituted the series.

So soon as the arrangement was completed, and the committee and people looked about for the man fitted to fill the highest post,—to cap the climax of their new system,—the eyes of all turned, with one accord, to Cyrus Peirce, as the only one to be found, on whom they could rely to make sure the success of their great experiment. Without much hesitation, though at a considerable sacrifice, Mr. Peirce relinquished his private school, which was much more lucrative and less laborious, and became, in 1837, the Principal of the Nantucket High School. It was to be made what it ought to be,—the first best of the series, and a model of its kind. In no respect was it a failure. It was indeed an eminent success. From his high position, he shed down his influence upon all the schools on the island. He infused into most of the teachers much of his own spirit. And the common schools of Nantucket have, ever since, been distinguished among the best in our country.

A few passages from a very valuable address, delivered by him, December 15th, 1837, will show what was Mr. Peirce's *ideal* of education; and what pains he thought should be taken, and what expenditures incurred, by parents and by the State, to secure this greatest blessing to all the children of men:

Education is the development of all man's powers—physical, intellectual, and moral. It is the *drawing out* of them all in their just harmony and proportion. It regards the material frame, by which the mind manifests its operations. It is the formation of character, the discipline of the intellect, and the building up of moral principle, and moral power. Its aim should be to enable man to know, to do, to enjoy and to be, all that his Creator intended he should know and do, enjoy and be. The more nearly it approaches this point, the more nearly it will fulfill its appropriate office; and, when it shall have reached this goal, man will stand forth again, as at first, the image of his Maker. * * * If such is the object, and such the power of education, it should be regarded as the proper business,—the greatest end of life,—rather than as a *means* to something higher and better. It should fill a large place in the eye of the patriot, the code of the legislator, and the heart of the parent, from neither of whom has it yet received one half of its due consideration. * * * With all parents there rests an incalculable responsibility in this respect. It is time they knew, and felt it too, that they are, without their own choice, their children's educators; their own house is a school-room. * * * Provision for *public* instruction—the instruction of all the children in the community—is the unquestionable interest and duty of every wise government; for the primary object of all wise governments should be to increase the happiness of the people. And the highest quality of human happiness is that derived from exalting the intellect and purifying the heart; to the end that men may aim at objects worthy of their ambition, and their social intercourse be regulated with all the satisfaction of mutual love, honor and trust. * * * The *moral* powers of man are his glory. They ally him to natures angelic. How, then, can that education be regarded as complete, which passes over the moral sentiments? These, like the physical and intellectual faculties, can be perfected and made to answer their full purpose, only by training and exercise. What an

anomaly is that school in which moral cultivation finds no place! We have defended schools, on the ground of public and private *utility*—as the palladium of social virtue and civil liberty. Now the prosperity of a community is far more dependent on sound moral sentiment, than on a high state of intellectual refinement. Nothing is more true than that men may be great and learned, without being good and useful. Men of high intellectual endowments, but destitute of moral principle, are far from being the best materials to compose society. We want great men, we want learned men, but much more do we want *good* men. On these must the community rely to carry forward the great work of human improvement. * * * How often has individual genius, that seemed angel-like in the loftiness of its aspirations, bowed before mean temptations, which timely discipline would have enabled it to withstand! Our own nation, though young, has more than once been seen to tremble on the verge of ruin; but, it is worthy of remark, that such a crisis in no instance has been the result of *ignorance*, but of the destitution of moral principle. If our union and liberties are ever shipwrecked, this is the rock on which they will split. We shall always have enough *great* men; the only danger is, that there will not be enough *good* men,—men of disciplined passions, nice moral discrimination and active benevolence. * * *

A cultivated intellect, cast upon society, uncontrolled and unsanctified by moral sentiments, is but the scattering of arrows, fire-brands and death. Therefore the education of the *moral sentiments* should be a primary object with all, who have any thing to do with instruction. If children are taught but *one* thing, whether at home or at school, let it be—their *duty*. Let it be love of truth, sobriety, temperance, order, justice, and humanity. If you make them any thing, make them *good*. * * * It is a fact, which does not speak to our praise, that almost every class-book adopted into our schools is prepared to teach how to read, or get, or calculate; to teach mere sciences, as though these were the great objects of life. Let something more be put into the hands of children, to teach them how to *feel*, to *act*, to *live*. * * *

Health stands among the first of blessings. Children would do well to learn something of the structure, laws and economy of their own material frame; what food, habits, attitudes, exercises and modes of living, are consistent with, opposed to, or promotive of health. What an incalculable benefit might thus be rendered to children, by making them early the intelligent guardians of a trust, to them of inestimable value! Would it not be doing them quite as great a service to demonstrate the natural consequences of inaction, over-action, tight lacing, exposure, excess, or licentiousness,—to teach them what are healthy attitudes and healthy diets,—how they may avoid a headache, a fever, or a consumption, as to teach them the solution of a difficult problem in algebra, or keep them eternally casting per centage? As connected with the subject of health, as well as for the reason of affording to children the means of suitable amusement and exercise, every school should be furnished with some simple apparatus for gymnastic purposes. Such provision might indeed be made auxiliary to good manners and morals, as well as to sound health. * * *

Why should not the rising generation be regarded as a public trust, and their education be sustained at the public charge? Nothing exerts so great an influence on the character of the present and the coming age; nothing on public and private virtue and happiness; nothing on the prosperity and perpetuity of our institutions. Nothing can better subserve the interests of liberty and the equalization of rights; nothing will better enable the poor and the middling interest to make an effectual stand against the encroachments of power, of wealth and of title; or the friends of order and law to frustrate the designs of the intriguing demagogue, or restrain the outbreaks of popular phrenzy, than *sound education*. Here, here, fellow-citizens, is the palladium of your liberties,—of all that is valuable in the social fabric. It is not only connected therewith, but constitutes its *very life*. Why then should not the public assume the education of the child? * * *

Then every class of citizens, and every individual, would feel a direct and immediate interest and concern in the public schools; and these would rise to an elevation of character, which has yet hardly been reached by our best private establishments. Our children would be educated together, without distinction of rank; and this, if it has no other recommendation, would certainly better comport with our republican habits and institutions. * * *

If the children of the affluent go to one school, and the children of mechanics and the poor to another, will not the tendency be to keep up a distinction of ranks in society? * * *

To have good

schools, we must have good *teachers*,—teachers of the right temper and disposition, and of the proper scholastic attainments. * * * Where shall we get them? How and where shall they be qualified? * * * Would it be any thing more than a consistent carrying out and completion of the school system already begun,—yea, would it exceed the limits of a judicious economy, to appropriate funds for establishing *seminaries*, in which teachers, themselves, may be taught *how to teach*. * * * This, it seems to us, more than any thing, our schools need; and this the community should demand.

Quickened by the spirit and guided by the principles of this excellent address, the people of Nantucket were led to make many improvements in their system of free schools. They enlarged the number of them, and graduated them in relation to each other, from the Primary to the High School; introduced improved desks and seats, effective ventilators, better text-books, and took greater pains to secure the services of well-qualified teachers. The private schools were, to a considerable extent, relinquished; and the children of all classes came together, as they were able, to enjoy alike the common bounty,—of all classes except that which had always been subjected to the greatest disadvantages, and therefore needed assistance and encouragement the most. The *colored* inhabitants of the town were not allowed to send their children into the public Grammar Schools; but a provision was made to educate them by themselves. Against this decision, Mr. Peirce remonstrated and contended, with his wonted earnestness and determination. But the “prejudice against color” was too mighty for his appeals to prevail. He left his protest against this wrong. It will be preserved; and, in some future day, it will be read with greater admiration than it would awaken now.

The address, from which we have just made liberal extracts, could not escape the vigilant notice of those wise and earnest philanthropists, who, at that time, were most intent upon the improvement of our system of public instruction. In 1837, the Hon. Horace Mann, (whose acceptance of the secretaryship of the then newly-created Board of Education in Massachusetts, was an era in the progress of Christian civilization,) visited Nantucket in the course of his thorough investigations into the condition of the common schools of the state. He found on that island the man who could construct, manage, and teach a school, better even than he could tell how it ought to be done. Mr. Peirce’s school appeared to Mr. Mann an approach to his own high ideal of what a seminary for the education of the young should be. He clothed his appreciation of its excellencies in a nautical figure, pertinent to the place and the community in which he found it. “That school,” said he—we quote from the memory of another—“that school is as much superior to schools in general as a strongly-built, well-equipped, ably-managed steamboat, propelled by a powerful engine, within itself competent to ‘keep its head,’ let the

winds blow and the waves roll as they may, is superior to a ship, that must shift its sails to suit every breeze, and furl them when it storms, and that is withal unseaworthy, leaking at many a seam, poorly manned, and commanded by a captain who does not understand navigation."

Mr. Peirce kept the Nantucket High School nearly two years. It comprised between fifty and sixty pupils of both sexes, and of the usual variety of ages and characters. He succeeded, however, in establishing and preserving uncommonly good order; in securing remarkable regularity and punctuality in the attendance of his pupils; and induced them to be diligent and faithful in their studies, and to make improvement in all respects greater than ever before. And yet he struck not one blow, nor inflicted any other corporal punishment.

The friends of the new system were more than satisfied. The opposers were silenced. It was made apparent to all, that public schools of every grade, having boys and girls together, if well classed, as they may be where there is a proper series, furnished with suitable rooms, text-books and apparatus, and committed to the management of competent teachers, may be conducted with exemplary order, and be led to make greater progress than common, in all the learning taught in our schools, without any inflictions of bodily suffering, or the stimulus of any other emulation than that which will be naturally awakened, wherever numbers are brought together to pursue the same high object. Excellence, in whatever they undertook to learn or to do, excellence was always kept before Mr. Peirce's pupils, as the mark to which they should aspire,—excellence, rather than to excel a competitor. Thoroughness, exactness, fidelity in all things, intelligence in every exercise, and an exalted tone of moral sentiments, were the admirable characteristics acknowledged to be conspicuous in Mr. Peirce's school.

These were precisely the excellencies which ought to be conspicuous in every school; but they must be extant in the teacher, or they can not be infused into pupils. Therefore, to unfold these excellencies, if possible, in all who would be teachers of the young, had come to be regarded by the enlightened friends of education as the greatest desideratum; and, to keep the schools out of the hands of those who were devoid of these excellencies was felt to be a necessary precaution. Mr. Mann and his co-laborers had been brought to the conclusion, that seminaries, especially for the training of teachers, must be established. And they were confident that Mr. Peirce was the man who could show what a normal school should be.

When, therefore, the munificence of the late Hon. Edmund Dwight

induced the legislature of Massachusetts to make the needful appropriation, and so soon as a local habitation had been provided, the Board of Education unanimously elected Mr. Peirce to commence the enterprise.

It was with no little difficulty that the people of Nantucket could be persuaded to relinquish him ; nor was it easy for him to persuade himself to leave his happy home in their midst, where he was so much respected and loved ; and where he was so well established at the head of a system of schools, which he had mainly devised, and which was working so satisfactorily under him. But no one was more fully aware of the defects of common schools than he. No one appreciated more profoundly the necessity of the especial preparation of teachers for their work. He was not the man who would refuse, from any personal considerations, what it was made to appear his duty to undertake for the benefit of the rising generations. He had admired, from the beginning, Horace Mann's generous consecration of himself to the improvement of the common schools. He discerned the wisdom of his plans, and the unsparing pains he took to carry them into operation. And, when that enlightened, devoted friend of humanity besought his help, with the earnest assurance that he knew no other man to whom he could so confidently intrust the commencement of that part of his improved system of schools, on which the success of the whole depended, Mr. Peirce could not withhold himself. He accepted the appointment, saying, "I had rather die than fail in the undertaking."

On the 3d of July, 1839, he entered upon his labors at Lexington, as principal of the first Normal School on this continent.

What a Normal School was to be, most persons could not divine. Conjectures were various ; some of them ludicrous. Then, a few teachers seemed to feel that the rearing of such an institution was a derogatory imputation upon their whole fraternity. Some academies looked with an evil eye upon a seminary, founded in part by the Commonwealth, to do what they had hitherto assumed to be their especial work. Moreover, the admirable qualifications of Mr. Peirce to be a teacher of teachers were not much known off the Island of Nantucket, excepting to the Board of Education, (itself a novelty,) and a few zealots in the cause of reform. Not a note of congratulation welcomed him to his post. The aspect all around was cold and forbidding, except the countenance of Mr. Mann, and the few enlightened friends of education who regarded his coming as the dawning of a new day.

At the opening of the school, only three offered themselves to
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become his pupils. The contrast between the full, flourishing establishment he had just left at Nantucket, and the "beggary account of empty boxes," which were daily before him for the first three months, was very disheartening. He could not repress the apprehension that the Board of Education had made a fatal mistake, in intrusting the commencement of the enterprise to one so little known as himself throughout the Commonwealth; and he feared that Normal Schools would die at their birth, for want of something to live on. However, he had put his hand to the plough, and of course the furrow must be driven through, aye, and the whole field turned over, before he would relinquish his effort. He set about his work, as one determined to "do with his might what his hand found to do." He soon made his three pupils conscious that there was more to be known about even the primary branches of education than they had dreamt of; and better methods of teaching reading, spelling, grammar, arithmetic and geography, than were practised in the schools. Their reports of the searching thoroughness and other excellent peculiarities of the Normal Teacher attracted others to him. The number of his pupils steadily increased from term to term, until, at the expiration of his first three years of service, there were forty-two. In the course of those years, more than fifty went out from under his training, to teach, with certificates of his approbation; and the obvious improvement in their methods of governing children, and giving them instruction, demonstrated the utility of Normal Schools. His immediate successor, in 1842, in order to satisfy himself and the public on this point, sent a circular letter to every district in the Commonwealth, where a pupil of Mr. Peirce's was known to have been employed as an instructor, making the inquiries adapted to elicit the desired information. In every case, but one or two, testimonials were returned, setting forth the marked superiority of teachers from the Normal School. It became then a fixed fact, that such a seminary was needful,—that it would effect the improvement in common schools, which was of first importance—namely, the better qualification of teachers. Normal Schools have been multiplied; their usefulness is no longer questioned; ample provisions are made for their support; they have come to be regarded as an essential part of the improved system of public instruction in New York, Connecticut, Rhode Island, and several other states, besides Massachusetts. Is it, then, small praise, to have it said of any one, that we are indebted for the establishment of Normal Schools to him, more than to any other individual? If to Horace Mann belongs the honor of having made the need of such institutions so apparent, that private and public bounty was directed toward them,

it is due to Mr. Peirce to record that it was his inflexible perseverance, which overcame the obstacles that well-nigh precluded their commencement, and his admirable fidelity and skill which settled the question of their usefulness. One of the earliest and most devoted promoters of the educational improvements which have been introduced within the last twenty years, the gentleman who framed and set in operation the excellent school system of Rhode Island, and has done more than any body else to regenerate the school system of Connecticut, (the editor of this Journal is the only person who would be displeased should we name him,) the gentleman whose knowledge of the history of this revival of education is more extensive and thorough, and whose judgment of its causes and effects is more to be relied on, than that of any other man,—hardly excepting even Horace Mann,—that gentleman has more than once been heard to say,—“Had it not been for Mr. Cyrus Peirce, I consider that the cause of Normal Schools would have failed, or have been postponed for an indefinite period.”

Let it, then, be added here, the selection of Mr. Peirce to commence this signal improvement, was not a matter of mere accident, or good fortune. It was the result of Mr. Mann's thorough appreciation of the nature of the undertaking, and profound insight into the qualifications of the one who should be trusted to commence it. He might have selected one of many gifted teachers, more widely known, and of more popular, attractive mien,—one who would, at the outset, have gathered about him a host of pupils. He might have found a few who could have taught some things, perhaps, better than Mr. Peirce. But there was no other man, within the sphere of his careful search, who combined so many of the qualities demanded, so many of the elements of certain success. If we should name another as comparable to him, it would be the late lamented David P. Page, the first principal of the New York Normal School, who excelled Mr. Peirce in popular gifts, and almost equaled him in all the fundamental requisites. Still, the preference was wisely given.

Mr. Peirce's profound reverence for truth is the basis of his character as a man and a teacher,—truth in every thing,—the whole truth, the exact truth. Never have we known another so scrupulous. His reverence for truth was ever active, ever working in him, and renewing itself, day by day, in some higher manifestation, or some deeper expression. Although he frequently, if not every day, closed his school with the admonition,—“my pupils, live to the truth,”—yet it never seemed like a vain repetition; it always appeared to come fresh from his heart, as if it were a new inspiration of his longing for them to become all that God had made them capable of being.

To pupils of a facile, temporizing, slipshod disposition, Mr. Peirce was tedious, because of his particularity. Not partly, almost, very nearly right, would ever satisfy him. Each answer that was given him to every question that he put, must be wholly, exactly correct, so correct as to make it self-evident that the one who gave it fully appreciated the truth expressed by the words he used; and used such words as made the truth luminous to others, who were capable of receiving it. This intellectual and moral conscientiousness soon captivated those of a kindred spirit, and, in due time, impressed the most heedless as an admirable, a divine characteristic. Surely it is so. It can not be too conspicuous in those, to whom may be intrusted the forming of the mental and moral habits of the young. For the divergence of "*almost* right," from "*exactly* right," may, in the course of time, be greater than any, except the Infinite mind, can estimate.

Attention to one thing at a time, and the thorough, complete understanding of every thing antecedent and preliminary, before attempting to advance in any branch of science, were principles on which Mr. Peirce insisted, until it was found to be futile to attempt to get forward under his tuition, if they were slighted. All shamming was detected by him; and skimming the surface of any subject made to appear silly. It was settled that nothing could be well taught to another, unless the teacher thoroughly comprehended what he set about to communicate. Therefore, much of the time of his pupils in the Normal School was devoted to the careful study of each branch of learning expected to be taught in the primary and grammar schools,—the primary being always accounted by him prior in importance, as well as in time. On nothing, except only moral culture, did Mr. Peirce dwell with more particularity, than on the first elements of Reading, Writing and Arithmetic. He insisted that whenever a child has been put in full possession of these, he will be able to attain any degree of proficiency in each of the branches, and their dependents, that he may take pains to seek. But, if these elementary parts have not been thoroughly learnt by any one, imperfection will, at some time, somewhere, show itself, and embarrass subsequent attempts at learning, with or without an instructor.

Next to thinking and expressing one's own thoughts, the most wonderful power given to man is that by which we may receive from the written or the printed page, and communicate audibly, the thoughts of another. Yet this power is in most cases very imperfectly unfolded, and very shabbily exercised. The number of good readers, within any one's acquaintance, may always be counted in a trice.

“ To hear some parsons, how they preach,
 How they run o'er all parts of speech,
 And neither rise a note, nor sink ;
 Our learned Bishops, one would think,
 Had taken school-boys from the rod
 To make ambassadors to God.”

Upon nothing, excepting moral character, did Mr. Peirce bestow so much pains as upon the Art of Reading. And he was singularly successful in teaching it—especially the reading of our Sacred Scriptures. Yet was he lacking in what would seem to be the *sine qua non* of a fine reader, namely, a clear, sonorous voice. His deficiency in this respect, however, was triumphed over by the force of his intellect, and the depth of his emotional nature. It was forgotten, as one listened to his luminous, forcible reading of choice passages from the Bible, or other favorite books. His hearers caught the inspiration of his soul ; so that, never has reading seemed to us so high an intellectual effort and treat, as when we have been listening to some of his pupils.

His method of teaching reading, from the beginning, is set forth in his lecture before the American Institute of Instruction, in 1844, which may be found in the volume published by the Institute that year. In order to save children ~~from~~ acquiring a monotonous, or drawling, or nasal tone, which it is so difficult afterward to correct, as well as to make reading, from the first, a more intelligible, intelligent, and agreeable exercise, Mr. Peirce, in that lecture, recommends, what he had tried with excellent success in his Model School, *beginning with words rather than letters*. We fear this method has not been faithfully tried in our schools generally ; and we would take this occasion to commend it again to all who are about to commence teaching any children to read, at home, or in the primary schools. Try this method, as it is explained in the lecture just referred to. We commend it, not only on the high authority of Mr. Peirce, but on our own observation of its much better results.

In Arithmetic, Mr. Peirce was among the first to welcome and apply Mr. W. Colburn's method of teaching the relations and powers of numbers,—a method which can never be superseded, and the application of which has never been surpassed, if equaled, by any subsequent authors, excepting those who have built on his foundation. Mr. Colburn's method, however, may be abused, as it has been, by teachers who have not thoroughly understood it, or have been careless in applying it. Mr. Peirce taught his pupils in the Normal School how to teach Arithmetic *exactly* in the manner indicated by

Mr. Colburn. In this he preceded, though he never surpassed Mr. Tillinghast; and we take this occasion to add, neither of them quite equaled Miss Caroline Tilden, the favorite pupil of the one, and one of the favorite assistants of the other.

But we have not here room to specify any further. In every department of teaching, Mr. Peirce was, and taught his pupils to be, thorough, intelligent, and intelligible. He impressed it, in the first place, upon all whom he was preparing for the work, that, whatsoever they would communicate to others, they must first themselves thoroughly understand. The text-book, however excellent, may be of little avail to his class, unless the teacher knows more than the mere words of that book. And, secondly, the teacher can not help his pupils to acquire any part of any science, excepting so far as he may lead them clearly to comprehend it. Mr. Peirce continually detected and repudiated the substitution of memory for understanding; and earnestly enjoined it upon his pupils to do likewise, when they should become teachers.

As soon as practicable, after opening the Normal School at Lexington, Mr. Peirce instituted the Model Department,—a school composed of the children of the neighborhood, just such as would be found in most of our country district schools. In that he led his normal pupils, seriatim, by turns, to apply and test for themselves, the correctness, the excellence of the principles of teaching, which he was laboring to instil into them. This was the most peculiar part of the institution. In the management of it, he evinced great adroitness as well as indomitable perseverance, and untiring patience. In that Model Department, the future teachers, under his supervision, practised the best methods of governing and instructing children, so that each one, when she left the Normal School, carried with her *some experience* in the conduct of a common school.

Thus Mr. Peirce wrought three years at Lexington, performing an amount of labor, which, should we give it in detail, it might lessen, in the estimation of our readers, our credibility as a biographer. He fully justified the confidence which Mr. Mann and the Board of Education had reposed in him. And he gained continually the reverence and the love of his successive pupils. Strict as he was, uncompromising, exacting as he was, he was yet so just, so true, so faithful in his attentions to each individual,—so kind and sympathizing to all, even the least successful and most unlovely,—that he conciliated the hearts of all, not wholly excepting even the very few who were untractable in his hands. It was so obvious that he desired their highest good, so obvious that he was truly *paternal* in his regard for their personal

welfare and future usefulness, that "*Father Peirce*" soon came to be the title given him with one accord.

His labors and cares were too much even for his powers of attention and endurance. They were such, that he seldom allowed himself more than *four hours* for sleep, out of each twenty-four. He slighted nothing. Not the least thing was out of order, that he was responsible for. He gave personal attention to every exercise of each one of his pupils—especial consideration to the case of every one who needed. He kept a watchful eye upon the deportment of all, out of school as well as in, and had a care for the comfort and especially for the health of all. It was more than he could longer endure.

In 1842, therefore, at the end of three years, he was obliged to resign his charge. "It was," we quote from the Sixth Annual Report of the Board of Education, "the ardent desire of the Board to secure the further services of that gentleman in a place, which he has filled with such honor to himself and such usefulness to the community; but, owing to the state of his health and to other circumstances, he felt obliged to tender his resignation, which the Board most reluctantly accepted. Never, perhaps, have greater assiduity and fidelity distinguished and rewarded, the labors of any instructor. Mr. Peirce has retired from the employment of teaching; but the models of instruction which he has left, and his power of exciting an enthusiasm in the noble cause of education, will long remain as a blessing to the young."

He left Lexington, regretted by all, and returned once more to his loved home on the Island of Nantucket, under the painful apprehension that his labors as a teacher were ended, and that the rest of his life must be spent as an invalid. But the entire repose of body and mind which he was there permitted to enjoy, recruited him more and much sooner than was expected; and, at the end of two years, he was ready to engage again in the work of teaching.

His successor, at Lexington, gladly resigned the place in his favor. He was at once reelected by a unanimous vote of the Board of Education, and resumed the charge of the Normal School in August, 1844;—not, however, in Lexington. The number of pupils had so greatly increased that much larger accommodations were needed than could be furnished in Lexington. A building of suitable dimensions, but erected for another purpose, had just then been purchased in West Newton. All arrangements necessary for the school were to be made in it. The devising and superintending of these devolved upon Mr. Peirce; and he soon showed, so far as the limits within which he was required to work would permit, that he knew how a school-room ought to be

constructed, arranged, furnished, warmed and ventilated, as well as how those who should be gathered into it, ought to be instructed. Every one who came to view the work, when completed, acknowledged that he had made the best possible use of the premises and the funds, that had been put at his disposal.

In that somewhat new and much enlarged sphere, he labored yet five years more, with his wonted fidelity, skill and success. He had now very able assistants, those on whose faithfulness as well as ability, he could implicitly rely. Yet was his attention unremitting. He was mindful of every thing. His pupils were not regarded merely as component parts of their several classes. Each of them was an individual. Each might have peculiar difficulties to contend with, peculiar obstacles to success. He, therefore, sought to know each one personally, that he might render the aid, and suggest the discipline applicable to each. True, as he never spared himself, so he rigidly exacted of his pupils all that he knew them to be able to perform. Yet, he sympathized with every one of them. He was as a father to them all. The discovery of any serious faults in any of them only made him more solicitous for their improvement, more tender in his manner; although never *indulgent*, never remitting what it was right to require.

It was during this second connexion with the Normal School that Mr. Pierce laid the foundation of a disease that will probably cause him much discomfort, it may be severe suffering, so long as he abides in the body.

It was his unvarying determination to have every thing pertaining to the school-house so carefully arranged, and in such perfect order betimes, that not one minute of the hours appropriated to school exercises should be lost. All his pupils were females. He, therefore, could not call upon them for assistance in some of the "chores" that needed to be done every day and night, especially in the winter season. Neither could he hire the service of any man, who would *never fail* to do every thing that needed to be done, at the right time, and in the best manner. Furthermore, he was unwilling to increase the expenses of his pupils, many of whom were poor, by swelling the amount of incidental charges, which devolved upon them. During each of the winters at West Newton, as he used to do while at Lexington, when the night was very cold, threatening an unusually severe morning, he would go, at eleven or twelve o'clock, and replenish the furnace, to insure a comfortable room at the opening of the school. He would always go, at 3 or 4 o'clock in the morning, attend to the fires, sweep off the snow from the steps, shovel paths around the house, bring water enough from a neighboring well to supply the demands

of the day, and then, returning home, would devote himself to study until school time, carefully preparing himself upon every lesson which he was about to teach. It may seem to some of our readers that we are condescending too much in making mention of such matters; but, it is in faithful attention to *small* matters that the depth and strength of a man's principles are evinced.* And the fact that it was these things which brought upon him a malady that will be life-long, gives them no little importance in the memoir of this excellent man.

In the summer of 1849, he was compelled again to resign the charge of the Normal School, which might almost be called a thing of his own creation; to the welfare of which every power of his soul and of his body had been consecrated for eight years. And now he must leave it, with the sad consciousness that health and strength were so seriously impaired that he was no longer able, and never again would be able, to discharge, as he had been wont to do, the duties of the place he had filled so long. Yes, literally *filled*. No one but himself could recount any of Father Peirce's shortcomings. His measure of performance had run over rather than come short. That was a day of sore trial to his feelings, and the feelings of the many who revered and loved him. Yet was it an occasion of joy, of generous exultation. He was to receive an honorable discharge from an arduous post, the duties of which had been excellently well fulfilled.

The highest commendations of his fidelity and success were bestowed by the Board of Education and others, who had been most cognizant of his labors. His pupils, in great numbers, gathered about him, to testify their respect and affection. The Normal School-rooms, which he had constructed, and had permeated with his earnest, devoted spirit, every day of every term for five years, were tastefully and pertinently decorated; and there, in the presence of as many of his normal children, and tried friends, and generous patrons of the institution, as the rooms would admit, he was addressed by the Hon. Horace Mann, who had selected him for that high place, had persuaded him to accept it, and who could, more justly than any body else, appreciate the exceeding value of his services. It was a valedictory honorable alike to him who gave and him who received it.

A purse, containing about five hundred dollars, contributed by his pupils and other friends, was then presented, to induce and enable him to accept the appointment, tendered to him by the American Peace Society, to go as one of their representatives to the World's Peace Congress, to be held shortly in the city of Paris.

* Mr. Peirce required nothing of his pupils, that he did not himself practise. During the fifty years of his school-keeping, he never absented himself in a single instance for the sake of any recreation. *And he was tardy only twice.*

This was almost the only recreation he had allowed himself to think of taking since he left college, in 1810.

He went to Europe in company with a long-trying friend,—one of the same ripe age with himself, of similar tastes and character,—the Rev. Dr. Joseph Allen, of Northborough, who, like himself, had well-earned a respite from care and toil. Both of them were disciples of the venerable Worcester, the Apostle of Peace, and had, for many years, inculcated and practised the principles of the Gospel, which that holy man labored to redeem from neglect. It was, therefore, with no common interest that they went to a convention of persons, called from all parts of the world, to meet in the metropolis of the most belligerent nation of modern Europe. The meeting convened on the 22d day of August, 1849. There they saw, heard and communed with many of the pure, Christian men of Christendom, who, in the midst of the clash of armies, the shouts of victory, the lamentations of defeat, had long seen and deplored the folly as well as the wickedness of war, and had been earnestly inquiring for some other modes of adjusting the differences which must needs arise between nations, similar to those that are relied upon in cases that arise between individuals.

They afterward spent some months, traveling in England and on the Continent, enjoying all the gratification that the time and their opportunities allowed them, and their abundant stores of historical and classical knowledge qualified them to partake of.

In a letter lately received from Dr. Allen, he says of Mr. Peirce :

I never fully appreciated his merits, until he became connected with the Normal School. There, as all know, he was not only principal but *princeps*. There he exhibited the abundant fruits of his patient, faithful labors, continued, without intermission, through the years of his youth and manhood ; and there he gained a name that will live and be honored by future generations. * * * It was my good fortune to be his fellow-traveler in a tour through some parts of England and the Continent, in the summer of 1849. We went in the same packet, rode in the same cars or carriages, lodged at the same inns. This close and long-continued intercourse served to cement our friendship, and greatly to increase my high respect for him as a scholar, and a man of integrity, honor and purity,—*an Israelite, indeed, in whom there is no guile.*

Soon after his return from Europe, in 1850, partly because of his pecuniary need, but mainly because of his love of teaching, he became an assistant in the excellent school opened by Mr. Nathaniel T. Allen, in the premises lately of the Normal School, which was removed to Framingham ; and there, like the Hon. John Q. Adams in Congress, he has for several years been discharging, with exemplary fidelity, the duties of a subordinate, in the very place where he had so long presided.

If there be one excellence which, more than another, has characterized the schools kept by Mr. Peirce, from the beginning of his long career, it is the especial attention he has paid to the *moral* culture of

his pupils. He early perceived that the development of the intellectual forces of the children of men, and the bestowment upon them of large stores of literary and scientific knowledge, without a corresponding unfolding of their moral natures, fitted and often would rather dispose them to vice more than to virtue. It has long been obvious that "knowledge is power" for evil as well as for good. Mr. Peirce was fully persuaded that those instructors were conferring a questionable benefit upon society, if nothing worse, who were sending out children, enabled to run well on any of the various courses which might be thrown open to their political ambition, their love of money, or desire for social distinction, unless they have taken all necessary pains to fortify them against temptation, by awakening in their hearts a profound reverence for all the laws of God, and an unfeigned, impartial respect for the rights and feelings of their fellow-men.

His views on this fundamentally important inatter were fully exhibited in a carefully prepared Essay on "Crime, its cause and cure," which he presented incognito to the committee of the American Institute of Instruction on Prize Essays, in 1853. Each member of that committee by himself examined it, and formed his decision without conference with the other members. They all concurred in awarding to his essay the premium offered. And yet, when the essay came to be read before the Institute at New Haven, it was misunderstood, misrepresented, vehemently opposed, and finally forbidden a place among the publications of the Institute. Seldom has there been such an instance of hot haste in a deliberative assembly of wise and good men. The essay was soon after published, just as it had been read to the Institute. It vindicates itself against the decision of that body. And it has also the endorsement of such men as George B. Emerson and Solomon Adams. The essay does not, as was alledged, charge upon the schools of New England that they teach immorality, or that they are the *productive cause* of the increase of crime among us. It only asserts and maintains what was seen to be true by the most careful observers, and has since become more and more apparent to all who take any notice,—1st, that *merely intellectual* education is no security against immorality or crime; 2d, that facts show that crime *may* increase at the same time with increased attention to education,—the common education of the school;—that this is the case, to some extent, in our own New England; and for the reason, in part, that the common education of our schools has in it too little of the moral element. We cultivate the head more than the heart. And 3d, that there is, hence, a call upon teachers, committees, parents, and all friends of true education, to make a larger outlay

for moral instruction, assigning to it in our schools the high place its importance demands. No propositions respecting our schools could have been announced, that were then, and are now, more easily proved than these. Could Mr. Peirce's essay be read again to the Institute, at this day, it would meet with a very different reception. The eyes of many more men, here and in Europe, have opened since 1853, to discern what he then saw. While we are writing these pages, a grave amount of testimony, exactly to the point in question, is brought to us in a contemporary journal, *The Religious Magazine*, as follows :

Education in New England has not been receding these dozen years. Schools have been multiplied ; universities have been enlarged ; the standard of scholarship has been raised. Yet the grosser kinds of iniquity have been spreading too. A careful examination of the records of penitentiaries and criminal dockets, has shown that this growth of lawlessness is just as great, in proportion, among those classes that instruction reaches, as with the abject and illiterate. Joseph Fletcher, one of Her Majesty's Inspectors of Schools, in a careful work on the moral statistics of England and Wales, shows that crime is not according to ignorance. Similar returns from France indicate, in fact, that the most highly educated districts are the most criminal districts. A series of able articles in the "Morning Chronicle," for 1849 and 1850, go to establish the same strange and almost paradoxical conclusion respecting different parts of Great Britain. The testimony of many chaplains of prisons is brought to confirm it. The ingenious treatise of Herbert Spencer, entitled "Social Statistics," adduces much parallel evidence. There may be some element in such data to modify an inference of the full breadth of the apparent facts. Yet is it a most impressive result. Ought it not to satisfy us that mental cultivation and moral principle are two things,—meant, no doubt to be harmonized and to help each other, but easily separated, and even made perversely hostile ?

Horace Mann took the true ground, in his late address at Antioch College, in maintaining that colleges ought to be held responsible for the moral as well as the intellectual character of its graduates ; and that diplomas should either contain, or be accompanied with, a discriminating certificate of moral character.

We think the American Institute of Instruction owe it to themselves, and to their committee on prizes, not less than to Mr. Peirce, to reconsider their action in 1853 respecting his essay, and to give it the honorable place among their publications to which it is entitled.

In accordance with the conviction declared in that essay, and animated by the spirit which breathes through it, Mr. Peirce, from the first, has given his chief attention to the moral conduct and principles of his pupils. No violation of the truth, in act or word, no obliquity of language, or feeling, or motive, would he pass lightly over. Any thing of the kind revealed to him that there was unsoundness at the very basis of his pupil's character ; and he had no heart, until that should be remedied, to go on building upon a foundation that he knew might at any time give way, and leave the superstructure a moral ruin,—all the more unsightly and pitiful if decorated with the

ornaments which learning, genius and taste may have entwined around the fallen columns.

Of course, it was in the preparation and recitation of their lessons, for the most part, that he was led to the discovery of his pupil's faults, or weaknesses,—was brought into conflict with the evil that was in them. He never punished, he never reprov'd a pupil for failing to do what he was unable to do; but only for negligence, for inattention, for not having made the effort he was bound to make. This he justly accounted an immorality. It was unfaithfulness to one's self; a fraud upon the teacher; ingratitude to one's parents; impiety toward God. No one could have been more tender, sympathizing, than Mr. Peirce always was, to one in difficulty. He would explain what was obscure. He would remove all obstacles out of his way, excepting that which the pupil alone could remove,—the obstacle in his own will,—his indisposition to make the needful effort. *That* the pupil must make himself. And Mr. Peirce never released him; never qualified a demand that it was reasonable to enforce.

Any artifices at the time of recitation, any promptings by word or sign, any sly lookings to discover what ought to have been learnt before, if detected, (as they were very apt to be by his vigilant eye or ear,) were sure to bring upon the culprits severe reprimands, it may have been some more enduring punishments. He could not look upon such as light offences,—merely roguish tricks, pardonable in thoughtless boys. They were frauds—attempts to make things and persons appear to be what they were not. And, if boys and girls did not appreciate the iniquity of such things, it ought all the more carefully to be exposed to them, and impressed upon them.

So, too, unnecessary tardiness and absence from school, playing or whispering during the hours assigned to study, were denounced and treated as grave offences against the little community, (which every school is,) no less than against one's self. Each and all of these things were reprov'd and punished, not so much because they were contrary to the laws which he had enacted, as because they were wrong in themselves, contrary to the eternal laws of right. He was careful to make the morality of all his requirements apparent to his pupils. His was not an arbitrary government. His laws were not matters of his own invention. They were the principles of righteousness applied to the conduct of children.

We have already stated that, at the outset of his career as a teacher, Mr. Peirce resorted to the then common expedients for insuring order, obedience, and attention to study; to wit, corporal punishments, appeals to emulation, offers of premiums. By these he did, for the

most part, obtain good recitations. He kept what was accounted a good school. He got to himself a high reputation. He could always have as many pupils as he saw fit to receive. For, behind all these things, there were accuracy, thoroughness, untiring assiduity, and impartial fidelity. It would seem, too, from the letters we have received, that, with the exception of the few very perverse, ill-disposed ones, he was generally beloved as well as respected by his pupils. They were all satisfied that he desired to promote their highest welfare; and that he was able as well as willing to teach them all they were willing or able to learn. Goldsmith's description of a country schoolmaster, might be taken as quite a correct likeness of him in that day, and of the regard in which he was held by the parents and their children.

But it was not long before he came to distrust the common appliances, and, at last, long ago, utterly to abandon and discountenance the use of them. He has been so successful in the management of his schools for the last twenty years, without corporal punishments, premiums, or artificial emulations, and withal has been so prominent an advocate of the new doctrine of school government, that it may be instructive, as well as interesting to our readers, to be informed of the process of the change, which took place in him, and the reasons for that change.

Our account will be taken mainly from a letter, which he wrote to a very particular friend,—wrote without the expectation that any part of it would be given to the public. It will speak for itself. It will call forth responses from the hearts of many, who have had, or may have, much experience in school-keeping.

The change was gradual, the work of time, and arose from various considerations. 1st. I could not, at least I did not, always administer corporal punishment, without awakening, or yielding to emotions of a doubtful character. I began to suspect that the effect upon myself was not good; and I could see that it often shocked, disturbed, but did not exalt the moral sentiment of the school. In a word, to both parties, it seemed to me, to work spiritual *death* rather than *life*. 2d. Often, after having inflicted it, I was visited with very troublesome doubts; such as, that possibly I had been too severe, even where I had no doubt that the offender deserved some chastisement; sometimes with a query, whether I could not have gotten along quite as well without any blows at all. This last query was pretty apt to arise the next day, after all the excitement of the occasion had subsided. 3d. Then again I was often troubled with the thought, that possibly I had not made sufficient allowance for the circumstances, and considerations, which pleaded in behalf of the culprit, such as natural temperament, inherited disposition, his previous training, surrounding influences, and peculiar temptations. 4th. Moreover, when I witnessed the blessed, the heavenly effects of forgiveness, and encouragement, I would almost resolve forthwith to put away the ferule and strap, and rely on moral suasion alone. 5th. As I lived longer, and observed, and experienced more, if I grew no wiser in other respects, I did in the knowledge of myself. I saw more of my own imperfections and faults, and self-conviction made me more compassionate and forgiving toward others. In fine, I came to the belief, that the *natural laws and their penalties*, to which all men, and the children of men, alike, are subject, from the beginning of their existence, were founded in love,

as well as wisdom ; yea, that our sufferings, (the consequences of transgression,) were, equally with our enjoyments, evidences of the wisdom and benevolence of the Heavenly Father. I thought, too, that I could discern a connexion between the transgression committed and the penalty endured,—an adaptation of the one to the other, in the divine discipline, the like of which I could not see in my own *artificial inflictions*. The punishments I was wont to apply, began to seem to me harsh, far-fetched, arbitrary, having no relation to the offences committed. And ought we not, said I to myself, in our discipline of children, to strive to imitate, as closely as possible, the Divine administration ? On philosophical principles, too, it seemed to me, the educator of the young could not be justified, in appealing to fear and force. Hope is a higher, nobler principle than fear. Hope, cheers, quickens, awakens aspiration, excites to effort and sustains it. Fear addresses itself to selfishness ; depresses and debases the subject of it. Moreover, it seemed to me, as the Creator had *adapted* the human mind to seek, apprehend and enjoy the truth, that, whenever truth was rightly presented, it would be apprehended, embraced, enjoyed, as naturally as the stomach receives, and relishes its appropriate food, without the extraneous and ill-adapted stimulus of *blows*. He, whose inspiration gave *understanding* to man, did not so fashion it as to render *blows* necessary to enable it to receive and appreciate knowledge. I came to see less and less clearly the loving kindness, or wisdom of such appliances.

God, creation, man, human relations, indeed all things began to put on a new and more beautiful aspect. Under the rule and quickening influence of love, the school-room wore a new and brighter face,—brighter prospectively, when I entered it in the morning ; brighter retrospectively, when I left it at night.

The above, I trust, will serve to hint to you the leading considerations that wrought with me a change of views and of practice, in regard to the whole subject of school discipline ; in regard to the means and motives to be resorted to, in the great work of education. The persons chiefly instrumental in bringing about this change in me, quite unconsciously it may have been to themselves, were the Rev. Mr. Mottey, late of Lynnfield, Mass. ; the Rev. Dr. Damon, late of West Cambridge, and Lucretia Mott. The conversations of each of these excellent persons, helped to bring me to the result I have attempted to describe. I think it was after listening to a conversation from Mrs. Mott, at Nantucket, in 1827, that I definitely formed the resolution to *attempt* thenceforward to keep school without the *intervention*, (for I can not say *aid*,) of *blows*.

In the same communication, of which the foregoing is an abstract, Mr. Peirce, says :—“ The book to which, after the Bible, I owe most, is that incomparable work of George Combe, ‘*On the Constitution of Man.*’ It was to me a most suggestive book ; and I regard it as the best treatise on education, and the philosophy of man, which I have ever met with.”

Whatever may have been his methods of teaching and governing, Mr. Peirce, from the beginning to the end of his career, has made the impression upon his pupils, that he was able to give them all the instruction they were disposed or able to receive ; and that it was his unfeigned desire, and constant endeavor, to lead them to become truly *wise*, and truly *good*.

The highest tribute that could be paid to his excellence, as a man and a teacher, would be a compendium of the very numerous testimonials which lie before us, from his earliest and his latest pupils. We have already given several from those of the former class. A few from the latter must suffice, and will appropriately close our memoir.

One, who was a member of his first class at Lexington, in 1839 and 1840, writes thus : “ I soon learnt to respect him, for his untiring

watchfulness, his uncompromising integrity, and his unceasing faithfulness—'instant in season and out of season.' To these I can bear a most grateful testimony."

Another, who was one of his pupils at West Newton, in 1849, says : "As an earnest, thorough, and effective teacher, I believe him to be unequaled. Endeavoring, as he mainly did, to rear the education of his pupils upon a true, solid basis, he dwelt especially upon the *elements* of every thing to be taught; aiming constantly to give that thorough, mental discipline, which puts the pupil into possession of his powers of acquisition and preservation. But Father Peirce's crowning excellence, was his moral power. I have never known a person who wielded so palpable an influence in this respect. Few natures could long withstand it. And I believe the good he has done in this, the highest, most essential, but most neglected part of human development, will never be duly estimated in time. * * * He combines, it seems to me, all the gentleness, tenderness, delicacy of a refined woman, with all the *manliness* of a true man."

An excellent young man, who became one of his pupils, soon after his return from Europe, has sent us the following testimony. "To Mr. Peirce, under God, I owe the knowledge I have acquired, and the moral character I have formed. I went to his school with strong proclivities to dissipation, and an utter distaste for study. With great forbearance, and by skilful, as well as kind management, he has enabled me to overcome both. He exerts quietly a very powerful influence over those who are intrusted to his discipline. He at once commands their respect; and, in due time, engages their affection."

But we must close;—and we close in the words of one, who was first a very favorite pupil, and afterward, for years, a most devoted and effective assistant,—Mrs. E. N. Walton :

I do not now recall any striking incidents, that would illustrate Father Peirce's character, either as a teacher, or as the pioneer in the great struggle which has resulted in the life and acknowledged necessity of Normal Schools. His life was uniformly so true, and his labors so unremitting, that, as I look back upon them, I discern no points that were strikingly prominent above others. The impression is rather that of a *beautiful whole*. * * * Every life has its lesson for humanity; and this, it seems to me, is taught by his. The almost omnipotence, within man's sphere, of a strong, inflexible *will*, and of patient, unremitting efforts in striving for the truth, and obeying one's convictions of right. His energy, united with his conscientiousness, made him what he was, and enabled him to accomplish what he did. What he undertook, he would do. *Attempting* was with him, so far as human efforts could make it, a synonym of *succeeding*. At first, I wondered at the results he accomplished; but an occurrence, which happened while we were at West Newton, showed me so fully his peculiar temperament, that I never afterward doubted that he would perform any task he set himself about. Whatever he could do, and had shown to be practicable, he insisted should be attempted by others. His pupils generally were *real workers*. They did not dare do otherwise than strive, and keep striving to the end. They felt, when they set about teaching, that there must be no failure; the whole normal enterprise rested,

for the time being, upon their shoulders, and they must bear it, though they were crushed beneath it.

His power of example was immense. Those pupils, upon whom his seal is deepest set, are remarkable for their energy, their faithfulness, their zeal and their *attention to the little things*.

"Learn first that which comes first." "Attend to one thing at a time." "Do thoroughly what you attempt to do at all." "Nip evil in the bud." "Be faithful in small matters." "Be firm, and yet be mild." "Be yourselves what you would have your pupils become." These maxims he repeated again and again to those he was training to be teachers, in view of their prospective duties. And "Live to the Truth,"—"Live to the Truth," was so ingrafted into our normal being that, should the mere walls of Normal Hall be tumbled to the earth, the last sound that would come from them, to our ears at least, would be, "Live to the Truth."

NOTE.

The following letter, addressed in 1851, by Mr. Peirce, to Hon. Henry Barnard, then Superintendent of Common Schools in Connecticut, embodies his own views as to the aims of his labors as Principal of the Normal School at Lexington, and West Newton.

"DEAR SIR:—You ask me 'what I aimed to accomplish, and would aim to accomplish now, with my past experience before me, in a Normal School.'

I answer briefly, that it was my aim, and it would be my aim again, to make better teachers, and especially, better teachers for our common schools; so that those primary seminaries, on which so many depend for their education, might answer, in a higher degree, the end of their institution. Yes, to make better teachers; teachers who would understand, and do their business better; teachers, who should know more of the nature of children, of youthful developments, more of the subjects to be taught, and more of the true methods of teaching; who would teach more philosophically, more in harmony with the natural development of the young mind, with a truer regard to the order and connection in which the different branches of knowledge should be presented to it, and, of course, more successfully. Again, I felt that there was a call for a truer government, a higher training and discipline, in our schools; that the appeal to the rod, to a sense of shame and fear of bodily pain, so prevalent in them, had a tendency to make children mean, secretive, and vengeful, instead of high-minded, truthful, and generous; and I wished to see them in the hands of teachers, who could understand the higher and purer motives of action, as gratitude, generous affection, sense of duty, by which children should be influenced, and under which their whole character should be formed. In short, I was desirous of putting our schools into the hands of those who would make them places in which children could learn, not only to read, and write, and spell, and cipher, but gain information on various other topics, (as accounts, civil institutions, natural history, physiology, political economy, &c.) which would be useful to them in after life, and have all their faculties, (physical, intellectual and moral,) trained in such harmony and proportion, as would result in the highest formation of character. This is what I supposed the object of Normal Schools to be. Such was my object.

But in accepting the charge of the first American Institution of this kind, I did not act in the belief that there were no good teachers, or good schools among us; or that I was more wise, more fit to teach, than all my fellows. On the contrary, I knew that there were, both within and without Massachusetts, excellent schools, and not a few of them, and teachers wiser than myself; yet my conviction was strong, that the ratio of such schools to the whole number of schools were small; and that the teachers in them, for the most part, had grown up to be what they were, from long observation, and through the discipline of an experience painful to themselves, and more painful to their pupils.

It was my impression also, that a majority of those engaged in school-keeping, taught few branches, and those imperfectly, that they possessed little fitness for their business, did not understand well, either the nature of children or the subjects they professed to teach, and had little skill in the art of teaching or governing schools. I could not think it possible for them, therefore, to make

their instructions very intelligible, interesting, or profitable to their pupils, or present to them the motives best adapted to secure good lessons and good conduct, or, in a word, adopt such a course of training as would result in a sound development of the faculties, and the sure formation of a good character. I admitted that a skill and power to do all this might be acquired by trial, if teachers continued in their business long enough; but while teachers were thus learning, I was sure that pupils must be suffering. In the process of time, a man may find out by experiment, (trial,) how to tan hides and convert them into leather. But most likely the time would be long, and he would spoil many before he got through. It would be far better for him, we know, to get some knowledge of Chemistry, and spend a little time in his neighbor's tannery, before he sets up for himself. In the same way, the farmer may learn what trees, and fruits, and seeds, are best suited to particular soils, and climates, and modes of culture, but it must be by a needless outlay of time and labor, and the incurring of much loss. If wise, he would first learn the principles and facts which agricultural experiments have already established, and then commence operations. So the more I considered the subject, the more the conviction grew upon my mind, that by a judicious course of study, and of discipline, teachers may be prepared to enter on their work, not only with the hope, but almost with the assurance of success. I did not then, I do not now, (at least in the fullest extent of it,) assent to the doctrine so often expressed in one form or another, that there are no general principles to be recognized in education; no general methods to be followed in the art of teaching; that all depends upon the individual teacher; that every principle, motive and method, must owe its power to the skill with which it is applied; that what is true, and good, and useful in the hands of one, may be quite the reverse in the hands of another; and of course, that every man must invent his own methods of teaching and governing, it being impossible successfully to adopt those of another. To me it seemed that education had claims to be regarded as a science, being based on immutable principles, of which the practical teacher, though he may modify them to meet the change of ever-varying circumstances, can never lose sight.

That the educator should watch the operations of nature, the development of the mind, discipline those faculties whose activities first appear, and teach that knowledge first, which the child can most easily comprehend, viz., that which comes in through the senses, rather than through reason and the imagination; that true education demands, or rather implies the training, strengthening, and perfecting of all the faculties by means of the especial exercise of each; that in teaching, we must begin with what is simple and known, and go on by easy steps to what is complex and unknown; that for true progress and lasting results, it were better for the attention to be concentrated on a few studies, and for a considerable time, than to be divided among many, changing from one to another at short intervals; that in training children we must concede a special recognition to the principle of curiosity, a love of knowledge, and so present truth as to keep this principle in proper action; that the pleasure of acquiring, and the advantage of possessing knowledge, may be made, and should be made, a sufficient stimulus to sustain wholesome exertion without resorting to emulation, or medals, or any rewards other than those which are the natural fruits of industry and attainment; that for securing order and obedience, there are better ways than to depend solely or chiefly upon the rod, or appeals to fear; that much may be done by way of prevention of evil; that gentle means should always first be tried; that undue attention is given to intellectual training in our schools, to the neglect of physical and moral; that the training of the faculties is more important than the communication of knowledge; that the discipline, the instruction of the school-room, should better subserve the interests of real life, than it now does;—these are some of the principles, truths, facts, in education, susceptible, I think, of the clearest demonstration, and pretty generally admitted now, by all enlightened educators.

The old method of teaching Arithmetic, for instance, by taking up some printed treatise and solving abstract questions consisting of large numbers, working blindly by what must appear to the pupil arbitrary rules, would now be regarded as less philosophical, less in conformity to mental development, than the more modern way of beginning with mental Arithmetic, using practical questions, which involve small numbers, and explaining the reason of every step as you go along.

So in the study of Grammar, no Normal teacher, whether a graduate or not, of a Normal School, would require his pupils to commit the whole text-book to memory, before looking at the nature of words, and their application in the structure of sentences. Almost all have found out that memorizing the Grammar-book, and the exercise of parsing, do very little toward giving one a knowledge of the English language.

Neither is it learning Geography, to read over and commit to memory, statistics of the length and breadth of countries, their boundaries, latitude and longitude, &c., &c., without map or globe, or any visible illustration, as was once the practice. Nor does the somewhat modern addition of maps and globes much help the process, unless the scholar, by a previous acquaintance with objects in the outer world, has been prepared to use them. The shading for mountains, and black lines for rivers on maps, will be of little use to a child who has not already some idea of a mountain and a river.

And the teacher who should attempt to teach reading by requiring a child to repeat from day to day, and from month to month, the whole alphabet, until he is familiar with all the letters, as was the fashion in former days, would deserve to lose his place and be sent himself to school. Could any thing be more injudicious? Is it not more in harmony with Nature's work, to begin with simple, significant words, or rather sentences, taking care always to select such as are easy and intelligible, as well as short? Or, if letters be taken first, should they not be formed into small groups, on some principle of association, and be combined with some visible object?

Surely, the different methods of teaching the branches above-mentioned, are not all equally good. Teaching is based on immutable principles, and may be regarded as an art.

Nearly thirty years' experience in the business of teaching, I thought, had given me some acquaintance with its true principles and processes, and I deemed it no presumption to believe that I could teach them to others. This I attempted to do in the Normal School at Lexington; 1st. didactically, *i. e.* by precept, in the form of familiar conversations and lectures; 2d. by giving every day, and continually, in my own manner of teaching, an exemplification of my theory; 3d. by requiring my pupils to teach each other, in my presence, the things which I had taught them; and 4th. by means of the Model School, where, under my general supervision, the Normal pupils had an opportunity, both to prove and to improve their skill in teaching and managing schools. At all our recitations, (the modes of which were very various,) and in other connections, there was allowed the greatest freedom of inquiry and remark, and principles, modes, processes, every thing indeed relating to school-keeping, was discussed. The thoughts and opinions of each one were thus made the property of the whole, and there was infused into all hearts a deeper and deeper interest in the teachers' calling. In this way the Normal School became a kind of standing Teachers' Institute.

But for a particular account of my manner and processes at the Normal School, allow me to refer you to a letter which I had the honor, at your request, to address to you from Lexington, Jan. 1, 1841, and which was published in the Common School Journal, both of Connecticut and Massachusetts, (vol. 3.)

What success attended my labors, I must leave to others to say. I acknowledge, it was far from being satisfactory to myself. Still the experiment convinced me that Normal Schools may be made a powerful auxiliary to the cause of education. A thorough training in them, I am persuaded, will do much toward supplying the want of experience. It will make the teachers' work easier, surer, better. I have reason to believe that Normal pupils are much indebted for whatever of fitness they possess for teaching, to the Normal School. They uniformly profess so to feel. I have, moreover, made diligent inquiry in regard to their success, and it is no exaggeration to say, that it has been manifestly great. Strong testimonials to the success of many of the early graduates of the Lexington (now W. Newton) Normal School, were published with the 8th Report of the late Secretary of the Board of Education, and may be found in the 7th vol. of the Massachusetts Common School Journal.

But it is sometimes asked, (and the inquiry deserves an answer,) Allowing that teaching is an art, and that teachers may be trained for their business, have we not High Schools and Academies, in which the various school branches are well taught? May not teachers in them be prepared for their work?

Where is the need then of a distinct order of Seminaries for training teachers? I admit we have Academies, High Schools, and other schools, furnished with competent teachers, in which is excellent teaching; but at the time of the establishment of the Normal Schools in Massachusetts, there was not, to my knowledge, any first-rate institution exclusively devoted to training teachers for our common schools; neither do I think there is now any, except the Normal Schools. And teachers can not be prepared for their work anywhere else, so well as in seminaries exclusively devoted to this object. The art of teaching must be made the great, the paramount, the only concern. It must not come in as subservient to, or merely collateral with any thing else whatever. And again, a Teachers' Seminary should have annexed to it, or rather as an integral part of it, a model, or experimental school for practice.

Were I to be placed in a Normal School again, the only difference in my aim would be to give more attention to the development of the faculties, to the spirit and motives by which a teacher should be moved, to physical and moral education, to the inculcation of good principles and good manners.

In conclusion, allow me to recapitulate. It was my aim, and it would be my aim again, in a Normal School, to raise up for our common schools especially, a better class of teachers,—teachers who would not only teach more and better than those already in the field, but who would govern better; teachers, who would teach in harmony with the laws of juvenile development, who would secure diligent study and good lessons and sure progress, without a resort to emulation and premiums, and good order from higher motives than the fear of the rod or bodily pain; teachers, who could not only instruct well in the common branches, as reading, writing, arithmetic, &c., but give valuable information on a variety of topics, such as accounts, history, civil institutions, political economy, and physiology; bring into action the various powers of children, and prepare them for the duties of practical life; teachers, whose whole influence on their pupils, direct and indirect, should be good, tending to make them, not only good readers, geographers, grammarians, arithmeticians, &c., but good scholars, good children, obedient, kind, respectful, mannerly, truthful; and in due time, virtuous, useful citizens, kind neighbors, high-minded, noble, pious men and women. And this I attempted to do by inculcating the truth in the art of teaching and governing,—the truth in all things; and by giving them a living example of it in my own practice."

II. THE CULTIVATION OF THE REFLECTIVE FACULTIES.

Lectures addressed to Young Teachers.

BY WILLIAM RUSSELL, LANCASTER, MASS.

Ed. American Journal of Education, (Boston,) 1826-29.

[Concluded from No. XI., page 216.]

II. THE ACTUATING PRINCIPLE OF THE REFLECTIVE FACULTIES : INQUIRY.

Its analogy to Curiosity.—When we trace the natural development of the human faculties, in their first stage of *perceptive* action, we observe them working by a law of incitement manifesting itself in the restless principle of *curiosity*,—the desire of knowledge. It is this feeling which prompts the child's appealing question, as he points to a new object that has attracted his attention,—“What is this?” But, as his reflective power develops, and his capacity of knowledge enlarges, his desire of information pierces deeper; and his interrogation takes a shape which indicates a more profound exercise of thought. He now inquires not “*What* is this?”—but “*How*,” or “*Why* is this?”

Reason, as the principle of intelligence which gleans and assorts the contributions of knowledge, has helped him to *understand* the exterior character of the object of his attention, and by the due exercise of *judgment*, in analytic observation, to distinguish, and classify, and denominate it accordingly. But a deeper thirst than mere curiosity as to external phenomena and characteristics, now actuates him: a more powerful instinct is at work within him. Reason has reached a maturer stage of development, and, prompted by inquiry, sets out the young explorer in quest not of mere facts, but of *relations* and *causes*. He thus learns to trace the successive links of *connected* phenomena and facts,—to investigate the *connection* itself, and determine its character, to search for interior and hidden springs of *sequence*, to arrive at *principles* and *causes*, to read and interpret *laws*, and, ultimately, to reach the certainty and the completeness of *science*.

The appetite of *curiosity* is satisfied with the knowledge of phenomena and of facts *individually*, or even as *detached* matters of observation: *inquiry* is restless till it arrives at their *connections* and *dependencies*, and the mind is thus put in possession of those relations of knowledge which constitute *principles* and establish *truth*. As an impelling and actuating force, *inquiry*, or inquisition, performs for the intellectual powers, in their comparative maturity, the same genial

office which was discharged by the awakening influence of *curiosity*, at an earlier stage of mental activity. It is, in fact, but the same instinctive law of the irrepressible desire to *know*, only working in a higher sphere, and for a higher end. *Curiosity*, working on the *perceptive* faculties, induces a tendency to *observation*, and forms the habit of wakeful attention to external *phenomena*, as the elements of KNOWLEDGE: *inquiry*, as the expressed desire to ascertain *relations*, *principles*, and *laws*, awakens the *reflective* faculties, and impels to *investigation*, with a view to the discovery of TRUTH. In the development and formation of mental character, *curiosity*, as the desire of *knowledge*, tends to create an *attentive* and *observing* mind, characterized by *intelligence*: *inquiry*, as the quest of *truth*, produces a *contemplative*, *thoughtful*, *reflective*, *reasoning* mind, addicted to *exploration* and *research*, and delighting in the attainments of *science*.

But in this higher sphere of intellectual activity, the human being is still acting under the guidance of an implanted *instinct*;—no longer, indeed, a mere unconscious stimulus, but a conscious and recognized impulse of progression toward a definite end and a satisfying consummation. The tendency, however, proves itself equally irresistible in the one form as in the other. For, while the child is sometimes so absorbed in the contemplation of the visible attractions of objects of beauty or of curiosity, as to forego even the calls of appetite for the sustenance of his body, in obedience to the more imperious claims of the wants of his intellectual nature; the adult man may lose himself yet more profoundly, when inquiry compels him to investigation, and plunges him into depths of thought in which he becomes lost to all surrounding objects and relations, and, like Newton, meditates on the fall of an apple, with an intensity and concentration of reflective attention which beguile him of needed sleep, and render him unaware of the presence of food or of the fact of his having omitted its use.

III. THE TENDENCY OF ACTION IN THE REFLECTIVE FACULTIES. INVESTIGATION.

Its manifold directions.—Inquiry, as the grand prompter of the reflective faculties, impels to habits of investigation and research. It not only leads to the scrutiny of the present, in quest of causes and of truth, but ransacks the records of the past, and penetrates into the probabilities of the future. It impels reason to explore the inmost recesses of nature, in pursuit of latent causes. It prompts man to conduct the experiments by which he interrogates nature of her processes, and wins, as the reward of his faithful inquest, the answers which he records in the archives of science. In the relations of moral truth, it

compels the investigation of evidence, the verifying of proofs, the sifting of testimony, for the attaining of certainty and the confirmation of belief. But for its influence, the world would be to man a mass of unconnected objects or facts : he would be to himself a mere embodiment of inconsistent elements, unintelligible and destitute of purpose.

Examples of the spirit of Investigation.—Incited by this principle, the *naturalist* explores the remotest regions of earth, to contemplate the productions of nature, to survey the great features of the globe, its various aspects of scenery, its mountains and rivers, its atmospheric phenomena, its mineral, vegetable, and animal products, and the mutual relations of cause and effect which all these bear to each other.

The *scientific voyager* and *traveler*, impelled by the irrepressible desire to prosecute his favorite researches, patiently endures fatigue, and sickness, and exhaustion, through every extreme of heat or cold ; he exiles himself from society, for months and years, to pursue his solitary investigations ; regardless of danger and difficulty, he bravely encounters every obstacle, and patiently endures every form of pain and privation. He goes forth with the spirit and hardihood of an invader, to extend the domain of science, and returns laden with the trophies of victory, in discoveries which enlighten and enrich the human race.

In the same spirit of investigation, the *astronomer* secludes himself, for successive months and years, to contemplate and record the phenomena of the heavens, and to immure himself in those labyrinths of computation by which the sublime truths of his noble science are investigated and revealed.

Actuated by the same principle, the *historian* pursues his laborious researches in the records of remotest time, in the half-effaced carving on the crumbling monument, or the dim characters on the decaying parchment,—in the obscure tradition or superstitious myth,—wherever a gleam or a spark of truth is to be found regarding the past life of man on earth. From his devotion to such investigations, no fresh charm of nature, or invitation of social delight, can induce him to withdraw, till he has sifted every alledged fact, verified every event, dispersed the clouds of fable, and let in the pure light of *truth* upon the historic page.

The *philologist*, in quest of a particle of meaning or significant value in the component elements of a word, is another impressive example of the spirit of inquiry leading to profoundest research. Whole years, nay, a long life, are joyfully devoted by him to such pursuits. Language after language, by his slow but sure processes of mining and sapping, is forced to give way to his irresistible energy and persevering

toil. Nothing can divert his attention, or turn him from his course of persistent indagation. A syllable or a letter, he feels assured, contains a secreted gem of meaning, the investigation of which will put him in possession of wealth untold; and that element he will trace, at whatever cost of persevering investigation, through libraries and through languages, till the lustre of the intellectual diamond beams full upon his mind. His personal acquisition, purchased at such a price, becomes, in due season, through the instrumentality of his devoted labors, the common property of the intellectual world.

The investigations of the *mechanician* into the laws and forces of nature, again exemplify the power which the spirit of inquiry exerts over the human mind, and the value of the results to which it leads. The long and complicated processes of computation by which the devoted servant of science pursues his study of its principles, when occupied with the intricate combinations involved in the invention of some device of mechanism, by which the well-being of mankind may be promoted for ages; the unabating ardor with which, in spite of every discouragement, he continues to consume fortune and life in the prosecution of his purpose;—all indicate the moving force of the mental principle by which his own interior world of invention and contrivance is actuated; and the results ultimately obtained reveal the value of the intellectual habits which are concerned in the processes of investigation.

The *chemist*, interrogating nature, as he investigates the constitution of her elements, is yet another forcible example of the same spirit. At the risk, sometimes, of life itself, he pursues his inquest of hidden relations, perplexing facts, and hitherto undiscovered elements and undeveloped forces, till he is enabled to enlighten the world by the revelation of a new material in the construction of the physical universe, and an invaluable aid to the welfare of man.

Investigation, in all the relations of mental action, is, in brief, the just price of labor, which man is doomed to pay for value received. The noblest of all intellectual acquirements, the grandest discoveries and most useful inventions, are due alike to this process by which the mind is enabled to read, whether in the world of matter or that of spirit, the laws instituted by the Creator; coöperating with which, man becomes possessed of a portion of divine power, and unaided by which, every attempt of human force or skill must be baffled. The tendency and the ability to penetrate into the depths of causation, constitute the mental prerogatives of man; they lift him up to the rank of nobility, in the orders of intelligence, and make his mind the well-spring of a stream which is destined to flow on forever,—not with

the mere casual or limited contributions of *observation*, but ever enlarging itself by the broad and deep affluents of profoundest thought and reflective reason, and richly laden with all the treasures of discovery, which have been accumulated by laborious and successful *investigation*.

IV. THE RESULT OF THE ACTION OF THE REFLECTIVE FACULTIES : TRUTH.

The successive stages of intellectual progress.—Furnished with the interior principle of *intelligence*, invested with the organized apparatus of *sensation*, and provided with the physical *material* for the exercise of his powers, the child, under the guidance of Creative wisdom, sets out on the career of intellectual progress, actuated by the impulse of *curiosity*, whose tendency is to insure the habit of *observation* and that discipline of his perceptive faculties by which he is ultimately enabled to win the prize of KNOWLEDGE. He thus accomplishes his first *curriculum* in the great school established by the benignant universal Providence which careth for humanity, and under whose discipline the law of progressive intellection secures, to a given extent, the welfare of man, whether more or less favored by intelligent human culture. To this first stage of development gradually succeeds that other, in which, through the inward action of the divinely-implanted principle of intelligence, man's own inner, mental world of conscious condition, act, cause, effects, tendency, and power,—of memory, reason, imagination, feeling, and will, is revealed and explored, as a theatre of comparatively unlimited expansion and ceaseless action. Within himself, he finds, at once, the power, the springs, the scope, the materials of this new career of activity, in which he is impelled by the same earnest irrepresible desire to discover and to know, as before, but now working in a higher sphere, and with a higher aim. Prompted by *inquiry*, and impelled to *investigation*, he is thus led onward to that higher goal of intellectual progress, where, by the disciplined action of the *reflective faculties*, *knowledge* is consummated in TRUTH, and where man discovers, and learns to reverence and obey, the highest law of his being,—subordination to the sway of the Reason which reigns supreme in the universe of thought.

Appropriate application of the term Truth.—The sense in which the word "truth" is properly used in general discussions connected with mental processes, is, of course, wider than that in which it is employed in relations strictly or exclusively pertaining to the science of logic. In the latter case, it implies no more than the exact conformity of the terms of a proposition to the fact which it is obviously meant to announce. But, in well-sanctioned forms of expression on

general topics, *truth* is, with equal justice, predicated of the correspondence of language to thought, of art to nature, of action to intention, of antitype to type,—in any relation whatever.

In the working of the mind, the term applies, with not less propriety, to the correspondence of perception to object, of conception to idea, of word to thing, of language to relation, of action to conscience, of habit to character, of aim to end, of opinion to sentiment or statement to fact, of expression or representation to reality or actuality. The word "truth," in brief, covers, properly, the whole ground of intellectual, æsthetic, or moral conformity of thought, expression, or action, to an exact and recognized standard, sanctioned by the canons of criticism or of conscience. It stands opposed, therefore, equally to falsity of conception, of expression, or of action. As a quality, it characterizes alike the habits of the correct thinker, of the exact artist, whether in the use of pencil, pen, or tongue, and those of the sincere and honest man. It secures the individual from the unintentional defects of error, and guards him against the voluntary deviations of design.

In relation, however, to the subject of human culture, and, in particular, to the discipline of the mental powers, truth is regarded as a result of voluntary and studious application,—as a product of the exercise of the reflective faculties, in the quest of ultimate principles in science, physical, intellectual, or moral. Examples in point are furnished in the process of tracing the great laws of physics, in the demonstrations of geometry, in the verification of history, in logical ratiocination, in the discussion of moral obligations, in the scrutiny of evidence. In such investigations, the quest of truth, conducted by well-disciplined reflective faculties, is steadily, skillfully, and successfully pushed onward to the grand crowning result of *certainty* and *conviction*. Unaided by the skill which culture and discipline insure, the mind has no security against the involuntary illusions of error, or the intentional misrepresentations of deceit; it discovers no stability in the outward universe, has no confidence in its own conclusions, no just reliance on itself, no firm conviction of duty, no enlightened faith in testimony; but blown about by every plausible assumption of theory, and every shifting phase of circumstance,—a prey to every reigning delusion, unsettled on any sure foundation of moral principle,—skeptical as to every vital truth, plunging into every approaching fog-bank of error, and drifting, without chart or compass, on the great ocean of uncertainty,—suffers, at length, an intellectual and moral wreck.

Most justly, as well as beautifully, has Bacon said, "truth, which

only doth judge itself, teacheth that the inquiry of truth, which is the love-making, or wooing, of it,—the knowledge of truth, which is the presence of it,—and the belief of truth, which is the enjoying of it,—is the sovereign good of human nature.”

Guided by his own unassisted reflective reason, man does unquestionably attain to great results, both intellectual and moral. But, enlightened by the knowledge which science and education shed on every relation of his being, what a vast expansion, what a wondrous elevation is he capable of attaining;—all resulting from the faithful application and skillful exercise of the reason with which his Creator has crowned his intellectual faculties! How noble, in this view, becomes the office of the educator, whose daily endeavor it is to cherish, and strengthen, and vivify this master principle of all intelligence!

V. EDUCATIONAL PROCESSES FOR THE DEVELOPMENT AND DISCIPLINE OF THE REFLECTIVE FACULTIES.

Defective Methods.—If we look at what is professedly and formally done, in our common modes of education, for the exercise and discipline of the reflective faculties; and if we found our estimate on the number of branches of knowledge or of science, and the number and variety of books nominally employed for the purpose, we might be inclined to suppose that, in this important part of culture, much is effected. But, on examining the actual state of things, errors and oversights, in this respect, are found to be numerous, and methods comparatively ineffectual.

Exclusive reliance on exactness of recollection.—*Memory*, the appointed servant of the reflective faculties, whose office it is to collect and keep and furnish the materials for their action, is, indeed, amply laden with the semblance and show of matter;—but most of it in the form of Hamlet's book of “words, words, words.” The too exclusive use of *manuals*, the mere records of knowledge, instead of the actual study of *objects, facts and relations*, the observation and the understanding of which constitute knowledge *itself*, leads to the cultivation of a verbal and mechanical memory, instead of a living and intelligent one. The fact is still too generally overlooked, that memory is not so much a separate faculty, which can be trained and disciplined by itself, as the mind,—in virtue of its spiritual nature and exemption from limits of time and space,—retaining or recalling what it has once observed or conceived; that the vigor of this retention, or the force of this recurrence, must always be as that of the original impression; and that the only rational reliance for the healthy and effective action of *memory*, must therefore be the freshness, the force, and the depth of *attention*. But, obviously, no impression made on the mind through

the medium of language,—no matter how exact may be the definition, or how true the description,—can ever be so complete or so effectual as that of direct observation through the senses, personal experience, or distinct consciousness. Here, again, we are referred to two great educational principles: that the study of things should precede the study of words, and should always be resorted to, in preference, wherever there is a choice of modes of instruction; and that, to awaken and develop the reflective faculties, the true course is, in obedience to the Creator's appointment, to use the objects of nature as the apparatus which His wisdom has provided, not only for the exercise and training of the mind's perceptive faculties, with a view to the acquisition of *knowledge*, but for the expanding and deepening of its capacities of discovering *truth*. Observation naturally prompts to thought and reflection. There is, in such circumstances, a conscious, living transition from one sphere of intelligence to another,—from one comparatively lower and more limited to one higher and more spacious. But in the mere contemplation or repetition of the words which describe an object, record a fact, or state a principle, the condition of mind is that of abstraction; and the mental associations, in such conditions, are always less vivid, forcible and distinct, than in the observation of concrete realities; and, when the former of these conditions is recalled, its impress is necessarily dim and obscure, compared to that of the latter, which, by the experience of actual perception, has become a comparatively inseparable part of the mental life and history of the agent.

The difference in these two cases will be rendered yet more strikingly apparent, if we suppose,—what is commonly true in verbatim processes of committing to memory,—that the mind of the learner, in his anxiety to retain and repeat with exactness the phraseology of the book which he studies, often glances aside from the contemplation of the *fact* or the principle which he is enunciating, to the literal succession of the *words* in which it is expressed. The mind's power of abstraction becomes, in this way, the very means of its deterioration; and the memory, abused by this arbitrary and mechanical mode of exercise, loses its healthy power of retention and recollection; and unfortunately, most of all, in those reflective processes of earnest thought which demand its most vigorous exertion.

The prevalent methods of teaching, moreover, are still too exclusively directed to the exercise of memory, at the expense of neglecting the other faculties,—an evil inseparable from the false views which still usurp the seats of instruction, and make education consist in processes of passive reception, on the part of the pupil; as if his mind were a

capacity to be filled, rather than a capability to be developed, or a life-power to be awakened.

Reading.—The greater number of the subjects which are introduced in early education, as means of exercise and discipline for the mind, are still too commonly treated under the influence of these erroneous views of the character and objects of mental culture. Hence the wearisome experience of the child, when compelled to drudge through the task of committing to memory the *names* of all the alphabetic characters of the language, before, or perhaps without ever, acquiring a knowledge of the *power*, or actual *sound*, of any one of the whole group. Every day, he is giving two or three of these sounds in every one of the short and easy words which he uses in conversation. But he is not allowed the satisfaction of recognizing the fact, that these troublesome and perplexing marks before his eye, are little graphic characters to suggest, phonetically to eye and ear, the very words which he is constantly uttering. When the alphabetic task is accomplished, there follows, usually, in the child's experience, that of hewing his way through whole columns of words, to him unmeaning, because lying out of his sphere in the understanding and use of language; and to this useless toil too often succeeds that of reading multitudes of unintelligible sentences of a character corresponding to the words which baffled him. But we need not dwell on this topic now, having entered into it at length, in former connections of this part of our subject.

Arithmetic.—In arithmetical instruction, which might be so effective an aid to the development of the mind's reflective power, the same evil still too generally prevails, as in the rudimental stages of spelling and reading. The very first step taken, in some instances, is to prescribe and enforce the committing to memory of elementary tables of numbers, by arbitrary repetition of the words in which these are expressed. Were the child allowed the fair opportunity of first *seeing*, in concrete form, the facts which he is made to assume and communicate in parrot-like form; and were he allowed to *create* them for himself, in visible or tangible shape, in copious instances, and thus to generalize the facts from his own observation, memory would have an intelligent, living office to perform, would work with freshness and strength, and long retain, or easily recall, what attention had proved. Were it required of the pupil thus to *construct* the given table, instead of merely repeating the words in which it is expressed, the exercise of memory would be as pleasing as it would be invigorating. It would thus be aided by the deepening and strengthening effect of the not less delightful processes of *combining* and *constructing*, in the actual

work of practical operations. The busy hand would thus help the thinking head to clearer views and deeper impressions; and the true and proper work of memory would be done in accordance with the law of mental action.—“AS IS THE EARNESTNESS OF ATTENTION, SO IS THE DURATION OF REMEMBRANCE, OR THE DISTINCTNESS AND READINESS OF RECOLLECTION.”

Geography.—The subject of *geography* furnishes very frequently another example of memoriter lessons, exacted, perhaps, with a well-meaning rigorous fidelity to the language of a text-book, but sacrificing the useful knowledge, the pleasing information, and the invaluable mental training and discipline, which this instructive branch of science might be made to furnish. Detached facts, comparative numerical tables, and assumed definitions, are yet too uniformly imposed as a burden on the memory; while the actual survey of even a limited portion of the earth's surface, within daily view, perhaps, of the learner, would furnish him with the best materials on which to build up the noble and majestic structure of geographical science.

Fortunately, through the labors of Professor Arnold Guyot, in his luminous exposition of the philosophy of instruction in this department of science, a new and better era is begun in American schools; and this branch of education is now, in many seminaries, taught on methods strictly logical. The study of geography thus becomes an admirable intellectual discipline, in addition to the systematic forms in which it embodies the great facts and pervading laws of nature, which are its peculiar province as a science. The student, who is trained on this admirable method, has the great features of the globe, and all their relations of consequent fact, imprinted forever on his memory. The very inequalities of the earth's surface, become to him an intelligible language, by which he reads the laws of design, and traces effects to causes, with the certainty of distinct recognition. Taught in this manner, few sciences are more adapted to the development of the reflective faculties, in their first steps of advancement from the field of perceptive observation to that of contemplative survey and rational inquiry, or to that of profound scientific investigation. The methods which Professor Guyot has transferred from the lessons of his own distinguished instructor, Carl Ritter, and the views of the patriarch of geographical science, Baron Alexander Von Humboldt, will, it is to be hoped, soon find their way not only into our text-books, in which they are beginning to appear, but into all our seminaries in which the young mind is undergoing the formative processes of education.

History.—Of all the sciences which are naturally fitted to invite the

mind to the full exercise of its reflective tendencies, none would seem so happily adapted to this end as *history*. Its records, while they are, in one sense, but forms of memory, are still the records of man moving on his amplest stage of action, as a human being, intelligent, rational, and moral; blending the relations of individual character and social life with those of the national and political sphere,—with the founding the government, or the fall of states and empires.

History, as it necessarily exhibits man in his moral relations, ought to be one of the most instructive and suggestive of studies. If any subject can excite reflective thought, it is this. Its analysis and scrutiny of human character; its investigation into the motives of action, in every form and condition of life; the research, to which it invites, into the manners and customs of by-gone ages; the careful examination which it induces of the testimony of conflicting records; the views which it discloses of national character and institutions; the insight which it gives into the policy of nations, and the influence of different forms of government; all bespeak the tendency of historical studies to evoke the most earnest and profound reflection. The study of history should be, in itself, an effective discipline of the mind, in all the noblest relations of its action. But, here, too, the mere imprinting on the memory a naked record of detached facts, of single events, or striking incidents, or of the items of a chronological table, is the too prevalent law of custom in the requisitions of educational establishments. The life of history, its suggestive power, as a reflective and moral instructor, is thus killed; and, instead of the living form, in its natural lineaments and beauty, we have but a meagre outline of the dry bones of what, in the technical language of historic compilation, is most aptly denominated a "skeleton."

To the mature mind, willing to encounter fatiguing effort, and patiently to add stone to stone of the intellectual fabric, the plan too commonly adopted in the instruction of young learners, of beginning the study of history with a mere outline of dates and events and eras, may prove practicable, though not easy or pleasant. But, to the youthful spirit, the great attraction of this study lies in its pictures of life and action, and in the sympathies which these evoke. To the juvenile reader all history is biography. The policy of nations, the intrigues of state, the strategies of war, are unintelligible and uninteresting to him; and he ignores them, if they intrude upon the narrative. But the feeling and the character and actions of individuals, he understands, and admires or hates, according to the promptings of his unperverted heart. He follows the steps of the historic hero, through all his scenes of struggle and trial, of effort and of triumph; imbibing

unconsciously, in the successive stages of this ideal progress, inspiring lessons of wisdom and virtue from all, or listening to the warnings which recorded experience gives on the evils of folly or of vice.

A course of judiciously selected *biography*, should be the educational introduction to the study of history. The interest attached to the personal narrative, accompanies the young student into his reading on the broader scale of national movements and their various consequences; and the life breathed into the study from the character of its earliest stage, gives warmth and attraction to all its more extensive views and complicated relations.

Language, as the product of the expressive faculties, and as a discipline for their development, we had occasion to discuss under that head, in a former lecture. But we have still to do with it as a part of education adapted to the strengthening of the mind's power of reflective investigation. Our common error in this department, as in others, is a too exclusive attention to the acquisition of a certain amount of knowledge of the etymological and syntactical forms of words and phrases,—a knowledge depending entirely on the exercise of memory in retaining or recalling these forms. Through the various stages of education, the attention is too exclusively fixed on these minutiae of language; and, neither in the study of ancient or of modern languages, nor even in that of our own, is the mind duly attracted to the character of the sentiments embodied in the works of the authors which are read in the progress of education, nor to the broad distinctive traits which form the character of the given language,—to the individuality which a successful writer stamps on it, or to the mental value of the forms of expression which he adopts. *Philology*, a pursuit so peculiarly adapted to the cultivation of the mind's reflective and investigating powers, is cut off from the student till the strong bias of personal taste or inclination induces him to open this mental vista for himself. *Criticism*, too, the art which demands the closest application of reflective judgment, in addition to perfect purity of taste, is handed over to the lessons of some meagre text-book, which does not contain matter enough within its boards for the proper discussion or fitting elucidation of a single principle of æsthetics.

Logic is another science belonging to the more advanced stages of education,—the study of which ought to exert a powerful influence on the tendencies and habits of the reflective faculties, but which is sometimes very inadequately taught even in our higher seminaries of learning. In some of these institutions, it is customary to restrict the study of logic to the ancient Aristotelian form of it, and without the advantage of the scholastic, syllogistic disputations, which, although always

formal in character, and sometimes frivolous in result, were yet designed to be vigorously exact exemplifications of pure logical reasoning ; and which, with all their faults and failures, secured, at least, one great practical object of education, by giving the mind active exercise in applying principles, instead of leaving it merely to listen, and remember, and record. It is true that, in some educational establishments, a more liberal view of logic is entertained, and that, in these seminaries, the science is regarded not merely as one which teaches the art of reasoning, but as that which investigates and enunciates the laws of thought, and involves, therefore, a knowledge of the elements of intellectual philosophy, together with the application of all the principles of mental science which affect the exercise of any class of the various powers and faculties of the mind.

An instructive exposition of this view of logic, as the first stage of purely intellectual discipline, is given in the "Outlines of Philosophic Education," by the late Professor Jardine, of Glasgow University, who, for fifty years, conducted, with distinguished success, his course of instruction, on the plan delineated in his work. That eminently skillful teacher,—for he regarded the duties of a professor in his department as consisting quite as much in conducting the practical processes of training exercises, as in the didactic routine of lecturing,—regarded the study of the Aristotelian logic but as a very limited part of intellectual discipline, and, while he allowed it its distinct place and full value, justly maintained that, for the purposes of modern education, which imply so wide and varied applications of thought,—in directions so different from those pursued in ancient times,—the sphere of study must be greatly enlarged beyond the narrow limits of the scholastic discipline, and a course of training prescribed which shall prepare the mind for the new demands made upon its powers, in the new modes of action with which modern science is conversant.

This broader view of logical discipline is fortunately taken by several of our own recent writers on the subject ; and the course of instruction is, accordingly, in some seminaries, enlarged so as to embrace the elements of intellectual philosophy, as indispensable to clear and satisfactory views of logic itself, and to the purposes for which the study of logic was originally constituted a department of education. But, even in such instances, the young student is not trained to apply the principles embodied in his text-book to an extensive course of practical exemplifications and personal discipline. He is not called to perform any series of practical exercises bearing the same relation to the science of logic that analytic parsing and written composition bear to grammar. He is not trained to trace the logic of great arguments

exemplified in the productions of eminent metaphysical writers. He is not disciplined in the digesting and methodizing of his own conceptions on prescribed subjects, so as to give sequence or soundness to argument, and certainty to his own conclusions.

In the study of *intellectual philosophy* we see, too often, another instance of the imperfect learning by book, without the contemplation of the thing itself of which the book treats. Our current instruction, in this department, consists in little more than the assigning of so many pages of a text-book to be committed to memory; and the progress made in the study of the science is judged of by the correctness or the fluency with which the terms employed in the nomenclature of a favorite system can be repeated, rather than by any actual knowledge or personal opinions on the subject itself. The student is not invited to put forth his own mind, in actual investigations on the topics which he studies: he is not permitted to enjoy the benefit of those conversational discussions with his instructor, which might create a living interest in the subject prescribed, and induce the student to prosecute with effect those unaided researches of individual application, without which knowledge is not to be acquired, or truth ascertained.

In the department of *moral philosophy*, a subject so peculiarly adapted to the development and discipline of the reflective faculties, we find, usually, the same mechanical routine of book-study and recitation adopted. In this highest relation of human instruction, the mind is still left passive and receptive merely; while there is no subject on which original, vigorous, and personal thought is so important to the acquisition of principle or the formation of character. Here, more than anywhere else, living, eloquent instruction from the man, rather than the book, is indispensable to the production of deep and enduring impressions of truth, and the exciting of hearty sympathy with its applications. Here, too, more than elsewhere, is the active use of the student's own mind necessary to the results of true culture on personal habit and character. His own investigations, and his own record of these, ought to be required of him, as the only rational benefit of the guidance afforded by a text-book or a teacher. Conversation and writing would throw life into these subjects, and make them matters of personal interest and personal conviction to the individual; and the fruits of education would thus be more extensively reaped in the experience of society.

APPROPRIATE METHODS OF DISCIPLINE.—We will now turn from the consideration of the subjects which form the usual material for the education and development of the reflective faculties, to the more

immediate contemplation of those faculties themselves, with regard to their natural wants and appropriate aids ; and, first, as regards the faculty of

Memory.—In the fact of *muscular* action, the power to retain depends on the firmness of the original *grasp*. The analogy holds in the exercise of memory : the retentive or repeating power depends on the depth of the impression : concentrated and sustained attention is the condition of remembrance. If we would strengthen the memory, we must cultivate force of attention. The indication of nature to the teacher, in this case, obviously is, Select for the mind's first exercises, striking or attractive objects of attention, or interesting subjects of thought. For more advanced stages of mental progress, when accuracy demands comparative minuteness and multiplicity of uninteresting detail, rely on the moral force of the will and disciplined habit, to give closeness and persistency to attention. In all cases, keep fully in mind the great value of mere *repetition* and frequent *review*, without which all ordinary subjects of past thought are ever tending to sink into dimness and obscurity, and, ultimately, into utter forgetfulness.

Mechanical aids to memory may sometimes appear very plausible ; and they often are very amusing temporary expedients. But they actually destroy memory, by setting it aside, and usurping its place. The physiologist tells us that if we omit the due use of the teeth, we forfeit the possession of them. The fact is strictly so of memory. The juggling tricks of perverted ingenuity may seem to conjure up a substitute for the sound and healthy exercise of this faculty. But the subject of the experiment, in this as in all other forms of charlatanism, finds himself, in the end, the victim of deception.

Memory, when employed on subjects comparatively complex, or intricate in their relations, finds its surest reliance,—next to close and fixed attention,—to consist in the grand universal law of *order*. *Arrangement, classification, system, method*, are powerful auxiliaries to memory, as they all tend, more or less, to give sequence to thought, by the law of causation, in the closest connection of antecedent and consequent. One stage of thought thus suggests another ; and the machinery of memory, so to speak, works smoothly and well. The security for remembrance or for recollection, in such circumstances, lies, of course, in the clearness with which connections and relations are perceived, and the fidelity with which they are observed. A treacherous memory is often but the report of unfaithful observation or dim conception.

Habits of Conception dependent on those of Perception.—*Conception*, as a primary power of reflective intelligence, performing for the

relations of pure intellection, the same office with that of *perception*, in the exercise of the understanding on the objects of *sensation*, depends, to a great extent, on the character and habits of the *perceptive* faculty. The *relations* which the *conceptive* power discerns between the objects and facts, presented to it by the ministrations of sense, constitute the condition of *intelligent observation*, as differing from mere *ocular aspection*. But these relations necessarily derive much of their reality and force from the vividness of the sensation and the clearness of the understanding, which have attracted *attention* to the external phenomena, and thus have elicited the conceptive acts of mind by which the relations perceived and understood become the ground-work of *reflection* and *meditation*, leading in turn to farther processes of thought, inductive or deductive, as investigation may require.

Clear, forcible and true *perceptions*, therefore, are requisite antecedents of corresponding qualities in *conception*; and a sound and active condition of the latter depends on similar conditions and habits of the former;—just as healthy *sensation* is, in turn, the pre-requisite of distinct *perception*. We are thus again referred, in adopting educational measures for strengthening and developing the mind's conceptive power, to the attentive observation of external nature, as the proper commencement of early mental training; as the only security, also, for the vigor of all those faculties which aid the mind in digesting and assimilating to itself, by purely internal operations, the materials of knowledge acquired through the action of sense, for the purpose of being incorporated into the mental fabric. We are, at the same time, reminded of the great fact, of which education should never lose sight, that, whatever be the number of faculties into which the intellectual philosopher may, in his scientific analysis, subdivide the action of the mind, or whatever may be the personified individuality which the figurative language of popular usage may arbitrarily confer on any one mode of mental action,—to distinguish it from others,—the principle of intelligence is strictly a *unit*; that it is the *same* agent, whether contemplating the external world through the windows of sense, or looking inward upon itself, and interpreting its own action. In both circumstances, we recognize a voluntary act of attention, followed by an apprehensive or a comprehensive act of understanding. In either case, *intelligence* is the power at work; *knowledge* is the *immediate*, and *truth* the *final* result.

Conception as dependent on Memory and Imagination.—Under the term “conception,” however, in the vague usage to which the English language is unfortunately prone, in all subjects purely intellectual, we usually include states or acts of *memory* and of *imagination*. Nor is

it to be denied that the conceptive faculty is often called into action on data furnished by *memory*, as well as on those presented by *sense* or by *reason*. To vivify and invigorate the power of conception, therefore, in such relations, we are admonished to pursue the same course of exercise and discipline by which that faculty is rendered prompt and retentive. Whatever we succeed in doing to improve the *memory*, becomes thus a gain to the power of *conception*.

Again, the prevalent use of language refers many of our conceptive acts to forms of *imagination*. The astronomer, speaking of the sun, tells us of its dark, central body,—of its first layer or substratum of cloudy atmosphere,—of its photosphere, or luminous atmosphere, and of yet a third rarer element, ethereal and slightly colored,—as to the character of which, science is somewhat perplexed with uncertainty. The conceptive power of the mind enables us, in this case, to follow the entrancing description as the scientific observer, aided by the many appliances which modern instruments provide, proceeds with his verified observations; and, with wondering attention, we draw on the tablet of imagination the successive images which his graphic but exact expressions suggest: we see, with the mind's eye, the sun-world, and its enfolding atmospheres, as distinctly in our consciousness as if we surveyed them with eye or "optic tube."

Correctness of Conception.—Even in such cases, however, the truthfulness and the distinctness of the mental picture depend, to a great extent, on the exactness of its correspondence to fact, as regards not only the forms but the character of objects, and the relations existing between them. Here, again, we are referred to the working of the intelligent principle in the modes which we denominate *understanding* and *judgment*, without which the whole structure erected in the mind would be as the poet's "baseless fabric of a vision."

In educational training, therefore, while every endeavor should be used to vivify and incite *imagination*, and to awaken it to its utmost activity by appropriate exercise, with a view to the vast power which that faculty confers on conception, as a creative energy of mind; and while all the aids which nature, art, and poetry, offer to this end, should be fully employed; there remains yet a task for education to perform, in inuring the conceptive faculty to the discipline of *reason* and *judgment*, so as to render it exact, and truthful, and symmetrical, in all its work.

The means by which the mind is to be formed to such habits in its conceptive action, are evidently the same which we would employ for developing and strengthening the reasoning powers: first, *the interesting presentation* of the objects and facts of the *natural* world,—so

as to elicit thought and reflection on their character and relations ; secondly, the *teacher's* skillful *suggestion*, designed to aid the observer in tracing those relations to principles and laws of logical science ; and, thirdly, the careful training of the mind to *the contemplation of its own action*, to the critical inspection and exact *discrimination of the results of its action*, and to the thorough *investigation of the laws of thought*, applied to the quest of truth.

CONSCIOUSNESS :—*as an aid to Reflective Reason*.—Of the reflective conditions of mind which tend to give accuracy to knowledge, or certainty to truth, none is more conducive to such results than that of *consciousness*. Not that it necessarily constitutes a separate power or faculty ; (since it is plainly but an act of introverted attention, by which the mind becomes aware of its existing states, acts, or processes ;) but rather that it is a mental condition distinctly recognized in all the languages of civilized man, and implies the power which the intelligent principle possesses of holding up, in distinct vision to itself, its own acts and operations ;—whether these refer to the external world of perception or the interior world of thought. This power of self-observation, when the attention is directed to relations purely intellectual, is necessarily the condition and the measure of force with which the mind pursues its trains of reflection, traces the invisible relations of sequence, or follows the continuous processes of meditation, in the prosecution of those profound researches which the depth and intricacy of scientific or moral truth not unfrequently require.

Its Susceptibility of Culture.—In the relations of moral culture, this faculty,—so to term it,—works in so close and intimate union with the great master principle of *conscience*, that its importance as a fact of mind demanding the earnest attention of the educator, in his capacity of moral guardian, is, at once, apparent. On that department of our subject we do not, at present, dwell, as it will invite our attention hereafter, in its proper place. But, as an intellectual condition, subject, to some extent, to the action of the will, and to the influence of disciplinary exercise, it is obvious that consciousness or self-observation, may, like any other power which the mind possesses, be rendered vivid, prompt, and operative, by repeated action.

Man commences his intellectual and moral life an *unconscious* agent, in the unknown and wonderful world around him, in childhood. He is as utterly unconscious of the influences exerted on himself as he is ignorant of the true character and relations of the objects by which he is surrounded. Absorbed in the contemplation of the broad field of the external world, or in the observation of its objects individually, he is lost alike to the consciousness of his own being, and to that of

the effects which are wrought within him by these very objects. Drawn onward by an unconscious power of attraction, he follows the study of nature, in obedience to an instinct of which he is not yet aware, but which, by leading him out of himself, conducts him to the school of *observation*, where knowledge commences, and from which he, in due season, returns, empowered by the instruction he has received to *observe* and *understand himself*.

As his nobler powers mature, they begin to work on the data which observation has furnished; and, as he examines, he thinks, he compares, he reflects, he reasons; he becomes aware of a more powerful influence and a deeper satisfaction than that of mere observation, while he consciously follows his successive conceptions, and meditates not only on the relations of object to object, and of effect to cause, in the outward universe, but on the yet more wonderful and mysterious action of his own inward being, to the consciousness of which he is now fully awakened. This newly-discovered world attracts his attention with a yet greater force and intensity of interest than that of the external sphere, in which he has hitherto moved; and the growing strength of his intellect, he finds, is more fully exerted and more decidedly proved in this inner region of its action, than in the outer field of sense and perception. He delights, accordingly, in this conscious exercise of a higher power, and recognizes the nobility of reason.

Such is man's progress, even when little assisted by the formal aids of education. But we see thus more clearly how judicious and skillful training may render consciousness comparatively *vivid*, *definite*, and *distinct*, by aiding, with appropriate appliances of exercise and discipline, this capability of reflective contemplation, of self-intelligence, and of self-development, which grows with the growth, and strengthens with the strength of the maturing mind. If this power is permitted to lie neglected and undeveloped, the result is uniformly a characteristic dullness, obscurity, and vagueness in the mind's habitual action. This fact we recognize, in full exemplification, when we contrast the uncultivated, half-conscious child, youth, or man, with the well-educated and the self-intelligent.

Mode of Culture.—Subjected to processes of cultivation, however, this faculty, like memory, can not be brought under the law of direct action. *Memory* is to be reached through *attention*; to enliven and strengthen the former, we must work upon the latter. We have no more power over it, separately, than we have over the reflection of an object in a mirror. Memory is the reflection of attention. We can not render the image distinct, unless the object is so. The same is true of *consciousness*. It has no separate or independent existence

It is, so to speak, the mind's reflection of itself; it is but an act of attention directed inward. The vividness, the definiteness, and the distinctness of consciousness, are,—as the corresponding properties in the act of attention,—blended with the consentaneous force of will coöperating in the act. In this latter circumstance, its action differs from that of memory, which is often, even in its most vivid delineations, wholly involuntary. But the depth and fullness of consciousness are always dependent, more or less, on the force of the will which directs the act of attention inward. It is thus rendered more perceptibly a subject of culture by educational training.

Morbid Unconsciousness.—To some minds the intellectual and moral value of habits of wakeful consciousness, is very great from, perhaps, some defect of organization or fault of habit, inclining the individual to a half dreamy condition of *reverie*, in which the mind loses power over its own action, and becomes lost amid the scenes of memory or of imagination. To the artist and the poet, an intensity of abstracted attention is, in some relations, the condition of imaginative power of conception and of living expression. But, in such cases, the mind is healthy, vigorous, and voluntary, in its action: it is obeying one of its own highest laws, which demands this almost superhuman power of abstracted and concentrated attention, for the contemplation and embodiment of ideal images of perfection. The abstractedness and “absence of mind,” on the other hand, which become habitual from neglect, are nothing else than a *morbid unconsciousness* indulged,—a result of organic or mental *weakness*, and a habit utterly destructive of voluntary power of attention or depth of thought. In some mournful instances, it is the sure precursor of insanity.

In all circumstances, the tendency of such habits is to cherish a morbid preponderance of imagination over reason and judgment, and to create a dreamy twilight of thought, in preference to the clear light of intellectual day. Listlessness of attention, and dullness of understanding, and every other evil of mental torpor, are thus entailed on the intellectual character.

Cultivation of the Reasoning Faculty.—The principle of reflective intelligence assumes, in the language of recognized usage, the various forms of action implied in the terms *understanding, judgment, reason*; and this triple denomination suggests also the progressive measures adopted in education, for the cultivation of this master power of intellect.

Understanding, as the primary act and condition of intelligence, is involved in every instance of *perception*, even in the cognizance of the

mere form and character of outward objects ; in the contemplation of facts, its aid is indispensable to the *apprehension* of their connections and relations ; and, in the tracing of these, its assistance is requisite to enable the mind to arrive at the *comprehension* of principles and causes. When the mind is unable to put forth this prehensile, (*seizing, grasping, holding,*) power, we say, in current phrase, the connection, the principle, the cause, or the relation, is "not understood." Reverting to the etymological signification of the term, by which this faculty is designated, we observed that the action of the "understanding" was represented as a necessary *ground*, or *foundation*, without which, of course, there could be no superstructure of thought or knowledge. In the terms now introduced, which denote the two chief forms of action in the process of understanding, the figurative suggestion is not less forcible or appropriate, than in the former instance. The uninformed understanding, is, in the latter case, represented as the *powerless hand*, which is not put forth, which does not lay hold on its object, or which lets it slip.

Natural Development of the Understanding.—The appropriate training of this fundamental faculty of the mind is distinctly indicated to the educator in the first natural workings of intellect in childhood. The inciting principle of curiosity impels the child to observe and to learn. But he is not satisfied with the mere knowledge of the external character of objects ; he is eagerly desirous to understand their internal construction, and hence he tears open, and pulls to pieces, even the flower which delights him ; and the indulgent father knows that it needs a sharp eye to keep the little investigator from practicing a similar experiment on a gold watch.

Educational Development.—That spirit of inquisition which is implanted in the mind, to secure its progressive development, renders the examination and inspection of objects, for the discovery of their internal structure and character, an exercise still more attractive and inviting to a child than that of the perception even of beauty in form or color ; and the investigation of the connection and relations of phenomena and of facts, yields him a deeper gratification than the delight arising from the recognition of any merely exterior trait of character in outward objects. Here, then, is the proper place where to commence the training of the understanding to the exercise of true apprehension and full comprehension, in the acquisition of a thorough knowledge of the objects by which the child is naturally surrounded, and of their relations to one another, in mutual adaptation, or in cause and effect. Perception is thus transmuted into knowledge ; without which transition there is no intellectual progress. The

understanding of relations is the mediating process by which object is linked to object, fact to fact, and relation to relation ; till knowledge, in its turn, becomes the completed chain of principle and truth, in the relations of system and science.

Practical Exercises.—One of the most hopeful indications of the general progress of opinion on the subject of education, is afforded in the comparatively recent introduction into primary schools of lessons on *objects*,—not merely the productions of nature in animal and vegetable and mineral form, but the common objects of observation in the child's daily notice at home and in school, in the street, and in the workshop. The young mind is thus strengthened, while it is gratified, by the exercise of tracing design and adaptation in the various contrivances of mechanical ingenuity. The conscious understanding of relations and processes, becomes to the mind what the expanding and enlivening influence of light is to the plant; while the self-intelligent agent enjoys the double pleasure of growth and the consciousness of it. Understanding, as the mind's prehensile and digestive power, appropriates to itself the material of its own life and strength, and quickens and expands with every acquisition, till it reaches the culminating point of the full maturity and vigor of a well-developed capacity.

Observation of the processes of Nature.—Next to the study of the elementary principles and application of mechanics, as a means of enlightening and invigorating the understanding by disciplinary exercises in tracing combination and operations to their causes, should come appropriate exercises in watching and tracing *the great processes of nature, daily* passing before the learner's observation, and inviting him to the study of those larger displays of power and intelligence, which are exhibited in the mechanism of the world's moving in space, and obeying the laws of time.

The *chemistry* of nature, too, should be made to furnish ample employment for the exercise of the understanding, in tracing the curious relations which that vast department of knowledge discloses. No science has more power than chemistry to stimulate curiosity, and provoke inquiry, and thus invite the mind to penetrate the mysteries of nature, and evolve the hidden causes and secret influences at work in phenomena, which the mind can not contemplate without the feeling of wonder, and which, at first, seem to baffle the power of intelligence; but through which the prying eye of the understanding learns, ere long, to penetrate, in the inquest of relations by which mystery is solved and difficulty explained. A simple elementary course of experiments, in this department of science, by the light which it sheds on common phenomena, exerts a great power over the

young mind;—suggesting inquiries and leading to investigations which call the understanding into wakeful and vigorous action on all facts accessible to observation. The teacher, who is true to his office, as guardian of the young mind, and who takes pleasure in aiding the formation of habits of intelligence and inquiry, will spare neither time, nor trouble, nor expense, in his endeavors to secure to his pupils the benefit of such aids to their intellectual culture.

Combined Exercises of Understanding and Judgment: Arithmetic. In the department of mathematical science, there is no lack of attention to the study of *arithmetic*, as an important branch of exercise and discipline for the reflective faculties, in the relations of the understanding operating on numbers. In this branch of culture, the purely mental processes first introduced by Pestalozzi, and transferred to American schools by the late Warren Colburn, have let in a flood of light not only on the subject of arithmetic, as an instrument of intellectual discipline, but on the whole field of education, and on all the details of methods of instruction, as regards the principles of rational and genial development applied to the human mind. Whatever may be the case elsewhere, there are few schools, in New England at least, in which arithmetic is not philosophically and successfully taught; and the vast improvement, or rather the entire renovation of the character of our primary schools, since the introduction of Colburn's method, may well suggest to the thoughtful teacher the immense amount of benefit which would certainly follow corresponding changes in other departments of education.

Geometry.—Another branch of mathematics admirably adapted to the cultivation of the mind's reflective and reasoning powers, when applied to external relations, and one which forms, by its very nature, the vestibule to all the other apartments of the great temple of knowledge, has not commonly met with that attention or that place which its importance requires. Geometry is too commonly deferred till a late stage, comparatively, in the progress of education; and it is, for the most part, taught abstractly, commencing with its *linear* forms. But the few teachers who have ventured to break away from the trammels of routine and prescription, and who have taken their suggestion from the obvious fact that, even in early childhood, the mind is delighted with the observation of definite forms in all their simple varieties, and that, at this stage of progress, form exists only in the visible and tangible concrete, and not in the abstract,—the few teachers who have here followed nature's course, and allowed the young learner to commence an easy elementary and practical study of geometry in its relation to *solid* objects, have found no difficulty arising from permitting children

to commence their attention to this branch of knowledge at a very early age, and to unspeakable advantage, as regards the exactness of mental habit which this mode of discipline so peculiarly tends to form.

From the observation and study of the *solid*, the transition is rational, natural and easy to the consideration and examination of its *surface*; and here another wide field of thought is opened to the mind of the juvenile learner,—yet one which is perfectly practicable to his faculties, and which he can always submit to actual survey and ocular measurement. With the solid body in his hand, the little student finds it an easy and a pleasing step to proceed from the contemplation of the *surface*, to that of its “*edges*,” as he calls the boundary *lines* of the surface; and here still another delightful scope of observation opens to his mind, as he proceeds to compare line with line, and, applying the definite and exact relations of number, learns to *measure*, and thus to give certainty and precision to his observations, and accuracy to his conceptions.

General Effects of Mathematical Discipline.—In the more advanced stages of education, the modes of instruction in the department of mathematics, are, from the nature of the subject, of a character so definite and comparatively immutable as to suggest methods and forms of exercise uniform and sure. Hence, the admirable results secured by the discipline to which the reasoning powers are subjected in the prosecution of these studies. The value of mathematical training consists, chiefly, in the exactness of attention and discrimination, and in the orderly procedure of thought required in the processes which it prescribes, and, consequently, in the correctness of conception and accuracy of judgment thus attained in the habits of the mind. Another invaluable advantage of mathematical studies, connected more immediately, however, with their advanced stages of mental application, consists in the extent and scope of their operations, combined with the perfect sequence of every step in their procedure, and the confidence which they serve to create in the mind's own action, by the certainty of its conclusions.

The main duty of the teacher, in this department of education, lies, from the very character of the subject, in watching carefully the mind's first steps in the earliest stages of exercise; so as to see to it that the perfect rigor of intellectual discipline is attained, which mathematical science is designed to produce, that there be no yielding to juvenile impatience, tending to laxity of attention, careless assumption, heedless oversight, and unconscious inaccuracy of mental habit. In more advanced stages of progress, the successive branches of the subject afford, by their own intrinsic character, a comparative security

for correctness in the processes of evolution, and especially in the case of all students whose first steps have been carefully watched.

Common Mistake.—There is an opinion somewhat prevalent, even among those who have the control of education, that the certainty of mathematical reasoning, depending on the peculiar character of the grounds on which it rests, has but little effect on the formation of accurate habits of judgment in relations which have no firmer foundation than matters of opinion, or of taste, or of metaphysical inquiry. But, in this view of the question, the inevitable influence of the law of *analogy* on the constitution and habits of the mind is overlooked. The educational effect of any study lies not so much in the specific character of the subject, or the particular exercises of intellect which any one of its processes requires, as in the analogous tendencies and habits which the given exercise contributes to form. The perfect precision of observation, the scrupulous correctness of judgment, and the strict sequence of thought, which mathematical operations demand, are invaluable aids to every process of mind in which the reasoning faculties are employed. A disproportioned excess of attention to mathematics in the assignments of education, may, certainly, be chargeable on the plan of intellectual culture adopted in many seminaries of learning, and, particularly, of such as are devoted to the mental training of the female sex. But this mistake, like that of attempting the exposition of moral truth by mathematical forms of reasoning, does not prove any want of adaptation in mathematics to the design and purpose of intellectual discipline on kindred subjects, or in the results of such discipline in the formation of mental habits and character.

Logical and Critical Discipline.—Of the great importance of a thorough practical logic, for the discipline of the reasoning faculties,—a course comprising processes of strict personal training in the art of thinking,—we have had occasion to speak, under other heads of our present investigation, and on this topic we need not now enlarge.

Another department of higher mental culture, the art of *criticism*, was briefly adverted to, on a former occasion. As one of the highest forms in which reason can be applied, and as the ground-work of all true discipline of imagination and taste, it claims a large share of attention in educational training. But, to render this department of study truly beneficial, it needs a thorough revision and enlargement of its plan. As generally adopted in our seminaries of learning, it is made to consist too much of processes of training by which the mental eye is sharpened for the perception of *error* and the detection of *defect*. This is but the negative part of critical discipline, and is

chiefly directed to the faults of others, rather than those of the observer himself; while, as a forming and moulding process, its chief benefit would lie in its efficacy in training the mind to the perception and recognition of *positive beauty* and *perfection*, and in forming the tastes and habits of the individual by a strict but genial *preventive* discipline, which should preclude the tendency to deviation from the principles of beauty and truth. To secure the results of such discipline, a liberal course of early training, directed to the intelligent recognition of beauty in nature and in art,—as was suggested in a former lecture,—becomes an indispensable foundation. The reasoning, on the data thus furnished, would necessarily become positive and practical. The mind would proceed under the sure guidance of ascertained principle: and the canons, so called, of criticism, would have an authority more sure than merely the speculative opinions of an individual, or of a class of theorizers. But, so far are we, as yet, from a truly liberal standard of education, that in all our higher seminaries, scarcely can we find a place assigned to any course of *æsthetic* study or training. Yet no species of discipline could be prescribed so admirably adapted to the generous development of the powers of judgment and reason, as that critical exercise by which the mind, in the analysis and combination of the elements of beauty, learns to interpret to its own consciousness the laws of grace and of harmony.

Philosophical Training.—The principles of *intellectual* and *moral philosophy*, we have already adverted to, as peculiarly adapted to the discipline of the *reflective* faculties. The great facts which the mind recognizes in contemplating the principles of the former of these branches of science, and the vital truths which it evolves in tracing the relations of the latter to the former, call for the exercise of reason and judgment on materials purely mental, and, by their very nature, fitted to train the mind to habits of close investigation and nice discrimination. On these habits is the mind's whole reliance to be placed in tracing the subtle distinctions on which the eviction of the profoundest truths not unfrequently depends.

On such subjects, as also in relation to logic and criticism, it was suggested, in a former connection of our subject, that education should be rendered more personal and practical in its methods; that it should comprise, in its measures for discipline, the mental efforts of the student himself in thought, conversation and discussion, rather than the mere endeavor to retain in memory the definitions and statements of a text-book.

Civic Training.—The study of civil polity, as it comprehends subjects collateral to history and to ethics, forms a theme well-suited

to the exercise of the mind's reflective powers, by the trains of thought to which it naturally leads. As a branch of education, it should be extended to an attentive survey of all the political relations of human society, as embodied in forms of government, in national constitutions, in international law, in civil institutions. Independently of the value of such investigations to the intelligent discharge of the duties of life, in all countries favored with constitutional immunities, the class of subjects now mentioned is of the utmost moment in the higher relations of education, as affording large scope and full exercise for the reasoning powers, in the investigations and discussions to which such subjects naturally invite the mind of the student. The discipline, however, resulting from this branch of studies, depends, obviously, on the extent to which it is made a matter of personal thought, of written dissertations, and of oral discussion, on the part of the student. In this, as in other departments of ethical science, our colleges would do well to arrange their exercises on the model of the debating society, or of the moot-courts of professional schools; so as to elicit voluntary mental action and effective coöperation on the part of students in their own education. The random exercises of debating clubs, as they are commonly conducted, in which little or no systematic preparation is made for discussion, do not serve such a purpose. For educational influences, careful premeditation and critical supervision are equally necessary to render discussion an appropriate discipline.

Natural Theology forms another branch of study peculiarly fitted to call forth and improve the reflective and reasoning powers of the mind. Every new advance of science gives additional attractions to this ennobling theme of contemplation. The profound thought to which it leads, the large analogies which it reveals, the great truths which it urges home to the mind, the sublime heights to which it conducts aspiring reason,—all indicate the high value of this branch of philosophic investigation, as an effective means of enlarging and invigorating the noblest faculties with which man is invested.

The subject of natural theology is, by no means, neglected in our customary routine of studies, either in schools or colleges. It is carefully designated on the programme of instruction, and regularly assigned to a definite term of the course. But restricted, as the attention given to these subjects generally is, to recitation from a formal text-book, little of the peculiar effect of personal investigation into them is felt on the mind at the time, or marked on the subsequent mental character of the student. Personal examination, and actual analysis and manipulation, are as much needed in the illustrations which serve to throw light on the subject of natural theology as they

are in the study of any other branch of science. The actual, ocular inspection of objects, is felt to be the only means of effective instruction in all other subjects which require the verification of principle by reference to fact. Without the aid of such practical measures, the best of text-books becomes dry or tedious, and, at all events, fails of exciting the earnest attention and personal interest which secure the energetic action of the whole mind, give life and vigor to its habits of action, and insure the further prosecution of inquiry in after stages of life.

To secure an earnest voluntary application to this noble study is not difficult, if the instructor take pains to invite his students to personal investigation of the numberless evidences of Divine power, wisdom, and goodness, which are furnished in every department of nature. The pleasure of observing, recording, and reporting these, is one to which the teacher who will faithfully make the experiment will find few minds so torpid as to be insensible.

Evidences of Christianity.—This subject, too, has its appointed place in our seminaries of learning; and that it is a study required in our higher schools for the female sex, as well as in our colleges, is a happy indication. But, the unintellectual, unmeaning process of reciting merely the paragraphs of a text-book, has the same injurious effect in this as in other departments of education. No subject can be presented to the mind on which the importance of clear and distinct views, or deep impressions and personal convictions of truth, are so important to the student, as on this;—none on which the utmost rigor of deduction, the closest investigation, the most cautious induction, are so imperatively demanded. The mere verbatim committing to memory, or even the careful recapitulation, of the arguments presented in the best of manuals, is a process too passive for any valuable purpose of educational influence on the individual. The second-hand knowledge thus acquired, makes too slight an impression to become a permanent personal possession; as the experienced teacher has sometimes cause to feel most deeply, when he sees a promising youth, who has recited his way successfully through a whole manual of “evidences,” so easily caught and entangled in the slight web of superficial and sophistical arguments offered by a fluent fellow-student, inclined to skeptical habits of thought.

The result is quite different when the instructor prescribes, not the mere language or reasoning of a single author, but a careful comparison of several, and a *resumé* prepared by the student himself, together with a full statement of objections, and the arguments by which these are rebutted. A still deeper impression is made on the mind of the individual, when such recapitulations are made, not only in the regular

form of writing, but in that also of deliberate, correct, and, if possible, earnest oral expression. It is thus only that great and vital truths can be woven into the texture of his own mind, and become, as it were, inseparable parts of itself.

Practical Exercises.—In conclusion of these suggestions regarding the development and discipline of the reflective faculties, a few other forms of practical exercise may deserve attention, as matters which devolve on the personal action and diligence of the teacher,—in regard to the aid which his living instructions and intelligent supervision ought to furnish, in addition to the customary course prescribed in manuals or text-books; and here we may advert to the great value of

(1.) *Systematic Reading*, as a means of cultivating reflective and thoughtful habits of mind,—reading, I mean, which is *study*, and not mere *perusal*; reading which is attentively done, carefully reviewed, exactly recorded, and, if practicable, orally recounted. Memory, under such discipline, becomes thoroughly retentive, information exact, judgment correct, conception clear, thought copious, and expression ready and appropriate.

(2.) An important aid to systematic reading may be found in the exercise of writing a careful, marginal *synopsis* of valuable works, comprising all their principal *topics*, distinctly presented, and, in addition to this, a penciled *analysis* of every prominent head or paragraph into its constituent subordinate *details*. In the case of standard works of great value and permanent authority, it may be worth while to draught a separate *plan* of the entire *work* under study, in which the synopsis and the analysis are so arranged to the eye, that the advantage of a mental map of the whole subject is secured for distinct and easy recollection, by the union of logical and ocular method.

(3.) As a means of training the faculty of *judgment* to correctness in its decisions, and exactness in discrimination, exercises in *analysis*, on every description of material, are of the greatest value. In the earliest stages of education, these may be performed, to great advantage, on objects in *nature*, particularly on the structure and organization of plants, with the aid, too, of the microscope. At a more advanced stage, the analysis of *language*, successively extending to sentences, clauses, phrases, words, and syllables, in written as well as oral forms, is another exercise of great value for sharpening the power of discrimination and forming habits of correct judgment. Still greater benefit attends the oral analysis of *discourses*, essays, and other didactic compositions, for the purpose of tracing their authors' trains of thought, following these in detail, and afterward recording the analysis, as has been already suggested.

(4.) To cultivate successfully the reasoning faculty, no method more effectual can be adopted than that of training the mind to a perfect observance of the prime law of *Order*. This great principle comes to the aid of the young mind, as creative ordination applied to chaos. The countless multitude and variety of objects soliciting observation, in the early years of childhood, and even at much later stages, often throw the mind into confusion and perplexity, till *order* comes to its aid, and, like the benevolent fairy in the fable, *arranges* the complicated masses and irregular accumulations, and lets in the light of *system* and *method* upon the elements of the mental world. Conflicting objects and relations are thus parted by due *distinction*; accordant elements and phenomena are grouped together, by their *analogies* and *affinities*, their *connections* and *dependencies*, the *predominance* of some and the *subordination* of others; till, at length, the authority of *Law* is recognized, and harmony established.

To attain this result, *Reason*, the supreme ordaining faculty, has to exert its power in various modes of operation. *Judgment*, as reason's executive, has to *collate*, *examine*, *compare*, *associate*, *combine* and *classify* the objects of observation and the subjects of consciousness. For such purposes no exercises can be better adapted than those which commence with the action of the *perceptive* faculties, and yet involve the use of the *reflective*, to a certain extent. Nature's great systems, in her three vast kingdoms, furnish, of course, the best material for such exercise and discipline of the mind, by combining with its perceptive action the aid of reflecting reason, in the contemplation and study of the vast domain of creation. As a noble discipline for the rational faculties, in their ascendancy over those of outward observation, and yet in perfect harmony and coöperation with them, no exercise can be more beneficial than that of surveying, in the light of *science*, the elements and forms of external nature. An illustration in point may be found in the science of *botany*, which is now rendered so generally accessible and so highly attractive, by recent manuals presenting this subject on the "natural" system, as an instructive and interesting branch of knowledge for all minds. Another example occurs in the arrangement of the *animal* kingdom presented by Cuvier, and modified by our great contemporary naturalist, Agassiz. The generous labors of this distinguished instructor, in his endeavors to bring his favorite subject before the minds of teachers, in forms happily adapted to the condition of their schools, have afforded the best suggestions for conducting appropriate exercises in this department of education. And it is to be hoped that many of our seminaries will henceforward enjoy the benefits of the admirable mental discipline resulting from those

habits of attentive observation, careful examination, and close analysis, as well as those of orderly arrangement, enlarged contemplation, and systematic classification, which the thorough study of nature is so happily adapted to insure.

But it should never be forgotten by the teacher that it is the extent to which the student is induced to carry the *personal observation* and *actual collection* of natural objects, and the care and fidelity with which he arranges his specimens according to the requirements of scientific classification, which determine how far the higher powers of his mind will be benefited by the study. There are too many seminaries, even now, in which the teacher, far from following the instructive personal example of the eminent authority to whom we have just referred, and joining their students in the actual exploration of nature, in the field exercises of observing and collecting, permit them to stay within doors, and "study" the whole subject by book.

The value of personal observation and actual investigation, as the only sure means of rendering the educational materials furnished in external nature, and in the action of the percipient intellect on these, conducive to the development and discipline of the mind's reflective power, is evinced in all the other relations and departments of physical science. The study of *astronomy*, as commonly conducted in our seminaries of all grades, has been, till recently, a process of mere book-work, of committing to memory the successive sentences of a manual, and repeating them by word of mouth. The actual observation of the heavens was a thing not thought of but as a matter of occasional gratification to curiosity; while, to render astronomy an effective instrument of mental culture, capable of awakening attention and eliciting reflection, the nightly survey of the varying aspects of the firmament, in conjunction with the passing hours, and the actual positions, or apparent shifting of the planetary bodies, should be continued till the eye finds itself, so to speak, at home in that upper world of wondrous facts, and the observer can literally "call the stars by name."

Many teachers have it easily in their power to render the young mind this noble service, which may stamp a thoughtful character on its habits of action for a whole life-time. Happily, many of our colleges are now enabled to offer to those who enjoy the superior opportunities of study afforded by such seminaries, the facilities for actual observation, which modern science and art so amply provide, in this department of education. But, in most of our higher schools and academies,—even in some which are favored with the possession and occasional use of a telescope,—the actual study of the heavens, even with the naked eye, or the humblest endeavor to note the position and

movements of the heavenly bodies, so as to enable the learner intelligently to read the sky, remains, as yet, a thing seldom attempted.

Were early education in this department rightly conducted, the young student would be prepared to receive with delight those sublime revelations of astronomical science which exhibit the laws of order and subordination,—of mutual influence and adjustment,—ruling in the apparent “wilderness of worlds,” and indicating the controlling power of that Reason which presides in eternal supremacy over the universe.

CONCLUDING EXPLANATIONS.

The brief and imperfect survey of the ground and principles of intellectual culture, which is here concluded, was, as has been intimated, originally presented in the form of conversational oral lectures to successive classes of young teachers and of persons intending to enter on the occupation of teaching. The views presented in these lectures were adapted, therefore, to the mental circumstances of students to some of whom any form of systematic investigation on the subject of intellectual discipline was wholly new, and to many of whom the philosophy of education was, as yet, a field unexplored. This fact will serve to explain the strictly elementary character of the preceding discussion, and the familiar style of its illustrations, as well as the frequent iteration of special topics; while the vast importance of the subject itself, in relation to the anticipated office and duties of the teacher, as the educator and guardian of the young mind, together with the acknowledged too general neglect of such considerations, rendered it necessary that the lecturer should endeavor to present the whole work of education in the impressive light of the highest relations and principles of human action.

To some of the readers of this journal, therefore, the whole series of these lectures may have seemed common-place and uninteresting; and to others the course of analysis may have seemed too abstract and philosophical for the ordinary purposes and business of education. The contributor of this and the preceding communications of the series to the pages of this journal can only plead, in answer to both classes of objections, that, for many years, his personal field of observation and of action has made it necessary for him to endeavor to meet the wants of ingenuous minds, conscious of deficiencies in their own course of early training, and earnestly desirous of the guiding light of the simplest, yet the highest, educational principles, to direct their own efforts for the advancement of others. Successive years, occupied in three of our New England States, in endeavoring to aid the noble aspirations of those whose daily labors form the ground of the

intellectual and moral hope of the community, have convinced the writer that the teacher's professional wants are most satisfactorily met when elementary principles of education are simply stated and practically illustrated, and the highest relations of human duty are presented as the motives to personal and professional action.—Long may the “plain living and high thinking” of their ancestry continue to characterize the teachers of New England!

The allusions made, in the course of the preceding discussion, to existing defects in “higher” seminaries, might seem uncalled for in a course of remarks addressed to young teachers. To explain this apparent intrusion, it may be sufficient to say, that some of the classes to which these lectures were originally addressed included among their members individuals who, though young both in years and experience, were graduates of the highest class of literary institutions, were anticipating professional employment in such establishments, and were attending the course of lectures with reference to the application, in their personal instructions, of the principles under discussion.

Apart, however, from this relation of circumstances, the consideration of principles of education, and methods of instruction, necessarily extends through the whole educational course of training; and defective methods of teaching are but little less injurious in the higher than in the lower forms of culture. The fact, moreover, is undeniable, that the renovation of the character of instruction, whether at home or abroad, has uniformly commenced in the primary stages of education, and won its way gradually upward;—a circumstance easily accounted for, when we recollect that, in the reformation, now so generally effected in elementary teaching, more regard has been paid to the wants of the *mind*, and less to the demands of *subjects*, than formerly was the case in the management of primary schools, or than is now, in the customary regulation of institutions of the highest nominal order, in most of which the *subject* of study is still too uniformly regarded in preference to the *instrument* of study.

To some readers of the journal, the intellectual philosophy, involved in the principles adopted in the preceding analysis of mental action and development, may not seem satisfactory,—as not according, in express terms, with established authorities on such topics. To objections of this character the author can only suggest that, in the circumstances of many of those to whom his lectures were addressed, it was not practicable to assume the data of a previous course of study in intellectual philosophy; and all that could properly be done, on his part, was to interweave, with his suggestions for the guidance of instructors in their professional endeavors, such elementary views of

mental action and tendency as might afford intelligible ground for these suggestions.

At the same time, the writer feels free to say that, following the counsels of his own instructor, the venerable Jardine, (a student and successor of Dr. Reid,) he could not adopt any "system" of intellectual philosophy as such. All systems hitherto offered have contributed useful suggestions for the guidance of inquiry. But none, as yet, can be regarded as exhaustive or complete. The *mind*, as a subject of study, has not yet received the humble measure of justice which we yield to a plant or a mineral,—a careful observation and close examination of its own character, apart from the obscuring influence of the conflicting views and metaphysical speculations of great writers and eminent authorities. But, to the teacher, philosophical theory is a doubtful aid, compared to his own daily inspection of the mind itself, in its actual working and obvious tendencies. He is, if he understands his position, himself a primary observer, authority and reporter, in the science of mind, as developed in the processes of education. His work is that of a living philosopher, in act. To his young disciples, he is Plato, and Socrates, and Aristotle, embodied in one person ;—opening to their expanding minds the highest spiritual, moral, and intellectual relations of truth.

III. PESTALOZZI AND THE SCHOOLS OF GERMANY.

FROM THE GERMAN OF DR. DIESTERWEG.

EVERY one considers it a matter of course that all our children go to school until they grow up to be youths and maidens. The observance of this custom begins at the sixth year. But the parents have long before spoken of the school to the child; he looks eagerly forward to the day of entrance; and when it takes place, he is absorbed in his school and his teacher for the next six or eight years or more. We always think of children and schools or children and books together. To be a child and to learn, have become almost synonymous terms. To find children in school, or passing along the streets with the apparatus which they use there, makes no one wonder. It is only the reverse, which attracts attention. The school fills a very important part in the life of the young. In fact school life is almost the whole life of childhood and youth; we can hardly conceive of them without it. Without school, without education, what would parents do with their children? Without them, where would they secure the young the necessary preparation for actual life?

With our present organization of society, schools are indispensable institutions. Many others may perish in the course of time; many have already perished; but schools abide, and increase. Where they do not exist, we expect barbarity and ignorance; where they flourish, civilization and knowledge.

No apology is necessary for sending our children to school. At school they learn. There they acquire mental activity and knowledge; the manifold varieties of things; to gain the knowledge of things in heaven above and in the earth beneath, and under the earth; of stones, and plants, and animals, and men; of past, present, and future.

[The remainder of the discourse treats of three points:—

1. What were the schools before Pestalozzi?
2. What did they become by his means, and since; that is, what are they now?
3. What was Pestalozzi's life and labors?]

I. THE OLD SCHOOLS.

Our present system of common or public schools—that is schools which are open to all children under certain regulations—date from the discovery of printing in 1436, when books began to be furnished so cheaply that the poor could buy them. Especially after Martin Luther had translated the Bible into German, and the desire to possess and understand that invaluable book became universal, did there also become universal the desire to know how to read. Men sought to learn, not only for the sake of reading the Scriptures, but also to be able to read and

sing the psalms, and to learn the catechism. For this purpose schools for children were established, which were essentially reading schools. Reading was the first and principal study; next came singing, and then memorizing texts, songs, and the catechism. At first the ministers taught; but afterward the duty was turned over to the inferior church officers, the choristers and sextons. Their duties as choristers and sextons were paramount, and as schoolmasters only secondary. The children paid a small monthly fee; no more being thought necessary, since the schoolmaster derived a salary from the church.

Nobody either made or knew how to make great pretensions to educational skill. If the teacher communicated to his scholars the acquirements above mentioned, and kept them in order, he gave satisfaction; and no one thought any thing about separate institutions for school children. There were no school books distinctively so called; the children learned their lessons in the Bible or the Psalter, and read either in the Old or the New Testament.

Each child read by himself; the simultaneous method was not known. One after another stepped up to the table where the master sat. He pointed out one letter at a time, and named it; the child named it after him; he drilled him in recognizing and remembering each. Then they took letter by letter of the words, and by getting acquainted with them in this way, the child gradually learned to read. This was a difficult method for him; a very difficult one. Years usually passed before any facility had been acquired; many did not learn in four years. It was imitative and purely mechanical labor on both sides. To understand what was read was seldom thought of. The syllables were pronounced with equal force, and the reading was without grace or expression.

Where it was possible, but unnaturally and mechanically, learning by heart was practiced. The children drawled out texts of Scripture, psalms, and the contents of the catechism from the beginning to end; short questions and long answers alike, all in the same monotonous manner. Anybody with delicate ears who heard the sound once, would remember it all his life long. There are people yet living, who were taught in that unintelligent way, who can corroborate these statements. Of the actual contents of the words whose sounds they had thus barely committed to memory by little and little, the children knew absolutely almost nothing. They learned superficially and understood superficially. Nothing really passed into their minds; at least nothing during their school years.

The instruction in singing was no better. The master sang to them the psalm-tunes over and over, until they could sing them, or rather screech them, after him.

Such was the condition of instruction in our schools during the sixteenth, seventeenth, and two-thirds of the eighteenth centuries; confined to one or two studies, and those taught in the most imperfect and mechanical way.

It was natural that youth endowed, when healthy, with an ever increas-

ing capacity for pleasure in living, should feel the utmost reluctance at attending school. To be employed daily, for three or four hours, or more, in this mechanical toil, was no light task; and it therefore became necessary to force the children to sit still, and study their lessons. During all that time, especially in the seventeenth century, during the fearful thirty years' war, and subsequently, as the age was sunk in barbarism, the children of course entered the schools ignorant and untrained. "As the old ones sung, so twittered the young." Stern severity and cruel punishments were the order of the day; and by them the children were kept in order. Parents governed children too young to attend, by threats of the schoolmaster and the school; and when they went, it was with fear and trembling. The rod, the cane, the raw-hide, were necessary apparatus in each school. The punishments of the teacher exceeded those of a prison. Kneeling on peas, sitting in the shame-bench, standing in the pillory, wearing an ass-cap, standing before the school door in the open street with a label on the back or breast, and other similar devices, were the remedies which the rude men of the age devised. To name a single example of a boy whom all have heard of, of high gifts, and of reputable family,—Dr. Martin Luther reckoned up fifteen or sixteen times that he was whipped upon the back in one forenoon. The learning and the training corresponds; the one was strictly a mechanical process; the other, only bodily punishment. What wonder that from such schools there came forth a rude generation; that men and women looked back all their lives to the school as to a dungeon, and to the teacher as a taskmaster, and jailer; that the schoolmaster was of a small repute; that understrappers were selected for school duty and school discipline; that dark, cold kennels were used for school-rooms; that the schoolmaster's place especially in the country, was assigned him amongst the servants and the like.

This could not last; it has not, thank God! When and by what efforts of admirable men the change took place, I shall relate a little on. Let us now look at the present.

II. THE MODERN SCHOOLS.

What are our schools in this present fifth decade of the nineteenth century, and what are they from year to year growing to be? Upon this subject I can of course only give my readers a fresher and livelier impression of matters which they already understand. I begin with the exterior—not only every town, but every village of our father-land has at present its own school-houses. They are usually so noticeable for architecture, airiness and dimensions, as to be recognized at the first glance. The districts often compete amicably with each other in their appearance, and make great sacrifices for superiority.

In the school-house resides the teacher; a man who is often an object of the ridicule of the young, but who, if really a *teacher*, deserves and possesses the respect of the old. Many of course fail to obtain an adequate reward, especially for their highest aspirations, in their important

calling; but their internal sources of satisfaction increase from day to day, in the power of lifting them above the depressing and wearing cares of their office. The conviction is daily gaining ground, that "what men do to the teacher, they are doing to their own children." The teacher is an educated man. He is trained in seminaries established and maintained for the purpose by the state. The time is past when teaching was practiced along with some handicraft; now undivided strength is devoted to it. How deeply teachers are themselves impressed with the importance, and engaged in the work, of steadily and continually improving themselves, is shown in the zeal with which they organize and maintain reading societies and associations for improvement.

Let us now consider the interior condition of the school, and observe its instruction:—

The children are kept quiet far otherwise than by blows. Each sits in his own place, busy at his lessons. Nowhere in the light, roomy and cleanly school rooms or halls is there any interruption, or any thing that could interrupt the attention of the young students. The walls are adorned with all manner of apparatus.

Far otherwise than by blows is the intercourse between teacher and children characterized. He greets them with a friendly word, and they him by rising up. He opens school with a prayer, and a hymn follows, sung well and sweetly. Now begins the business of instruction. All are earnest in it; every one has his work to do. There is no longer more than a slight trace of the plan of single instruction. All learn together every thing that is taught. Formerly the only thing taught to all was to read, and that by rote; for writing and arithmetic were required an extra payment; now, their work is regulated by a carefully considered plan of study, prepared by the teacher and superintending authorities of the school, which includes all subjects essential to the attainments of all; all the elements, that is of a general education.

At the head of all instruction is that concerning God's providence and man's destiny; in religion and virtue. To instruct the children in these great truths, to lay the secure foundation of fixed religious habits, is the highest aim of the teacher. Maxims, songs, &c., chosen with wise foresight, are ineradicably planted in his memory, and become a rich treasure to the scholar in after life. The singing as a part of the religious exercises. In solo, duet, or chorus, the scholars sing to the edification of all who take pleasure in well doing. They also learn secular songs, suitable in words and melody, and promotive of social good feeling.

The second chief subject of school instruction is reading. One who can not read easily, loses the principal means of acquiring knowledge during his future life. And how is it taught? The frightful old-fashioned drawl is done away with even to its last vestiges. Children now read, after two years' regular school attendance, not only fluently, but with just tone and accent, in such wise as to show that they understand and feel what they read. Is not that alone an immeasurable advance?

Formerly, the children studied each by himself, and where they barely

learned to write by continual repetition of the letters and long practice, they now acquire facility in noting down and drawing up in the form of a composition, whatever they think or know. From the beginning, they are invariably trained to recite distinctly and correctly, speaking with proper tone, and as nearly as possible all together. This exercise has completely proved for the first time, how important it is that the teacher should understand and observe the rules of syntax and correct speaking. In this point, our present school instruction is an entirely new art. The old-fashioned teachers themselves could scarcely read; now, the scholars learn it.

It is needless to detail all that remains; the entire revolution in teaching arithmetic, where, for unintelligent rule-work, has been substituted the means of developing the intellect, inasmuch that the scholars can not only reckon easily both mentally and in writing, but can also understand, judge, and form conclusions. It is needless to detail the instruction in the miscellaneous departments of geography, history, natural history, popular astronomy, physics, &c., which is intended for every man who pretends, even to the beginning of an education, and by means of which only is man enabled to comprehend the wonder of existence, and to grow up intelligently into an active life amongst its marvelous machinery.

No; it is needless to speak of those things and of many more; but it would be wrong not to devote a few words to the means by which the teacher of the present day maintains discipline; that is, seeks to train his scholars to obedience, good order, good conduct and deportment, and to all other good qualities. In truth, no one who should overlook our immense improvement in this department can be said to know the proposed aim of our good schools and skillful educators and teachers; or ever to understand our schools at all. The well-disposed scholar is received and managed by love. But if the teacher finds himself forced to punish an ungoverned, disobedient, or lazy scholar, he at once puts a period to the indulgence of his base or wicked practices. It pains him, but his sense of duty prevails over his pain, and he punishes him as a man acquainted with human nature and as a friend, first admonishing him with words. Fear is not the sceptre with which he governs; that would train not men, but slaves. It is only when admonition, stimulation, and example have failed, and when duty absolutely demands it, that he makes use of harsher means. It is above all his endeavor to treat his children like a conscientious father. Their success is his pride and happiness; in it he finds the blessing of his difficult calling. He daily beseeches God for it, and looks with a thankful heart to him, the giver of all good, upon whose blessing every thing depends, and without whom the watchman of the house watches in vain, if under the divine protection any thing has prospered under his hands.

Instead of a dark and dreary dungeon, the school has become an institution for training men. Where the children formerly only remained unwillingly, they now like best to go. Consider, now, what the consequences of this change of training must be on the hearts and lives of the

children. How many millions of tears less must flow every year down childrens' cheeks! In Germany alone, more than five millions of children are attending school at the same time. Is the inspiration of such a number to future goodness a fantastic vision? Must not every department of school management assume great importance? It is with joy and pride that I say it; I myself am a teacher. Nowhere, in general, do children spend happier hours, than in school; at morning, and at noon, they can not wait for the time of departing for school; they willingly lose their breakfast, rather than to be late. How was it formerly? How often did fathers or mothers drag their screaming children to the school? And what awaited them there? God bless the men who have been and still are laboring, to the end that the pleasant season of youth, which will never return, the happy time of innocent childhood, may not be troubled with the dark barbaric sternness of pedantic school-tyrants; but that the school may be a place where the children may learn all that is good and praiseworthy, in milder and more earnest ways; a place in which earnest and thoughtful men, friends of children, and loving the teacher's profession, may feel and admit that they have passed the happiest hours of their lives. From schools so conducted, a blessing must go forth over the earth. Indeed, the ancients knew this. Thousands of years ago, it was high praise to say "He has built us a school;" and not less to say, "He has prepared praise for himself in the mouths of children."

The school has become an institution for training men and women; the old "school-masters" have become teachers. Pupils are now educated from the very foundations of their being, and by intelligible means. The scholar is not a machine, an automaton, a log; and accordingly the system of learning unintelligently by rote has come to be reckoned a slavish and degrading drudgery. The laws of human training and development are no longer arbitrarily announced, but are investigated, and when discovered, are faithfully followed. These laws lie within human nature itself. Beasts may be drilled at pleasure into external observances; but human beings must be educated and developed with reason and to reason, according to the laws impressed by God upon human nature. Of these laws, the schoolmaster handcraftsmen of former centuries knew nothing. Now, every thoughtful teacher adjusts his course of education and all his efforts whatever, as nearly as possible to nature. The consequences of this magnificent endeavor, in pedagogic science and art are plain before our eyes in our school-rooms. Instead of the former damp and gloomy prisons, we have light, healthy, clean and pleasant rooms; instead of dry and mechanical drilling in reading and other studies, effective and skillful education in the elements of all the knowledge and attainments required by man; instead of the ancient stick-government and bastinado system, a mild, earnest, paternal and reasonable method of discipline; loving instruction from well written books; teachers zealously discharging their duties; in short, we in Germany, by full consciousness that something better is always attainable, by laboring forward always to better methods, and by actual attainment, that the best educated nations on

earth, the French and English, are behind us in respect to educational matters, we may justifiably take pride in knowing that men from all the civilized nations in the world, even from beyond the ocean, travel hither to observe the German common schools, to understand the German teachers, and to transplant into their own countries the benefits of which we are already possessed.

The young reader who has followed me thus far will naturally inquire, how all this happened; in what manner this better school system came into being. And among the names of those noble men to whose thoughts and deeds we owe so invaluable a creation, all historians will record with high honor that of Pestalozzi.

III. INFLUENCE OF PESTALOZZI'S LIFE AND LABORS ON THE SCHOOLS OF EUROPE.

[We omit much of the details of Pestalozzi's career as they will be found in Raumer's *Life* already referred to.—Barnard's *Journal of Education*, Vol. III, p. 401.]

As Pestalozzi grew up, he studied to become a minister, but finally decided to study law. In this profession he found no pleasure, although he completed his studies in it; his attention being involuntarily drawn aside to the unhappy condition of society around him. In the high places of his native city, prodigality, luxury, and contempt of the lower classes, were rife; while the poor in the other hand, regarded their superiors with hatred, but were prostrate in misery, want, ignorance, and immorality. The contemplation of these immeasurable evils of the age filled Pestalozzi's heart with grief and pain, and these feelings directed his thoughts to a search for some remedy. The result of a year's reflection upon the means of assisting his unfortunate fellow-men was, that it could only be done by training; by a better education of youth, especially of the children of the poor and the lower classes generally. Like a flash the idea came into his mind, "I will be a schoolmaster;" a teacher and educator of poor children. He consulted within himself upon this changed design; and seem to hear a voice replying, "you shall;" and again, "you can." So he answered, "I will." How well he fulfilled the promise! He now became the schoolmaster of a world.

Intention, Power, and Resolve; wherever these three operate together, there result not only promising words, but efficient actors.

He was filled with a sublime conception, which remained with him until after his eightieth year. His ideal was, the ennobling of mankind by education and culture. To this he devoted his whole life. He could pursue nothing else; he neglected every thing else; he thought of himself last of all. Ordinary men called him a fanatic, and cast nicknames at him and his enterprise.

He continued his special affection and love for the children of the poor. He was very early convinced that their education could not be successfully conducted within the close-shut, artificially organized public orphan-houses. He considered that they could only develop properly, in body

and mind alike, in the country; that they ought at an early age to commence at some country occupation; especially at some useful and practical kind of labor; and that by that means their minds would develop in a simple and natural manner.

[Here follows a sketch of his labors at Neuhof.]

Every child who was capable of it was set at some out door work, and suitable labor was also provided in the house; during which last time he instructed them. He was surprised to see how little use they made of their faculties; how blind and deaf they seemed to the most striking phenomena, and how incorrectly they spoke. Accordingly he concluded even then that the development of the faculties, learning to see and hear aright, and speak correctly, were worth more than facility in reading and writing. The enterprise was too large for means, and too complicated for his practical ability.

[The experiment failed, but out of his painful experience and observation he wrote "Leonard and Gertrude," which was published by Decker of Berlin, in 1781.]

Amongst the nobles, princes, citizens, and philanthropists, both of Germany and Switzerland, there had been since 1770 a growing desire for social improvements. The conviction was all the time spreading, that there was a necessity for bestowing a better education upon the lower classes; of opposing the spread of superstition, and of diffusing more light and knowledge. In educational directions, Basedow and the Canon von Rochow had already distinguished themselves; and thousands had enlisted in aiding their enterprises. A book like Leonard and Gertrude, full of nature and truth, must necessarily be received with enthusiasm. The author, hitherto unappreciated even in his own neighborhood, immediately came into repute and honor. Encouraged by this success, he made in 1782 a tour through Germany, in search of model schools, studying the experience and operations of others, and gaining an acquaintance with the first men in Germany; Klopstock, Wieland, Goethe, Herder, Jacobi, &c. On his return he delighted the world with other useful writings. But still he did not succeed in finding any place where he could pursue undisturbed the object of his life.

Meanwhile—for we must hasten—the French Revolution broke out, and proceeded onward to the most horrible excesses. Switzerland was attacked, and in 1798 was invaded and overrun. The usual consequences of war, impoverishment, demoralization and barbarism did not fail to follow. Such news made the patriotic heart of Pestalozzi beat higher. At the information that troops of destitute children were wandering helplessly about, particularly in the vicinity of the Catholic town of Stanz, he proceeded thither, obtained from the authorities the gift of an empty house, and gathered into it eighty mendicant children. He says in relation to this occurrence, "The unfortunate and ruined condition of Stanz, and the relations into which I came with a great crowd of entirely destitute, partly wild, but powerful children of nature and of the mountains, gave me an excellent basis of operations, and though in the midst of

manifold hindrances, an opportunity for a decisive experiment upon the scope and grade of the faculties which exist universally in children, as a base for education; and likewise to determine whether and to what extent the requisites are possible and practicable, which the necessities of the case demands, for the education of the common people." He became their father, educator and teacher. Day and night he was with them, the earliest in the morning, and the last at night; he ate, slept and played with them. In a single month, they had learned as much of the profit and pleasure of his instructions, that often in the evening when he requested them to go to bed, they begged that he would stay a little longer and teach them. Content and happiness, the blessing of God, rested upon the house. When in 1799 the village of Altdorf was burnt, Pestalozzi asked his children, "How is it? Can we receive about twenty of these houseless children amongst us? If we do we must divide our food with them." "Yes, yes," they all cried out, shouting for joy.

But this pleasure lasted not long. In that same year the French entered the neighborhood, took possession of the building for a hospital, and Father Pestalozzi was forced to disperse his children. His health was broken down with care, sorrow and over-exertion; and he was obliged once more to seek the means of support. He therefore went to Burgdorf, and established himself near the town as an assistant teacher without wages. His new modes of instruction displeased the country people. He did not let the children study the Heidelberg Catechism enough; and his instruction in thinking and speaking seemed to them entirely superfluous. But after eight months, the superintending authority, presenting themselves at the school, were much astonished at what he had accomplished. Unfortunately, his strength was exhausted in his oral labors; at the end of a year he had to resign his situation for the sake of his health.

During all his experiments thus far, his purpose of founding a self-supporting educational institution remained unaltered. He ceased operations at Burgdorf in 1801; was afterward established at München-Buchsee in Berne, near Hofwyl, where Fellenberg was laboring, and finally at Yverdun (Iferten,) where he entirely broke down in 1825. The last establishment was named the Pestalozzian Institute; and as such it became famous in all Europe, and even beyond the ocean, in America, &c. Neither before nor since has any similar institution ever attained to so great fame.

The work done in that institution became the foundation of the common schools of Germany; and changed the ancient mechanical schools into institutions for real human training.

The fundamental maxims upon which the instruction there proceeded, were as follows:

The basis of education is not to be constructed, but to be sought; it exists in the nature of man.

The nature of man contains an inborn and active instinct of development; is an organized nature; and man is an organized being.

True education will find that its chief hindrances are, passive obstructions in the way of development ; its work is more negative than positive.

Its positive work consists in stimulation ; the science of education is a theory of stimulation, or the right application of the best motives.

The development of man commences with natural perceptions through the senses ; its highest attainment is, intellectually, the exercise of reason ; practically, independence.

The means of independence and self-maintenance is, spontaneous activity.

Practical capacity depends much more upon the possession of intellectual and corporeal power, than upon the amount of knowledge. The chief aim of all education, (instruction included,) is therefore the development of these powers.

The religious character depends much less upon learning the Scriptures and the catechism, than upon the intercourse of the child with a God-fearing mother and an energetic father. Religious education, like all other, must begin with the birth of the child ; and it is principally in the hands of the mother.

The chief departments for the development of power, are form, number and speech. The idea of elementary training is, the notion of laying, within the nature of the child, by means of domestic education, (the influence of father, mother, brothers and sisters,) the foundations of faith, love, of the powers of seeing, speaking and reflecting, and by the use of all the means of education, according to the laws and methods of development included within nature itself.

Such is the actual substance of Pestalozzi's principles of education. The consequences follow of themselves. They are these :

The family circle is the best place for education ; the mother's book the best school-book.

All instruction must be based upon training the intuitive faculty. The first instruction is altogether instruction in seeing : the first instruction on any subject must be the same, in order to fruitful, active and real comprehension of it. The opposite of this is the empty and vain mode of mere verbal instruction. First the thing itself should be taught, and afterward, as far as possible, the form, the representation, and the name.

The first portion of instruction consists in naming things and causing the names to be repeated, in describing them and causing them to be described. After this, it should be the teacher's prime object to develop spontaneous activity, and for that purpose to use the fore-mentioned progressive and inventive method of teaching.

Nothing should be learnt by rote without being understood ; the practice of learning by rote should be confined to mere matters of form. In the method of oral communication with the scholars is to be found an adequate measure for estimating the clearness and activity of the scholar's power of seeing, and his knowledge.

The chief inducements to the right and the good are not fear and punishment, but kindness and love.

These conclusions flow naturally from Pestalozzi's fundamental principles. If I were to give a brief statement of his method for intellectual training, I should call it "Education to spontaneous activity, by means of knowledge acquired by the perceptions."

This system has changed the whole condition of schools. It has not, it is true, yet penetrated all the schools, or all the teachers; but this is not the fault of the founder. To change a system established for centuries, is the work of centuries; not of a year, nor ten years. In the development of a nation, and in like manner of a school system, there are epochs, stationary periods, crises and reactions.

While the best men in Prussia, after 1808, were laboring to effect a regeneration of their unfortunate country, King Frederic William the Third* summoned C. A. Zeller the pupil of Pestalozzi, to Königsberg, with the commission of awakening the intellectual faculties of the people, as the only dependence for the rescue of the country. The great Fichte had already drawn attention to Pestalozzi, in his lectures and publications at Berlin. Afterward, the eminent minister, Von Altenstein, sent some young men to Yverdon to be trained.† By these means, and by means of the numerous publications of Pestalozzi and his followers, with some

* Ramsauer writes as follows of the visit of Frederic William III. to Pestalozzi :

"When the king of Prussia came to Neufchatel in 1814, Pestalozzi was very ill. Nevertheless, he insisted that I should carry him to the king, that he might thank him for his zeal in the cause of common schools, and for having sent so many pupils to Yverdon. On the way he fainted several times, and I was obliged to take him from the vehicle and carry him into a house. I urged him to return, but he replied, 'No; say nothing about it. I must see the king, if I die after it: if by means of my visit to him, a single Prussian child obtains a better education, I shall be well repaid.'"

The benefits which this noble man wished for one child, have been secured already to millions.

† Extract from a letter which the Baron Von Altenstein wrote to Pestalozzi, dated 11th Sept., 1803, at Königsberg :

"The king's majesty, with a view to the efficient improvement of the national system of education, which always lies so near his heart, has lately entrusted me, as directing minister, with the oversight of the schools and educational system in the proper Prussian provinces of his dominions.

Being fully convinced of the great value of the system of instruction discovered, and so skillfully carried into practice by yourself, and expecting from it the most favorable influence upon the culture of the people, I am desirous of making its introduction into the elementary schools the basis of a thorough educational reform in those provinces. Among the measures which I contemplate for this purpose, one of the principal is, forthwith to send to you two suitable young men, that they may drink in the spirit of your entire system of education and instruction, at the purest source. I desire them not only to learn some one department of it, but to master all of them, in their various connections and deepest unity, under the guidance of yourself, the eminent founder of the system, and with your efficient assistance. I desire them by this intercourse with you, not only to acquire the spirit of your system, but to become trained into a complete fitness for the teacher's vocation; to acquire the same conviction of its holiness, and the same ardent impulses to pursue it, which have induced you to devote to it your whole life.

In order to the best mode of procedure, I desire in the meanwhile to hear from yourself what class of young men you consider fittest to learn your method; what age, natural disposition, and previous mental training would suit you best, in order that the individuals selected may meet your wishes in every respect."

In 1809, the minister of public instruction writes as follows to the teachers who had been sent to Yverdon: "The section of public instruction begs you to believe, and to assure Mr. Pestalozzi, that the cause is the interest of the government, and of his majesty, the king, personally, who are convinced that liberation from extraordinary calamities is fruitless, and only to be effected by a thorough improvement of the people's education."

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help from the pressure of circumstances, the Prussian, or rather the Prussian-Pestalozzian school-system, was established. For he is entitled to at least half the fame of the German common schools. Whatever of excellence or eminence they have, they really owe to no one but him. Wherever his principles have been deviated from, there has followed a decline. Whatever of progress yet remains visible is a development of his principles. Whatever in our system is based on human nature, is taken from him. His experiments have secured their world-wide fame to the German schools. From France, England, Italy, Spain, Russia, Poland, Norway, Sweden, Holland, Denmark, America, whoever desires to study the best schools, resorts to Germany. Whatever fame they have, they owe to Pestalozzi. Wise people have made use of his creations for organizing improved institutions for training teachers. But the first impulse was given to the movement by the noble Swiss. As the waters flow from that land in every direction, in like manner have fruitful principles of instruction been diffused from it into every country where improvement can be detected.

The men and women by whom especially the method and spirit of Pestalozzi were diffused in Germany are; Frederick William III and his consort Louise;* state-councilors Nicolovius and Suvern; the philosopher Fichte, by his immortal addresses to the German nation; high school-councilor Zeller in Königsberg; the Prussian teachers trained at Yverdun; namely, Kawerau, Dreist, Henning, Braun, Steger Marsch, the two Bernhards, Hänel, Titze, Runge, Baltrusch, Patzig, Preuss, Kratz, and Rendschmidt; royal and school councilor Von Türk in Potsdam, seminary-director Gruner in Idstein; professor Lodomus in Carlsruhe; the prelate Denzel in Esslingen; seminary-director Stern in Carlsruhe; principal Plamann, in Berlin; seminary-director Harnisch in Breslau; Karoline Radolphi in Heidelberg; Betty Gleim in Bremen and Elberfeld; Ramsauer, royal tutor in Oldenberg; professor Schacht in Mentz; seminary inspector Kruger in Bunzlau; seminary-director Hientzsch in Potsdam; principal Scholz in Breslau, Dr. Tillich in Dessau; director Blochmann in Dresden; principal Ackermann in Frankfort on the Mayne; principal de Laspé in Wiesbaden; seminary-inspector Wagner in Brühl; seminary-director Braun in Neuwied; seminary-preceptor Muhl in Trier; seminary-director Graffmann in Stettin; catechist Kröger in Hamburg; inspector Collmann in Cassel; and others. By means of these men the Pestalozzian common schools were set in operation throughout all Germany; and in Prussia, the Prussian-Pestalozzian system. As during Pestalozzi's life Yverdun was a place of pilgrimage for teachers, so afterward, from Europe, America and elsewhere, men came to observe the German and Prussian common schools. May this reputation never decrease; may it ever grow greater and greater! Much yet remains to be done.

* Queen Louise, who superintended the education of her own children, visited frequently the schools conducted on the plans and methods of Pestalozzi, spending hours in each visit, and aided in many ways those who labored to regenerate the popular schools of Prussia.

The foregoing sketch of Pestalozzi's labors, and of their influence on the popular schools of Germany, abridged from the Centennial Discourses of two of his avowed disciples, Dr. Blochmann, of Dresden, and Dr. Diesterweg, of Berlin, represent the extreme views entertained by the admirers of the great Swiss educator. There is a large number of educators and teachers, at the head of whom is Karl von Raumer, at one time a resident at Yverdun, for the purpose of studying the system and methods of the Pestalozzian Institution, who, while they acknowledge the value of Pestalozzi's services to the instruction and industrial training of the poor, and to the true theory of education, maintain that his principles and methods as developed and applied by himself, are in some respects unsound and incomplete.

The following summary and comparative view of his principles, is taken from an article by William C. Woodbridge, in the *American Annals of Education*, for January, 1837.

As the result of his investigations, Pestalozzi assumed as a fundamental principle, that education, in order to fit man for his destination, must proceed according to the laws of nature. To adopt the language of his followers—that it must not act as an arbitrary mediator between the child and nature, between man and God, pursuing its own artificial arrangements, instead of the indications of Providence—that it should assist the course of natural development, instead of doing it violence—that it should watch, and follow its progress, instead of attempting to mark out a path agreeably to a preconceived system.

I. In view of this principle, he did not choose, like Basedow, to cultivate the mind in a material way, merely by inculcating and engrafting every thing relating to external objects, and giving mechanical skill. He sought, on the contrary, to develop, and exercise, and strengthen the faculties of the child by a steady course of excitement to self-activity, with a limited degree of assistance to his efforts.

II. In opposition to the haste, and blind groping of many teachers without system, he endeavored to find the proper point for commencing, and to proceed in a slow and gradual, but uninterrupted course, from one point to another—always waiting until the first should have a certain degree of distinctness in the mind of the child, before entering upon the exhibition of the second. To pursue any other course would only give superficial knowledge, which would neither afford pleasure to the child, nor promote its real progress.

III. He opposed the undue cultivation of the memory and understanding, as hostile to true education. He placed the essence of education in the harmonious and uniform development of every faculty, so that the body should not be in advance of the mind, and that in the development of the mind, neither the physical powers, nor the affections, should be neglected; and that skill in action should be acquired at the same time with knowledge. When this point is secured, we may know that education has really begun, and that it is not merely superficial.

IV. He required close attention and constant reference to the peculiarities of every child, and of each sex, as well as to the characteristics of the people among whom he lived, in order that he might acquire the development and qualifications necessary for the situation to which the Creator destined him, when he gave him these active faculties, and be prepared to labor successfully for those among whom he was placed by his birth.

V. While Basedow introduced a multitude of subjects of instruction into the schools, without special regard to the development of the intellectual powers, Pestalozzi considered this plan as superficial. He limited the elementary subjects of instruction to Form, Number and Language, as the essential condition

of definite and distinct knowledge; and believed that these elements should be taught with the utmost possible simplicity, comprehensiveness and mutual connection.

VI. Pestalozzi, as well as Basedow, desired that instruction should commence with the intuition or simple perception of external objects and their relations. He was not, however, satisfied with this alone, but wished that the *art of observing* should also be acquired. He thought the things perceived of less consequence than the cultivation of the perceptive powers, which should enable the child to observe completely,—to exhaust the subjects which should be brought before his mind.

VII. While the Philanthropinists attached great importance to special exercises of reflection, Pestalozzi would not make this a subject of separate study. He maintained that every subject of instruction should be properly treated, and thus become an exercise of thought; and believed, that lessons on Number, and Proportion and Size, would give the best occasion for it.

VIII. Pestalozzi, as well as Basedow, attached great importance to Arithmetic, particularly to Mental Arithmetic. He valued it, however, not merely in the limited view of its practical usefulness, but as an excellent means of strengthening the mind. He also introduced Geometry into the elementary schools, and the art connected with it, of modeling and drawing beautiful objects. He wished, in this way, to train the eye, the hand, and the touch, for that more advanced species of drawing which had not been thought of before. Proceeding from the simple and intuitive, to the more complicated and difficult forms, he arranged a series of exercises so gradual and complete, that the method of teaching this subject was soon brought to a good degree of perfection.

IX. The Philanthropinists introduced the instruction of language into the common schools, but limited it chiefly to the writing of letters and preparation of essays. But Pestalozzi was not satisfied with a lifeless repetition of the rules of grammar, nor yet with mere exercises for common life. He aimed at a development of the laws of language from within—an introduction into its internal nature and construction and peculiar spirit—which would not only cultivate the intellect, but also improve the affections. It is impossible to do justice to his method of instruction on this subject, in a brief sketch like the present—but those who have witnessed its progress and results, are fully aware of its practical character and value.

X. Like Basedow, Rochow and others, Pestalozzi introduced vocal music into the circle of school studies, on account of its powerful influence on the heart. But he was not satisfied that the children should learn to sing a few melodies by note or by ear. He wished them to know the rules of melody and rhythm, and dynamics—to pursue a regular course of instruction, descending to its very elements, and rendering the musical notes as familiar as the sounds of the letters. The extensive work of Nageli and Pfeiffer has contributed very much to give this branch of instruction a better form.

XI. He opposed the abuse which was made of the Socratic method in many of the Philanthropic and other schools, by attempting to draw something out of children before they had received any knowledge. He recommends, on the contrary, in the early periods of instruction, the established method of dictation by the teacher and repetition by the scholar, with a proper regard to rhythm, and at a later period, especially in the mathematical and other subjects which involve reasoning, the modern method, in which the teacher merely gives out the problems in a proper order, and leaves them to be solved by the pupils, by the exertion of their own powers.

XII. Pestalozzi opposes strenuously the opinion that religious instruction should be addressed exclusively to the understanding; and shows that religion lies deep in the hearts of men, and that it should not be enstamped from without, but developed from within; that the basis of religious feeling is to be found in the childish disposition to love, to thankfulness, to veneration, obedience and confidence toward its parents; that these should be cultivated and strengthened and directed toward God; and that religion should be formally treated of at a later period in connection with the feelings thus excited. As he requires the mother to direct the first development of all the faculties of her child, he assigns to her especially the task of first cultivating the religious feelings.

XIII. Pestalozzi agreed with Basedow, that mutual affection ought to reign between the educator and the pupil, both in the house and in the school, in or-

der to render education effectual and useful. He was, therefore, as little disposed as Basedow, to sustain school despotism; but he did not rely on artificial excitements, such as those addressed to emulation. He preferred that the children should find their best reward in the consciousness of increased intellectual vigor; and expected the teacher to render the instruction so attractive, that the delightful feeling of progress should be the strongest excitement to industry and to morality.

XIV. Pestalozzi attached as much importance to the cultivation of the bodily powers, and the exercise of the senses, as the Philanthropists, and in his publications, pointed out a graduated course for this purpose. But as Guts-muths, Vieth, Jahn, and Elias treated this subject very fully, nothing further was written concerning it by his immediate followers.

Such are the great principles which entitle Pestalozzi to the high praise of having given a more natural, a more comprehensive and deeper foundation for education and instruction, and of having called into being a method which is far superior to any that preceded it.

But with all the excellencies of the system of education adopted by Pestalozzi, truth requires us to state that it also involves serious defects.

1. In his zeal for the improvement of the mind itself, and for those modes of instruction which were calculated to develop and invigorate its faculties, Pestalozzi forgot too much the necessity of general positive knowledge, as the material for thought and for practical use in future life. The pupils of his establishment, instructed on his plan, were too often dismissed with intellectual powers which were vigorous and acute, but without the stores of knowledge important for immediate use—well qualified for mathematical and abstract reasoning, but not prepared to apply it to the business of common life.

2. He commenced with intuitive, mathematical studies too early, attached too much importance to them, and devoted a portion of time to them, which did not allow a reasonable attention to other studies, and which prevented the regular and harmonious cultivation of other powers.

3. The *method* of instruction was also defective in one important point. Simplification was carried too far, and continued too long. The mind became so accustomed to receive knowledge divided into its most simple elements and smallest portions, that it was not prepared to embrace complicated ideas, or to make those rapid strides in investigation and conclusion which is one of the most important results of a sound education, and which indicates the most valuable kind of mental vigor both for scientific purposes and for practical life.

4. He attached too little importance to testimony as one of the sources of our knowledge, and devoted too little attention to historical truth. He was accustomed to observe that history was but a 'tissue of lies;' and forgot that it was necessary to occupy the pupil with man, and with moral events, as well as with nature and matter, if we wish to cultivate properly his moral powers, and elevate him above the material world.

5. But above all, it is to be regretted, that in reference to religious education, he fell into an important error of his predecessors. His too exclusive attention to mathematical and scientific subjects, tended, like the system of Basedow, to give his pupils the habit of undervaluing historical evidence and of demanding rational demonstration for every truth, or of requiring the evidence of their senses, or something analogous to it, to which they were constantly called to appeal in their studies of Natural History.

It is precisely in this way, that many men of profound scientific attainments have been led to reject the evidence of revelation, and some, even, strange as it may seem, to deny the existence of Him, whose works and laws they study. In some of the early Pestalozzian schools, feelings of this nature were particularly cherished by the habit of asserting a falsehood in the lessons on Mathematics or Natural history, and calling upon the pupils to contradict it or disprove it if they did not admit its truth. No improvement of the intellectual powers, can, in our view, compensate for the injury to the moral sense and the diminished respect for truth, which will naturally result from such a course.

6. While Pestalozzi disapproved of the attempts of the Philanthropists to draw forth from the minds of children, before they had stores of knowledge, he seemed to forget the application of his principle to moral subjects, or to imagine that this most elevated species of knowledge was innate. He attempted too much to draw from the minds of his pupils those great truths of religion and the

spiritual world which can only be acquired from revelation; and thus led them to imagine they were competent to judge on this subject without external aid. It is obvious that such a course would fall in most unhappily with the tendencies produced by other parts of the plan, and that we could not hope to educate in such a mode, a truly Christian community.

The personal character of Pestalozzi also influenced his views and methods of education on religious subjects. He was remarkably the creature of powerful impulses, which were usually of the most mild and benevolent kind; and he preserved a child-like character in this respect even to old age. It was probably this temperament, which led him to estimate at a low rate the importance of positive religious truth in the education of children, and to maintain that the mere habit of faith and love, if cultivated toward earthly friends and benefactors, would, of course, be transferred to our Heavenly Father, whenever his character should be exhibited to the mind of the child. The fundamental error of this view was established by the unhappy experience of his own institution. His own example afforded the most striking evidence that the noblest impulses, not directed by established principles, may lead to imprudence and ruin, and thus defeat their own ends. As an illustration of this, it may be mentioned that, on one of those occasions, frequently occurring, on which he was reduced to extremity for want of the means of supplying his large family, he borrowed four hundred dollars from a friend for the purpose. In going home, he met a peasant, wringing his hands in despair for the loss of his cow. Pestalozzi put the entire bag of money into his hands, and ran off to escape his thanks. These circumstances, combined with the want of tact in reference to the affairs of common life, materially impaired his powers of usefulness as a practical instructor of youth. The rapid progress of his ideas rarely allowed him to execute his own plans; and, in accordance with his own system, too much time was employed in the profound development of principles, to admit of much attention to their practical application.

But, as one of his admirers observed, it was his province to educate ideas and not children. He combated, with unshrinking boldness and untiring perseverance, through a long life, the prejudices and abuses of the age in reference to education, both by his example and by his numerous publications. He attacked with great vigor and no small degree of success, that favorite maxim of bigotry and tyranny, that obedience and devotion are the legitimate offspring of ignorance. He denounced that degrading system, which considers it enough to enable man to procure a subsistence for himself and his offspring—and in this manner, merely to place him on a level with the beast of the forest; and which deems every thing lost whose value can not be estimated in money. He urged upon the consciences of parents and rulers, with an energy approaching that of the ancient prophets, the solemn duties which Divine Providence had imposed upon them, in committing to their charge the present and future destinies of their fellow-beings. In this way, he produced an impulse, which pervaded the continent of Europe, and which, by means of his popular and theoretical works, reached the cottages of the poor and the palaces of the great. His institution at Yverdon was crowded with men of every nation; not merely those who were led by the same impulse which inspired him, but by the agents of kings and noblemen, and public institutions, who came to make themselves acquainted with his principles, in order to become his fellow-laborers in other countries."

IV. STATE INDUSTRIAL SCHOOL FOR GIRLS,

AT LANCASTER, MASSACHUSETTS.

THE act, establishing the State Reform School for Girls, was passed by the Legislature of Massachusetts, on the 21st of May, 1855, and the Commissioners appointed for this purpose, located the school in the quiet and beautiful town of Lancaster, where they proceeded to erect,—instead of one large building, surrounded by walls, or forming a wall itself by inclosing a hollow square,—several edifices, plain in their architecture, and arranged to accommodate separate families, forming together a little industrial village around their common chapel. In these edifices, on the 27th of August, 1856, the school was opened,—the first industrial, reformatory school, upon the family system,* as distinguished from the penitentiary, in the United States, and which, by its success, we believe, is destined to modify our reformatory institutions and agencies.

Each house, of which three are now occupied, is perfect in itself, having accommodation for the instruction, industry and domestic training of thirty girls. Each of them is two stories in height, and constructed in the form of an L. Entering at the front door, which is near the angle of the L, on the right is the parlor; from which opens the "work room," likewise on the right hand of the entrance; next, is a small lighted room, or closet, and beyond is the school room. Opposite the "work room" is the laundry and a large closet. On the left of the entrance is the dining room, and beyond that is the pantry and kitchen, with a bath room, wash room and drying room.

Over each house two matrons, (one called the assistant,) and affectionately addressed as mother and aunt by the girls, are placed, into whose hands is given the entire care and discipline of the family; the superintendent being their counselor, and affording advice and aid whenever requested. In addition to the three homes, is a house for the superin-

* How far the Commissioners, in their plan of organization, which differs so materially from that of the State Reform School for boys at Westboro', were influenced by the "Letter" addressed to them by Dr. S. G. Howe, we have no means of knowing, but we advise every committeeman and commissioner, and every legislator and philanthropist, who wishes to do something for the reformation and elevation of vicious, or viciously disposed girls or boys, to read that Letter, and also to read thoughtfully any good account of the Farm Reformatory, at Mettray in France; of the Rough House, at Horn near Hamburg; of the Red Hill Farm School for Boys near London, and of the Red Lodge Reform School for Girls near Bristol, England, and they can not fail to see that any institution which aims at the reformation of this class of young persons, and especially of girls, must have as much of the *home*, the *family*, and the *school* in it as is practicable; and more of the daily and hourly moral training, which is necessarily involved in the habit of useful occupation on the farm, or in the workshop, or the household, and in the cheering word of woman, acting and feeling as a mother, or sister, or companion, or the wise counsel and example of men acting like fathers, brothers and friends, than can be found in a *prison*.

tendent, who is also the chaplain of the institution, a house for the farmer, and a chapel.

Besides the facilities in the building for organizing the institution on the basis of the family, it differs from others in that its subjects are saved from the dishonor of a sentence from a criminal tribunal. No girl is sent to it from the courts; but special commissioners are appointed by the executive, (the judges of probate being commissioners *ex officio*,) in the various towns in the state, before whom the girls are brought, and who have authority to commit them to the institution for the term of their minority. The object of the school is to succor and save such girls, under sixteen, as are *exposed* to a life of crime, through orphanage, vagrancy, unsuitable homes, etc.; or have been guilty of acts of petty crime, but have not become habitual and hardened criminals.

The school differs from others of the same class, in that it proposes to retain its subjects solely by a moral and social power, rather than by walls, locks and bars. It is surrounded by a simple paling fence, and the girls take their exercise as freely upon the lawn as children of the common schools. There have been (in six months) but two slight attempts to escape, and the officers feel no more anxiety in reference to this, after a pupil has remained long enough to awaken a personal affection for the matrons, than parents do in reference to their children. The trustees reason that it is better to be subjected to some inconvenience in securing the return of fugitives, if, on rare occasions, there are attempts to leave the premises, than to break so seriously into the family plan as to introduce physical restraint. In the case of two-thirds of the present inmates, no ordinary inducement could lead them to leave, without permission. The punishments are simple, appealing rather to the moral sense than to a fear of bodily suffering. The discipline chiefly relied upon, and thus far failing in no instance, is seclusion from their companions in their own or another room, with a light diet, and the affectionate and christian exhortation of the matron. The most impertinent and obstinate, after a period of exclusion from the society of their companions, and of reflection, yield to the discipline of the school.

These girls are placed in the institution until their majority, but the trustees have authority to bind them out in suitable families, whenever in their judgment it will be for the best interests of the child that this should be done, or when the work of reformation is so far completed as to give them confidence in the future integrity and virtue of their previous wards.

The institution, since its opening, has been under the immediate care of Rev. Bradford K. Pierce, who possesses, in an eminent degree, the bright, hopeful, cheerful temper, the kind sympathies, the enthusiastic devotion to the best spiritual interests of his charge, which are essential to the highest success.

We give below a communication from a valued correspondent, after a recent visit to this interesting institution.

"THE number of inmates of the school, (or of all the families into which it is subdivided for better moral supervision and care,) was, at the close of the period, commencing with the opening of the establishment and extending to the 1st of December last, 32; received during the present year, up to September 30th, the number is 68. Of these, four were found unsuitable for the purposes of such a school, and discharged as such; two only have escaped,—a very small number, considering the fact that none but moral safeguards are adopted as means of retention; two have been indentured in favorable situations. The whole number now in the school, (1st October, 1857,) is 92. The State, we thus see, has under its guardian care, in this friendly home, a family of nearly 100 actual or virtual orphan girls.

The four cases mentioned as discharged were not so treated on moral grounds, but on those of either insanity or peculiar physical circumstances, which rendered their exclusion indispensable to the welfare of the pupils of the school.

The limits of accommodation in the houses connected with the school were reached by the 10th of June; and applications for admission have been made in sufficient number to require the erection of another building, if not two.

The degree of success attending the measures adopted in the school for the personal and moral as well as intellectual benefit of the pupils, is highly encouraging. A great change has been wrought on the habits of many of those who have been inmates of the establishment for a period sufficient to allow opportunity of judging of the probable permanency of its influence. The kind and judicious supervision exerted by the Superintendent, who seems to be most happily adapted to such a charge, and the unwearied, patient and genial management of the matrons and instructresses, seem, thus far, to be, in a measure, rewarded by the general spirit of attention, order, obedience, neatness and propriety which pervades the school, not only when assembled for general purposes of devotion and religious instruction, but when occupied with the industrial employments and school lessons conducted in the separate houses which form the homes of the respective groups into which the inmates are divided, as members of families. The general aspect of the pupils is that of docility and cheerfulness, active and healthy habits, and personal neatness. To these results the admirable arrangements of the different houses, together with the healthful diet and regimen adopted, not less than the personal care and attention of the matrons, have largely contributed.

With all advantages in their favor, however, the task of creating and maintaining such results must devolve a vast amount of toil, and care, and ceaseless watchfulness, on the Superintendent and the matrons. Such a school, notwithstanding the desire to have it maintain a preventive rather than a reformatory character, must contain many elements of deep-seated evil; requiring every resort of tact and influence to counteract their tendency, and to prevent the contact of vice with vice from causing the school itself to become a source of injury to its inmates.

It would seem especially desirable that, in future cases of admission, the preference should be given to the youngest class of candidates, so as to render the intended influence of the school in salutary training practicable, and to insure the true economy in State expenditure. The obduracy of confirmed habit renders the moral condition of an older class of pupils nearly hopeless, and impedes the good influence which might otherwise be exerted on the younger. It is matter of regret, therefore, to read the following classification, as regards the proportion of ages in the present number of inmates: over fifteen, 28; between twelve and fifteen, 49; between ten and twelve, 15; between seven and ten, 8. It is pleasing, however, to observe that the influence of the school has already had such an effect

on some of even the older pupils, as to admit of their being intrusted, under due limitations, with a share in the guidance and teaching of the younger members; while the deportment of many of the youngest classes, in its comparative exemption from obvious faults, operates, to some extent, as a monitory influence on their elders. Such facts are peculiarly pleasing to the observation of the visitor of the school, when he recalls the degrading circumstances from which many of its members have entered it.

One prominent feature in the management of the school is the daily practice of housework, in its various branches, as a part of the training of the inmates of each house. The expertness attained by some in such employment is remarkable; and, when one adverts to the utter neglect of any such occupation in the previous history of nearly all the pupils, it is plain that the kind hearted matrons must have spared no pains in their training. Washing, sewing, knitting, the charge of their rooms, which, by the way, are admirably kept, as to order and neatness; and, in addition to these common household employments, the proper care of milk and butter, the preparing of vegetables and fruit for culinary purposes, with many other domestic details, are carefully exemplified and thoroughly taught to all the inmates, in due rotation.

It is impossible for a visitor to this noble charity to overlook the wisdom of the arrangement on the part of the Trustees, who planted their undertaking on the beautiful and spacious grounds which it occupies as a site. If any influence of God in Nature can work on the human heart, as a purifying, healing and renovating effect, it must be here. The charming landscape around the edifices and grounds, the grounds themselves, the highly cultivated and flourishing farm, the beautiful walks, the noble shade-trees, and the graceful flower-beds, and, to crown all, the neat and commodious chapel for worship, not less than the handsome houses which serve as homes to their occupants,—all contribute to render this truly philanthropic and Christian institution a most attractive spectacle, whether as a refuge and a nursery for suffering childhood, or an impressive proof of the faith which the State of Massachusetts reposes in the influence of preventive education as a security against crime and misery.

One of the most pleasing sights which a benevolent mind can enjoy is that of the assembled pupils for their general exercises in the chapel on Sunday afternoon. These exercises consist, besides the opening and closing devotions, conducted by the Superintendent, in the simultaneous recitation of passages of Scripture, in answering questions on these proposed by the Superintendent, in listening to a familiar address, either by the Superintendent or some occasional visitor invited to attend, and, toward the close of the afternoon, in joining in the singing of a hymn selected for the purpose.

What gives additional interest to this affecting scene is the thought that the State, by its judicious bounty, thus brings, weekly, under the influence of the sanctuary this numerous family of beneficiaries, who would otherwise, in all probability, never, in the whole course of the year, come within the doors of a place of worship. A few of the inmates of the school, there is good reason to hope, resort weekly to the chapel to offer a genuine tribute of gratitude for their rescue from the fatal consequences of a life of sin, and for the generous provision which public and private munificence has made for their instruction and training, as well as for their health and comfort, and, in due season, for their employment in useful and respectable stations in life."

V. SYSTEM OF NATIONAL EDUCATION IN IRELAND.

THE RULES AND REGULATIONS adopted by the Board of Commissioners of National Education in Ireland for their own guidance, and for the management of the schools established to secure united secular instruction for children of diverse and warring religious creeds, are worthy of attentive study, not only by those who have to deal with the same difficulties of race, politics, and religion, but by all who are called on to frame or administer systems of public instruction. For although the system was framed to meet difficulties which had grown up out of centuries of unwise and despotic legislation, it has been developed by men of great practical wisdom. The Board was constituted from the start so as to represent the highest ecclesiastical influence in the great antagonistic parties of Ireland,—not simply the Catholic and Protestant divisions, but the Episcopal, the Presbyterian, and the Unitarian section of the Protestant interest. And in the selection of these representatives, the social and political standing of the members was calculated to command respect, and conciliate jealousy and opposition.

The vote moved by Mr. Spring Rice, now Lord Monteagle, that “a sum of £30,000 be granted for enabling the Lord Lieutenant of Ireland to assist in the education of the people,” did not pass without considerable opposition, although no division of the House was taken. Parliament was soon after prorogued, and, immediately after, Lord Stanley, then Chief Secretary for Ireland, addressed a letter to the Duke of Leinster, the Lord Lieutenant, announcing the design of the government to appoint a Board of Commissioners of National Education for Ireland, and setting forth the principles on which the schools, established or aided by the public grant, would be administered. The Board was to be “composed of men of high personal character, including individuals of exalted stations in the church,” and “professing different religious opinions.” Security was thereby afforded to the country, “that while the interests of religion would not be overlooked, the most scrupulous care should be taken not to interfere with the peculiar tenets of any description of christian pupils.” “The schools will be required to be kept open for a certain number of hours, on four or five days in the week, for moral and literary education only; and that the remaining one or two days in the week will be set apart for giving, separately, such religious education to the children as may be approved of by the clergy of their respective persuasions.” Pastors of different religious denominations are to be “permitted and encouraged to give religious instruction to the children” of their own flock,

either before or after the ordinary school hours. In the power over the selection of books, opportunity was given to make such selections from Scripture as all parties would approve.

With the announcement of these general principles, "for a combined literary and separate religious education," the Board was appointed, consisting of the Lord Lieutenant, the Protestant Archbishop of Dublin, the Catholic Archbishop of Dublin, the Attorney-General for Ireland, and three others—making three members of the Established Church, two Catholics, one Presbyterian and one Unitarian. The action of the Board has been governed from the outset by one rule—not to adopt any measure touching religious instruction in which every member could not concur.

The Board has now been in existence twenty-six years; and during that period Parliament has appropriated to the support of these schools over eleven millions of dollars. The schools have risen from 789 in 1833 to 5,124 in 1855, and the number of pupils from 107,049 to 538,246; and during this whole period, not one case of proselytism has been proved; no religious zealot, no matter to what church he might belong, has dared to violate, or could do so with impunity, the impartial and tolerant principle of the national system, which respects alike and protects from interference the religious faith of Protestants and Roman Catholics. Since 1831 two committees of inquiry, on the subject of Irish Education, have sat in both Houses of Parliament, and no deviation from the principles laid down in Lord Stanley's plan has been recommended, or even suggested by them; nine successive administrations have been in power, but not one responsible minister, nor any Lord Lieutenant of Ireland, has ever suggested a departure from the essential principles adopted at the beginning. During this whole period the system has encountered the bitter and implacable opposition of the ultra zealots in the Protestant and Catholic churches, while the largest and most influential portion of the Established Church, the aristocracy, and the gentry of the country, the clergy and laity of the Presbyterian body, and many Catholic prelates and priests, have either withheld their countenance, or given only a cold and reluctant support.

The annual grants of Parliament in aid of the elementary instruction of the poor in Ireland, instead of being expended exclusively in the payment of teachers' wages, is appropriated by the Commissioners: (1,) in aid of convenient and suitable school-houses, furniture and apparatus; (2,) in improving the literary qualifications, and professional knowledge and skill of teachers; (3,) in establishing a spirit of self-improvement in teachers by a classification of salaries, according to success and length of service; (4,) in securing a uniformity of good text-books, carefully prepared, well printed, strongly bound, and at the lowest wholesale price; (5,) in the encouragement of special schools of different grades, such as evening schools, work-house and prison schools, industrial schools, agricultural schools; and (6,) in subjecting all the schools aided to a thorough periodical and intelligent inspection.

IRELAND.

PART I.—RULES AND REGULATIONS OF THE COMMISSIONERS OF NATIONAL EDUCATION AS REVISED MAY, 1855.

I. *Object and Fundamental Principle of the System of National Education.*

1. The object of the system of National Education is to afford *combined* literary and moral, and *separate* religious instruction, to children of all persuasions, as far as possible, in the same School, upon the fundamental principle, that no attempt shall be made to interfere with the peculiar religious tenets of any description of Christian pupils.

2. It is the earnest wish of Her Majesty's Government, and of the Commissioners, that the Clergy and Laity of the different religious denominations should coöperate in conducting National Schools.

3. The Commissioners by themselves, or their Officers, are to be allowed to visit and examine the Schools whenever they think fit. Those who visit on the part of the Commissioners are furnished with credentials under their Seal.

4. The Commissioners will not change any fundamental Rule without the express permission of His Excellency, the Lord Lieutenant.

II. *Management of National Schools.*

1. The local government of the National Schools is vested in the local Patrons thereof.

2. The Commissioners recognize as the local Patron the person who applies in the first instance to place the School in connection with the Board, unless it be otherwise specified in the application.

3. If a School be under the local management of a School-Committee, such Committee has all the rights of an individual Patron.

4. The Patron has the right of nominating any fit person to act as his representative in the local management of the School; such representative to be designated the "Local Manager." The Patron may, at any time, resume the direct management of the School, or appoint another Local Manager.

This rule applies equally whether the Patronship be vested in one or more individuals.

5. When a School is vested in Trustees, they have the right to nominate the local Manager.

6. When a School is vested in the Commissioners, the name of the Patron or Patrons is inserted in the lease.

7. In the case of a vacancy in the Patronship by death, the representative of a Lay Patron, or the successor of a Clerical Patron, is recognized by the Board, (where no valid objection exists,) as the person to succeed to the Patronship of the School.

8. If a Patron wishes to resign the office, he has the power of nominating his successor, subject to the approval of the Board.

9. In all cases, the Commissioners reserve to themselves the power of determining whether the Patron, or the person nominated by him, either as his successor, or as local Manager, can be recognized by them as a fit person to exercise the trust.

10. In all cases, whether the School be Vested or Non-Vested, the Patron, when nominating a local manager, ought to notify to the Commissioners, whether or not the person so nominated is to exercise all the rights of Patron during the period he acts as Manager.

11. When a School is under the control of a Committee, or of joint Patrons, a "Local Manager" should be appointed, to correspond with the office, sign documents, &c., &c.

III. *Description of Schools to which Commissioners grant aid.*

1. The Schools to which the Commissioners grant aid are divided into two classes, viz. :—1st, Vested Schools, which are vested in the Commissioners, or were vested previously to the incorporation of the Board, in Trustees, for the pur-

pose of being permanently maintained as National Schools; 2dly, Non-Vested Schools, which are the property of private individuals. Both these classes of Schools are under the control of Local Patrons or Managers.

2. There are also Model Schools, Literary and Agricultural, of which the Commissioners are themselves the Patrons, but which are conducted on the same fundamental principles as the ordinary National Schools.

3. The Commissioners encourage industrial instruction in National Schools in all suitable cases.

4. The Commissioners require that, in Schools attended by females, instruction shall be given, (if practicable,) in plain needlework.

IV. *Religious and Secular Instruction.*

1. Opportunities are to be afforded, (as hereinafter provided for,) to the children of all National Schools for receiving such religious instruction as their parents or guardians approve of.

2. Religious instruction must be so arranged, that each School shall be open to children of all communions; that due regard be had to parental right and authority; that, accordingly, no child be *compelled* to receive, or to be present at any religious instruction of which his parents or guardians disapprove; and that the time for giving it be so fixed, that no child shall be thereby, in effect, excluded, directly or indirectly, from the other advantages which the School affords.

3. A public notification of the times for religious instruction must be inserted in large letters in the "Time-Table" supplied by the Commissioners who recommend that, as far as may be practicable, the general nature of such religious instruction be also stated therein.

4. The "Time-Table" must be kept constantly hung up in a conspicuous place in the School-room.

5. The Teacher must, immediately before the commencement of religious instruction, announce distinctly to the pupils, that the hour for religious instruction has arrived, and must, at the same time, put and keep up, during the period allotted to such religious instruction, and within the view of all the pupils, a notification thereof, containing the words "Religious Instruction," printed in large characters, on a form to be supplied by the Commissioners.

6. When the secular instruction precedes the religious instruction, in any National School, there shall be a sufficient interval between the announcement and the commencement of the religious instruction; and whether the religious or the secular instruction shall have priority in any National School, the books used for the instruction first in order, shall be carefully laid aside, at its termination, in the press or other place appropriated for keeping the School-books.

7. No secular instruction, whether literary or industrial, shall be carried on in the same apartment, during school hours,* simultaneously with religious instruction.

8. In School, toward the building of which the Commissioners have contributed, and which are *vested* in Trustees, for the purposes of National Education, or which are vested in the Commissioners in their corporate capacity, such pastors or other persons as shall be approved of by the parents or guardians of the children respectively, shall have access to them *in the School-room*, for the purpose of giving them religious instruction there, at convenient times to be appointed for that purpose.

9. In Schools *not vested*, and which receive no other aid than salary and books, it is for the Patrons or Managers to determine whether any, and if any, what religious instruction shall be given *in the School-room*; but if they do not permit it to be given in the School-room, the children whose parents or guardians so desire, must be allowed to absent themselves from the School, at reasonable times, for the purpose of receiving such instruction *elsewhere*.

In such Schools, the Commissioners do not insist that opportunities shall be afforded (as in the case of Vested Schools) for religious instruction being given *in the School-room*, by such Pastors, or other persons, as shall be approved by the parents or guardians of the children.

10. The reading of the Scriptures, either in the Protestant, Authorized, or Douay

* The term "SCHOOL HOURS," is always to be understood to mean the entire time, in each day, from the opening of the School to the closing of the same for the dismissal of the pupils.

version,—the teaching of catechisms,—public prayer,—and all other religious exercises, come within the rules as to religious instruction.

11. The Patrons and Managers of *all* National Schools have the right to permit the Holy Scriptures, (either in the Authorized or Douay version,) to be read, at the time or times set apart for religious instruction; and in *all Vested Schools* the parents or guardians of the children have the right to require the Patrons and Managers to afford opportunities for the reading of the Holy Scriptures, in the School-room, under proper persons approved of by the parents or guardians for that purpose.

12. Religious instruction, prayer, or other religious exercises, may take place, at any time, before and after the ordinary School business, (during which all children, of whatever denomination they may be, are required to attend;) but must not take place *more than once*, at an *intermediate* time, between the commencement and the close of ordinary School business. The Commissioners, however, will not sanction any arrangement for religious instruction, prayer, or other religious exercises at an *intermediate time*, in cases where it shall appear to them, that such arrangement will interfere with the usefulness of the School, by preventing children of any religious denomination from availing themselves of its advantages, or by subjecting those in attendance to any practical inconvenience.

13. The secular School business must not be interrupted, or suspended, by any spiritual exercise whatsoever.

Note.—The Commissioners earnestly recommend that Religious Instruction shall take place either immediately before the commencement, or immediately after the close of the ordinary School business; and they further recommend that, whenever the Patron or Manager thinks fit to have religious instruction at an intermediate time, a separate apartment shall, (when practicable,) be provided for the reception of those children whose parents or guardians may disapprove of their being present thereat.

14. Patrons, Managers, and Teachers, are not required to *exclude* any children from any religious instruction given in the School; but all children are to have full power to absent themselves, or to withdraw from it. If any parents or guardians object to the religious instruction given in a National School, it devolves upon them to adopt measures to prevent their children from being present thereat.

15. Patrons, Managers, and Teachers, are not to use any means, directly or indirectly, to induce children to attend any religious instruction, contrary to the wishes of their parents or guardians. The Commissioners will regard such interference as opposed to the whole spirit of the system of National Education.

16. If any child of a religious persuasion different from that of the Teacher of any National School, attend during the time or times set apart for religious instruction given by such Teacher, it shall be his or her duty, on the *first attendance* of every such child, during the time for such religious instruction given by such Teacher in such School, *forthwith* to notify the same to the parent or guardian of such child, on and by a form to be furnished by the Commissioners.

17. The Teachers are required to keep a record of the names of the children to whose parents they have sent the printed form of notification.

18. The Registry kept in each School, according to the form furnished by the Commissioners, must show the religious denomination of each child on the School roll.

19. A sufficient number of hours, to be approved of in each case, by the Commissioners, is to be appropriated to the ordinary School business, during which all children, of whatever denomination they may be, are required to attend.

20. In all National Schools, (except those in which Industrial Instruction is the *chief* object,) there must be Literary instruction for at least *four* hours, upon five days in the week.

21. In Schools in which Industrial Instruction is the *chief* object, the Commissioners require that not less than *two* hours, daily, shall be devoted to literary instruction.

V. Use of School-houses.

1. In Non-Vested Schools, the Commissioners do not, in ordinary cases, exercise control over the use of the School-houses on Sundays, or before or after the School hours on the other days of the week; such use being left altogether to the

Local Patrons or Managers, of all religious persuasions, subject to the interference of the Board in cases leading to contention or abuse.

2. No National School-house shall be employed, at any time, even temporarily, as the *stated* place of DIVINE WORSHIP of any religious community; or for the celebration or administration of the sacraments or rites of any church.

3. No aid will be granted to a School *held in a place of worship*; nor will the Commissioners sanction the *transfer* of an existing School to a place of worship, even for a temporary period.

4. When a School-room is in any way connected with a place of worship, there must not be any *direct internal* communication between the School-room and such place of worship.

5. Vested School-houses must be used, *exclusively*, for the education of the children attending them; except on Sundays, when they may be employed for Sunday Schools, with the sanction of the Patrons or Managers, subject, in cases leading to contention or abuse, to the interference of the Commissioners.

6. No political meetings shall be held in National School-houses, whether vested or non-vested; nor shall any political business *whatsoever* be transacted therein.

VI. Use of Books or Tablets.

1. The use of the books published by the Commissioners is not compulsory; but the titles of all other books which the Patrons or Managers of Schools intend for the ordinary School business, are to be notified to the Commissioners; and none are to be used to which they object. The approval of any such books is to extend only to the particular edition which has been submitted to the Commissioners.

2. If any other books than the Holy Scriptures, or the *standard* books of the church to which the children using them belong, be employed in communicating religious instruction, the title of each is to be made known to the Commissioners whenever they deem it necessary.

3. The Commissioners do not insist on the "Scripture Lessons" or book of "Sacred Poetry" being read in any of the National Schools, nor do they allow them to be read as part of the ordinary School business, (during which all children, of whatever denomination they may be, are required to attend,) in any School attended by children whose parents or guardians object to their being read by their children.

In such cases the Commissioners prohibit the use of these books, except at times set apart for the purpose, either before or after such ordinary School business, and under the following conditions:—

First—That no child, whose parent or guardian objects, shall be required, directly or indirectly, to be present at such reading.

Second—That in order that any children, whose parents or guardians object, may be at liberty to absent themselves, or to withdraw, at the time set apart for the reading of the books above specified, public notification of the time set apart for such reading shall be inserted in large letters in the Time-Table of the School—that there shall be a sufficient interval between the conclusion of such ordinary School business and the commencement of such reading; and that the Teacher shall, immediately before its commencement, announce distinctly to the pupils, that any child whose parent or guardian so desires may then retire.

Third—That in every such case there shall be, exclusive of the time set apart for such reading, sufficient time devoted each day to the ordinary School business, in order that those children who do not join in the reading of the books, may enjoy ample means of literary instruction in the School-room.

4. When using the Scripture Lessons, the Teachers are prohibited, except at the times set apart for religious instruction, from putting to the children any other questions than those appended to the end of each lesson.

5. The Commissioners require that the principles of the following lesson, or of a lesson of a similar import, (to be approved of by the Commissioners,) shall be strictly inculcated during the hours of united instruction, in all Schools received into connection with the Board, and that a copy of the lesson itself be hung up in each School.

Christians should endeavor, as the Apostle Paul commands them, to "live peaceably with all men," (Romans, ch. xii. v. 17,) even with those of a different religious persuasion.

Our Saviour, Christ, commanded his disciples to "love one another." He taught them to love even their enemies, to bless those that cursed them, and to pray for those who persecuted them. He himself prayed for his murderers.

Many men hold erroneous doctrines, but we ought not to hate or persecute them. We ought to seek for the truth, and to hold fast what we are convinced is the truth; but not to treat harshly those who are in error. Jesus Christ did not intend his religion to be forced on men by violent means. He would not allow his disciples to fight for him.

If any persons treat us unkindly, we must not do the same to them; for Christ and his apostles have taught us not to return evil for evil. If we would obey Christ, we must do to others, not as they do to us, but as we would wish them to do to us.

Quarreling with our neighbors and abusing them, is not the way to convince them that we are in the right, and they in the wrong. It is more likely to convey them that we have not a Christian spirit. We ought, by behaving gently and kindly to every one, to show ourselves followers of Christ, who, "when he was reviled, reviled not again." (1 Peter, ch. ii. v. 23.)

6. The use of the Tablet, furnished by the Commissioners, containing the Ten Commandments, is not compulsory.

7. The rules as to religious instruction do not apply to the matter contained in the common School-books, in the Scripture Lessons, in the book of Sacred Poetry, or in any other book, the use of which the Commissioners may at any time sanction for the purpose of united instruction.

VII. *Appointment and Dismissal of Teachers.*

1. The local Patrons, (or Managers,) of Schools have the right of appointing the Teachers, subject to the approval of the Board, as to character and general qualifications; the local Patrons, (or Managers,) have also the power of removing the Teachers of their own authority. National Teachers should be persons of Christian sentiment, of calm temper, and discretion; they should be imbued with a spirit of peace, of obedience to the law, and of loyalty to their sovereign; they should not only possess the art of communicating knowledge, but be capable of moulding the mind of youth, and of giving to the power which education confers a useful direction. These are the qualities for which Patrons of Schools when making choice of Teachers should anxiously look. They are those which the Commissioners are anxious to find, to encourage, and to reward.

2. No clergyman of any denomination, or, (except in the case of Convent Schools,) member of any religious order, can be recognized as the Teacher of a National School.

3. Teachers of National Schools are not permitted to carry on, or engage in, any business or occupation, that will impede, or interfere with their usefulness as Teachers. Teachers of National Schools are especially forbidden to keep public houses, or houses for the sale of spirituous liquors.

4. Should the Commissioners consider any Teacher in a Vested School unfit for his office, or otherwise objectionable, they will require that he be dismissed and another provided: in Non-Vested Schools the grant of salary will be withheld until a suitable Teacher be procured. Teachers are also liable to be fined or suspended, at all times, when the Commissioners shall deem it necessary, on sufficient cause being shown.

VIII. *Inspection by the Commissioners or their Officers.*

1. As the Commissioners do not take the control or regulation of any School, except their own Model Schools, directly into their own hands, but leave all Schools aided by them under the authority of the local Patrons or Managers, (as stated in § II. ;) the *Inspectors* are not to give *direct orders*, as on the part of the Board, respecting any necessary regulations, but to point out any such regulations to the local Patrons or Managers of the Schools, that *they* may give the requisite orders.

2. The Commissioners require that every National School be inspected by the *Inspector of the District*, at least three times in each year.

3. The *District Inspector*, after each inspection, is to communicate with the local Patron or Manager, for the purpose of affording information concerning the general state of the School, and pointing out such violations of rule, or defects, if any, as he may have observed; and he is to make such suggestions as he may deem necessary.

4. Upon ordinary occasions, the *Inspector* is not to give any intimation of his No. 11.—[VOL. IV., NO. 2.]—24

intended visit ; but when the inspection is to be public, he is to make such previous arrangements with the local Patrons or Managers, as will facilitate the attendance of the parents of the children, and other persons interested in the welfare of the Schools.

5. The Inspector is to report to the Commissioners the result of each visit, and to use every means to obtain accurate information as to the discipline, management, and methods of instruction pursued in the School.

6. When applications for aid are referred to the District Inspector, he is to have an interview with the applicant ; and also to communicate personally, or by writing, with the clergymen of the different denominations, and with other parties in the neighborhood, with the view of ascertaining their opinions on the application, and whether they have any, and what, objections thereunto.

7. The Inspector is also to supply the Commissioners with such local information as they may from time to time require from him, and to act as their agent in all matters in which they may employ him ; but he is not invested with authority to decide upon any question affecting a National School, or the general business of the Commissioners, without their direction.

IX. Admission of Visitors.

1. The public generally must have free access to every National School, (whether Vested or Non-Vested,) during the hours devoted to secular instruction —not to take part in the ordinary business, or to interrupt it, but, as visitors, to observe how it is conducted.

2. Every Teacher of a National School is to receive courteously visitors of all denominations, to afford them free access to the School-room, and full liberty to examine the Register, Daily Report Book, and Class Rolls ; to observe what books are in the hands of the children, or upon the desks, what tablets are hung up on the walls, and what is the method of teaching ; but the teachers are not required to permit any person to interrupt the business of the School, by asking questions of children, examining classes, calling for papers or documents of any kind, except those specified, or in any other way diverting the attention of either Teachers or Scholars from their usual business.

3. Should any visitors wish for information which they can not obtain by such an inspection, it is the duty of the teachers to refer them to the Patron or Manager of the school for such information.

4. Every teacher is required to have his visitors' or Daily Report Book lying upon his desk, that visitors may, if they choose, enter remarks in it. Such remarks as may be made, the teachers are by no means to alter or erase ; and the Inspector of the district is required to transmit to the Commissioners copies of such remarks as he may deem of sufficient importance to be made known to them.

5. As the religious instruction of the children given in the School-room, is under the control of the clergyman or lay person, communicating it with the approbation of their parents, the *Commissioners* can give no liberty to any visitor whether clergyman or other person, to interfere therewith, or to be present thereat.

X. Miscellaneous.

1. When any School is received by the Commissioners into connection with them, the inscription, "NATIONAL SCHOOL," shall be put up in plain and legible characters on the School-house, or on such other place as may render it conspicuous to the public. When a School-house is built partly by aid from the Commissioners, a stone is to be introduced into the wall having that inscription cut upon it. The Commissioners will not, when granting aid *in future*, sanction the inscription of any title of a *denominational character*, or which may appear to them to indicate that the school is one belonging to any particular religious body. The Commissioners, however, do not object to the terms, Male, Female, or Infant : or to the proper local designation of the city, town, or parish, street, village, or townland in which the School may be situated ; or to the name of the founder being stated on the inscription.

2. Patrons and Managers are permitted to close their respective schools for a reasonable time or times during the year, subject to the interference of the Commissioners in case of abuse.

3. No emblems or symbols of a *denominational* nature shall be exhibited in the School-room, during the hours of united instruction; nor will the Commissioners, in future, grant aid to any School which exhibits on the exterior of the buildings any such emblems.

4. No emblems or symbols of a *political* nature shall at *any time* be exhibited in the School-room, or affixed to the *exterior* of the buildings; nor shall any placards whatsoever be affixed thereto.

5. The Commissioners regard the attendance of any of their Teachers at meetings held for *political purposes*, or their taking part in elections for Members of Parliament, or for Poor Law Guardians, &c., except by voting, as incompatible with the performance of their duties, and as a violation of rule which will render them liable to dismissal.

6. The Commissioners require that a copy of Part I., of their Rules, on a form to be furnished by them, shall be suspended in every National School-room.

PART II.—DIFFERENT CLASSES OF NATIONAL SCHOOLS.

I. *District Model Schools.*

1. District Model Schools are built and supported entirely out of the funds placed by Parliament at the disposal of the Commissioners, and are therefore under their exclusive control.

2. The chief objects of District Model Schools are to promote united education; to exhibit the most improved methods of literary and scientific instruction, and to train young persons for the office of Teacher.

3. In District Model Schools, the Commissioners appoint and dismiss, of their own authority, the Teachers and other officers; regulate the course of instruction, and exercise all the rights of Patrons. The Commissioners afford the necessary opportunities for giving religious instruction to the pupils, by such Pastors or other persons as are approved of by their parents or guardians, and in separate apartments allotted to the purpose.

4. Some of the District Model Schools have farms attached to them, for the purpose of affording instruction in agriculture.

II. *Agricultural Schools.*

1. Agricultural Schools of every class must have a literary department annexed to them, conducted on the principles of ordinary National Schools.

2. Agricultural Schools consist of two classes, Model and Ordinary.

3. Model Agricultural Schools are divided into two classes, viz.: those under the exclusive control of the Commissioners, and those under local Patrons.

4. In all Model Agricultural Schools the Commissioners will grant salary to a Teacher for the literary department *exclusively*, when the extent of the farm and other circumstances render such an appointment necessary.

III. *Model Agricultural Schools under the exclusive control of the Commissioners.*

1. The Commissioners defray the greater portion of the cost of erecting the necessary buildings; but they require the local parties to contribute in such proportion as may be deemed necessary, according to the circumstances of each case.

2. The Commissioners undertake the *entire* cost of the furniture, fittings, rent, taxes, maintenance, implements, stock, &c., &c.

3. A farm of sufficient extent must be conveyed to the Commissioners, at a moderate rent, and on a satisfactory lease.

4. The Commissioners exercise all the rights of Patrons, as in the case of District Model Schools.

5. The Commissioners admit into these Schools a limited number of free, and also of paying resident Agricultural pupils.

6. The Commissioners contribute a small weekly payment to the class of day pupils who work on the farm.

IV. *Model Agricultural Schools, (Vested and Non-Vested,) under Local Patrons.*

1. *Vested Model Agricultural Schools.*

1. The Commissioners contribute a certain amount of assistance toward the erection of the buildings, in proportion to the amount of local contribution, and the extent of the farm. The remaining portion of the cost of the buildings and furniture, and the whole cost of implements, stock, seed, &c., must be contributed by local parties.

2. The site of the buildings must be legally vested in the Commissioners free of rent.

3. The only aid granted by the Commissioners toward the *maintenance* of such Schools, consists of salary to the Master, (who must be competent to conduct both the literary and agricultural departments;) a sum toward the support of a limited number of resident Agricultural pupils, and a weekly payment to the class of day pupils who work on the farm.

2. *Non-Vested Model Agricultural Schools.*

1. The entire cost of the necessary buildings, furniture, implements, stock, seed, &c., must be defrayed by local parties, and a farm of sufficient extent must be provided.

2. The Commissioners grant the usual salary to the Master, according to his class, as a literary Teacher, and an additional sum of £10 a year for his services as Agriculturist. They contribute also toward the support of a limited number of resident agricultural pupils, and a weekly payment to the class of day pupils who work on the farm.

V. *Ordinary Agricultural Schools.*

1. This class of Schools consists of ordinary National Schools, (either Vested or Non-Vested,) to which a small farm, (from one to three acres,) is annexed. The Teacher must be competent to give instruction both in the theory and practice of agriculture, and must cultivate the land, with the assistance of his pupils.

2. The only aid granted by the Commissioners, is an addition of £5 a year to the class salary of the Teacher, and in some special cases, a small weekly payment to an Industrial class of pupils.

3. To entitle a School to such aid, the Commissioners require to be satisfied from the Reports of the Agricultural Inspectors, that the Agricultural department is efficiently conducted.

VI. *Agricultural Schools connected with Workhouses.*

1. In Workhouse Schools to which farms are attached, the Commissioners award to the Agricultural Teacher, a gratuity not exceeding £15 in one year, and make a free grant of books on agriculture. These gratuities and grants are awarded on the recommendation of the Agricultural inspectors.

VII. *School Gardens.*

1. The Commissioners award gratuities, on the recommendation of the Agricultural Inspectors, to the Teachers of National Schools, who exhibit the best specimens of garden culture, on ground attached to their respective Schools, the ground to be cultivated by the pupils.

VIII. *Industrial Schools.*

1. In these Schools, embroidery and other advanced kinds of needlework are taught. The Commissioners grant salaries to the teachers on the following conditions:

First—That *all* the pupils of the industrial department shall receive literary instruction, for at least *two hours* daily.

Second—That no religious instruction or religious exercise shall take place during the time the pupils are engaged in industrial occupation.

Third—That a separate room be provided for industrial instruction.

Fourth—That in addition to the literary teacher, there shall be a suitable person appointed to conduct the industrial department

2. None but lay teachers are entitled to a salary from the Commissioners, for conducting an industrial department in connection with a *Convent School*.

3. The amount of salary will depend upon the circumstances of each case.

IX. *Convent Schools.*

1. Convent Schools receive aid under the conditions applicable to Non-Vested Schools, and they are subject to the same Rules and Regulations.

2. The members of the community may themselves discharge the office of Teachers, with or without the aid of such other persons as they may see fit to employ; the salaries of the assistants to be defrayed by the community.

3. The amount of salary awarded to Convent Schools is regulated by the average number of children in daily attendance, according to a scale laid down by the Commissioners.

4. The Commissioners will grant aid to *one School only*, in connection with the same Convent.

X. *Workhouse Schools.*

1. Such Schools are received into connection, and grants of Books made thereto, on condition that they shall be subject to inspection by the Commissioners, or their officers, and that all the Rules of the Board applicable to Non-Vested Schools be faithfully observed.

2. The Commissioners award annual gratuities to a certain number of the Teachers of Workhouse Schools in each District, on the recommendation of the Inspector.

XI. *Schools attached to Prisons.*

Such Schools are received into connection, upon the same general principles as the Workhouse Schools, and grants of Books are made thereto. In special cases gratuities are awarded to the Teachers.

XII. *Evening Schools.*

The Commissioners grant aid toward the support of Evening Schools, where the wants of the locality render such institutions desirable. The aid is limited to salary and books.

PART III.

I. CONDITIONS UPON WHICH AID IS GRANTED TOWARD BUILDING SCHOOL-HOUSES; TOWARD PAYMENT OF TEACHERS' SALARIES.—CLASSIFICATION OF TEACHERS.—SCALE OF SALARIES TO TEACHERS, MONITORS, &c.—GENERAL REGULATIONS RESPECTING THE TRAINING OF TEACHERS, &c., &c.

1. The Commissioners of National Education grant aid under two general heads, viz. :—

First—Toward building School-houses, and providing suitable fittings and furniture. In such cases the Commissioners also grant aid toward the payment of Teachers, supply of Books, &c., as hereafter explained.

Secondly—Toward the support and maintenance of Schools established by local parties, without any assistance from the Commissioners toward the erection of the buildings, or providing furniture.

2. The Commissioners desire it to be distinctly understood that they reserve to themselves the right to withdraw any grant of salary or books, whenever they see fit.

II. *Building (Vested Schools.)*

1. Before any grant is made toward building a School-house, the Commissioners are to be satisfied that a necessity exists for such a School, that an eligible site has been procured, that a satisfactory lease of the site will be executed to the Commissioners in their corporate capacity; and that the applicant parties are prepared to raise, by local contribution, at least one-third of the whole sum which the Commissioners deem necessary for the erection of the house, providing furniture, &c.

2. If the proposed site be for a School in a rural District, and be within three statute miles of a School-house, toward the erection of which the Commissioners have contributed aid, no grant can be made.

3. Although the Commissioners do not absolutely refuse aid toward the erection of School-houses on ground connected with a place of worship, yet they much prefer having them erected on ground which is not so connected, where it can be obtained; they therefore require that, before church, chapel or meeting-house ground be selected as the site of a School-house, *strict* inquiry be made whether another convenient site can be obtained, and that the result shall be stated to them.

4. The School premises must be vested in the Commissioners, at a nominal rent, and for such term, under the circumstances, as they may deem necessary.

5. The Commissioners will keep in repair the School-house and furniture, where the premises are vested in them in their corporate capacity.

6. When the School premises have been vested in Trustees, for the purposes of National Education, it devolves on the Trustees to keep the house, furniture, &c., in repair.

7. When grants are voted toward the building, &c., of a School-house, the conveyance must be duly executed *before the works are commenced*.

8. No grant can be made until the District Inspector shall have reported upon all the circumstances of the case; until the Clerk of Works shall have reported on the eligibility of the proposed site; and the Law Adviser of the Board shall have given his opinion, from the information laid before him, that a satisfactory lease can be executed.

9. The Commissioners determine, from the information afforded them, what amount of School accommodation should be provided in the proposed building.

10. The Commissioners can not, in any case, pay more than two-thirds of the sum which they may deem necessary for the erection of the School-house, (including furniture, &c. ;) and they invariably require that the remaining one-third at least, shall be locally provided for.

11. The cost of the house, &c., is determined by the number of children which it is intended to accommodate.

12. The Commissioners furnish instructions as to the plan and specification, to which the parties receiving aid are bound strictly to adhere.

13. The Commissioners do not contribute to the ornamenting of School-houses, but merely to such expenditures as may be necessary for having the children accommodated in plain, substantial buildings. If buildings of another description be preferred, the whole of the extra expense must be provided by the applicants.

14. The Commissioners do not contribute toward the expense of erecting residences for the Teachers.

15. The whole of the works must be completed within twelve months from the date of the execution of the lease, (unless by special permission,) or the grants will be forfeited.

16. The Commissioners do not make advances or instalments of their grants.

17. The house, furniture, &c., must be completed, and the School ready for the reception of the scholars before the grant can be paid.

18. Previous to the payment of the grants, a certificate, according to a form furnished, must be forwarded to the Commissioners, stating that the School-house, furniture, &c., have been completed in a satisfactory and workmanlike manner, and built according to the dimensions and directions set forth in the plan and specification. This certificate to be signed by the Manager and by the Contractor. The work to be approved of by the Clerk of Works, or by any other person authorized by the Commissioners or the Government to examine it; and if a question arise as to the expenditure incurred, the accounts must be submitted to any audit which may be deemed necessary.

19. The Commissioners do not make grants to purchase School-houses, nor to purchase, alter, or furnish other houses, for the purpose of being converted into School-houses.

III. *Aids to Schools previously established.*

(Such Schools come under the class of "Non-Vested Schools." See PART I., Section 3, p. 23.)

1. The aid granted to Schools previously established is limited to salary and books.

2. The Commissioners do not contribute toward repairs, fittings, furniture ; or to the rent of the School-house.

3. Before aid can be granted, the Commissioners must be satisfied that the case is deserving of assistance ; that there is reason to expect that the School will be efficiently and permanently supported ; that some local provision will be made in aid of the Teacher's salary, in addition to the School fees ; that the School-house is in good repair, and provided with a sufficient quantity of suitable furniture ; that a competent Teacher has been appointed ; that the School is in operation ; and that there is an average daily attendance of, at least, thirty children.

4. The Commissioners reserve to themselves the right of making grants of " salary and books," in special cases, to Schools in which the average daily attendance of pupils is below thirty, upon the following condition :—

That so long as the average daily attendance continues under thirty, the salary awarded shall not exceed that of a Probationary Teacher ; but that whenever an average daily attendance of thirty pupils, for a period of three months, can be shown from the records of the School, the Teacher will then be paid the amount of salary to which he or she may be entitled, according to the scale of classification.

5. Before the Commissioners consider any application for aid, they require, from the Inspector of the District, a report upon all the circumstances of the case.

6. To entitle a School to a continuance of aid, the house and furniture must be kept in sufficient repair by means of local contributions ; the School conducted in all respects in a satisfactory manner, and in accordance with the regulations of the Commissioners ; and it must appear from the records of the School, that there is a sufficient average daily attendance of pupils.

7. In mixed Schools, *i. e.*, schools in which male and female children are taught in the same room, the Teacher may be either male or female, as the circumstances of the School may require ; but when a mixed School has been received into connection, by the Commissioners, under a male or a female Teacher, the Commissioners will not sanction the appointment of a Teacher of a different sex, unless previous application be made to them to sanction such change.

8. When a School has been taken into connection, as a School for males, or for females solely, the Commissioners will not sanction the change from a male to a female School, or *vice versa*, without their permission having been previously obtained.

IV. *Workhouse Schools and Schools attached to Prisons.* (See PART II., Sections 10 and 11.)

V. *Classification and Salaries of Teachers, Monitors, &c.*

1. All National Teachers are either "Classed Teachers" or "Probationers." The former are divided into three classes :—

The class in which each Teacher is ranked depends upon his or her qualifications, as determined after examination by the Professors, or by the Inspectors.

All Teachers, on first entering the service of the Board, or who have not been classed, are termed probationers.

There are, also, Assistant Teachers, Teachers of needlework, and paid Monitors.

2. The Commissioners have determined upon a course of study for each class, in which the Teachers are to be examined, as a test of their fitness for promotion.

3. Every National Teacher will be furnished, on application to the District Inspector, with a copy of the programme of the course of study above referred to, in which is stated the minimum of proficiency required for each class,

4. No Teacher will be admitted to examination with a view to promotion, on whose School a decidedly unfavorable report has been made by the District Inspector within the previous year.

5. Teachers will not be eligible for promotion, unless, in addition to satisfactory answering in the course prescribed for the class to which they aspire, it appears from the reports of the respective District Inspectors, that the Schools are properly organized and well conducted ; that adequate exertions have been made to

keep up a sufficient average attendance ; that the junior classes are carefully taught, and that a fair proportion of the pupils of the higher classes, besides being proficient in the ordinary branches of reading, spelling and writing, are possessed of a respectable amount of knowledge in, at least, grammar, geography, and arithmetic. In female Schools it will be further requisite that instruction in plain needlework, including sewing, knitting, and cutting out, be given to all girls capable of receiving it, and that they exhibit a due proficiency in this department.

6. It must also appear from the reports of the Inspectors, that the School accounts have been regularly and correctly kept ; that the School premises have been preserved with neatness and order, and that cleanliness in person and habits has been enforced on the children attending them.

7. The Head and District Inspectors are authorized to recommend that such Teachers be removed, fined or lowered in their classification, as may have conducted themselves improperly, or in whose Schools the attendance has considerably decreased, or who, from any other cause, may seem to these officers to merit such punishment.

8. All Teachers, who have not been classed, will be paid as probationers, until they be classed at the first general or special examination, to which they shall have been summoned. Those who then obtain classification, will be paid from the commencement of their service under the Board, according to the rate of salary attached to their class. This rule will not extend to any teachers who, when summoned, shall fail, from any cause whatever, to present themselves for examination.

9. All Teachers, not previously classed, who shall be summoned to a course of training, are to undergo a preliminary examination on their arrival in Dublin ; and if then classed, shall receive the benefits of *such classification*, from the date of appointment to the date of the termination of the course of training ; and they will receive the benefit of any promotion obtained at their second classification at the termination of the course, from the latter date.

10. All Teachers who have been unsuccessful at their first examination, and who may be retained on trial, will receive the salary of the class to which they may be promoted at any subsequent examination, from the commencement of the quarter in which their classification shall be determined.

11. Teachers who, after their first examination, have been retained on trial as probationers, if not recommended for promotion by the Head, or District Inspectors, at the next ensuing examination, or by the Professors, after training, can not be continued in the service of the Board ; but their salaries will be paid for one month subsequent to the date of dismissal.

12. All Teachers newly appointed to National Schools, who, after examination by the Inspectors, may be found wholly unqualified, must be removed from the School ; but salary will be paid, at the rate of a probationer, up to the date of the order for removal.

13. If a Teacher who has been dismissed from a National School for any cause, be appointed to another National School, the Commissioners reserve to themselves the right to determine whether the appointment can be sanctioned, or any salary paid to such a Teacher.

14. If a Teacher who has been a considerable period out of the service of the Board, shall again enter it, the Commissioners reserve to themselves the right to determine, in each case, whether such Teacher shall retain the class he was in, previous to quitting the service of the Board.

15. The Pupil Teachers of District Model Schools, on taking charge of National Schools, after the completion of their course of training, shall rank as third class Teachers, (provided they be deemed qualified for that class by the Head Inspector,) until they shall have been classed at the first general or special examination held after their appointment, in the district in which their Schools are situated, when they will be paid according to their classification, from the date of such examination.

16. All Teachers must remain at least one year in a lower division of any class, before they are eligible for promotion to a higher division ; and they must remain two years in the same class before they can be promoted to a higher class. These conditions, however, being fulfilled, Teachers of superior attainments may be

advanced from any division of one class to any division of another after their first classification, (except untrained Teachers who can not be placed in the first class,) without being required to pass through the intermediate divisions: such promotion to date from the 1st of April in the year in which the examinations are held.

17. This regulation does not apply to Teachers who may be promoted on the recommendation of the Professors at the termination of their course of training.

18. No Teachers can be raised to any division of the first class, unless they shall have been trained at the Normal School of the Commissioners, and recommended for promotion by the Professors.

19. Trained Teachers, except at their own request, and with the sanction of the District Inspector, will not be required to attend any examination that may be held during the three years subsequent to the date of their classification by the Professors at the expiration of the course of training.

20. National Teachers, forty-five years of age and upwards, who have served under the Board for a period of not less than fifteen years, or Teachers who have attained fifty years of age, and served not less than ten years, will not be required to attend any examination, provided they have been already examined and classed by the Professors, or by the Inspectors.

21. Teachers who may have absented themselves, without satisfactory reason assigned, from the examinations of previous years, will be liable to be dismissed should they not present themselves when again summoned.

22. All Teachers, also, who may be *specially* summoned, and who shall be absent without a sufficient reason, will be liable to be fined or depressed.

VI. Scale of Salaries to Teachers, Monitors, &c.

1. Ordinary National Schools.

1. The Commissioners grant salaries to Teachers of National Schools at the following rates, subject to the foregoing and annexed regulations:—

		Males	Females.
First Class Teachers,	{ 1st Division,	£46	£36
	{ 2d " "	38	30
	{ 3d " "	32	24
Second Class " "	{ 1st Division,	26	22
	{ 2d " "	24	20
Third Class " "	{ 1st Division,	20	17
	{ 2d " "	17	15
Probationary Teachers,		14	12
Assistant Teachers, if qualified as Probationers only,		14	12
Do. if qualified for any Division of a Class,		17	15
Mistresses to teach Needlework,			8

2. The Commissioners require that a further income be secured to the Teacher, either by local subscription or School-fees, to such amount in each case as they may direct; and the Commissioners also require that the payments made by the children shall not be diminished in consequence of any increase of salary which may be awarded to the Teacher.

2. Model Agricultural Schools under exclusive control of the Board.

Teachers of Model Agricultural Schools under the exclusive control of the Board, receive such amount of salary as the Commissioners deem sufficient, according to the circumstances of each case.

3. Model Agricultural Schools under Local Patrons.

Masters of Model Agricultural Schools under Local Patrons, who are competent to conduct both the Literary and Agricultural departments, receive £10 per annum, in addition to the salary of the class in which they may be placed; but if their income from the Board, with this addition, should fall short of £30 per annum, the difference will be granted to them, so that, in all cases, such Teachers shall have secured to them for their *combined* services a salary of £30 a year at least.

4. *Ordinary Agricultural Schools.*

Masters of Ordinary Agricultural Schools receive £5 per annum in addition to the salary of their class, provided they are competent to conduct both the Literary and Agricultural departments, and that the Commissioners shall have previously approved of Agriculture being taught in the School.

5. *Assistant Teachers.*

1. The Commissioners will not grant a salary to an Assistant Teacher in any School in which there is not an average daily attendance of at least seventy-five pupils for three months previous to the date of application; and in Schools whose average attendance does not rise considerably above this, and which are already provided with paid Monitors, Assistants can not be recognized by the Board.

2. Assistant Teachers will not be sanctioned whose qualifications are not at least equal to those required of probationers, or who are under eighteen years of age.

6. *Workmistresses.*

1. The Commissioners will not grant salary to workmistresses, unless there be a sufficient average daily attendance of pupils; and the Commissioners require that at least two hours each day be devoted to instruction in this branch.

2. If any workmistress whose appointment has been sanctioned by the Commissioners, be employed during the remainder of the ordinary school-hours in giving literary instruction to the junior classes, it is competent for the District Inspector, if he considers her qualified, to recommend that she be paid at the rate of salary awarded to "Probationers:" any increase of salary granted under this regulation is not to have a retrospective effect.

3. In Schools attended by female children only, under the care of a female Teacher, such Teacher, must be competent not only to conduct the Literary department, but also to give instruction in needlework: but if the average daily attendance of girls exceed fifty, for a period of three months, application may be made for a grant of salary to a workmistress to take charge of the Industrial department, which, however, must be superintended by the principal Teacher, who will be held responsible for its efficient management.

7. *Industrial Schools.*

In National Schools where embroidery and other advanced kinds of needlework are taught, the amount of salary granted for giving such instruction is regulated by the nature of the work, and the number of pupils engaged in it, subject to the conditions set forth in Part II., Sec. 8.

8. *Convent Schools.*

1. In Schools of this description, salary is paid according to a percentage on the average daily attendance:—

For 50 average daily attendance,	£10	
" 100	" 20	} Increase per cent. £20 per annum.
" 200	" 40	
" 300	" 60	
" 400	" 77	
" 500	" 94	
" 600	" 111	" £17 "
Above 600	" "	" £15

2. Where the average daily attendance amounts to thirty above the 100, salary for fifty will be allowed; and when it exceeds fifty and does not amount to seventy-five above the 100, salary for three-fourths of 100 will be allowed; and when it exceeds seventy-five, salary for 100 will be allowed.

3. In cases where the average attendance does *not* amount to 100, salary to be paid thus:—

For thirty children, and not exceeding fifty, £10 per annum.

When the attendance exceeds fifty and does not amount to seventy-five, £15 per annum will be paid.

When it exceeds seventy-five, to be paid at £20.

4. The Commissioners pay salary according to the average number of children in daily attendance at each Convent School, without reference to the number of rooms into which they may be distributed.

5. As the amount of salary will in all cases depend upon the average daily attendance of pupils, as shown by the quarterly returns, Managers are to be prepared for augmentation or diminution accordingly.

9. *Paid Monitors.*

SALARIES.

For the First Year, . . .	£4
For the Second Year, . . .	£5
For the Third Year, . . .	£7
For the Fourth Year, . . .	£8

1. The Paid Monitors are selected from among the best pupils in the National Schools of each district, and are appointed by the Commissioners upon the recommendation of the District Inspectors.

2. No Manager of a National School is obliged to employ the services of a Paid Monitor, unless he wishes to do so.

3. The appointment of a Paid Monitor can not be held for a longer period than FOUR YEARS, at the expiration of which the salary will be discontinued.

4. The salary may, however, be withdrawn at any time, should want of diligence, of efficiency, or of good conduct on the part of the Monitor, or should any other circumstance, render such a course desirable.

5. The Commissioners select the Schools (on the recommendation of the Inspectors,) in which the services of Paid Monitors may be employed.

6. When a vacancy occurs, whether before or after the expiration of four years, it does not necessarily follow that a successor shall be appointed in the same school.

7. The School for which a Paid Monitor is recommended by the Inspector, should exhibit a tolerable degree of efficiency, should have a sufficient average attendance to require a Paid Monitor, and the Teacher should be qualified to give instruction in a prescribed course.

8. The Programme of the course of study for Paid Monitors can be obtained on application to the District Inspector.

9. Paid Monitors who have completed the four years of their course in a satisfactory manner, are eligible, on examination by the Inspectors, as candidates for the situation of Assistant Teachers, or of Pupil-Teachers in District Model Schools.

10. *Scale of Gratuities to Literary Teachers of Workhouse Schools.*

1. The Commissioners of National Education, (with the concurrence of the Poor Law Commissioners,) award gratuities to a certain number, (forty males and forty females,) of the Teachers of the Workhouse Schools, in Connection with the National Board, who shall be recommended by the District Inspectors.

2. The gratuities are divided into two classes:—

For Male	{	First Class, . . .	Twenty at the rate of	£6 a year each
Teachers,		Second Class, . . .	Twenty	“ “ £4 “
For Female	{	First Class, . . .	Twenty	“ “ £5 “
Teachers,		Second Class, . . .	Twenty	“ “ £3 “

3. The payment will be made half yearly, with the usual issue of salary to Teachers of National Schools, after the 31st March, and 30th September in each year.

4. It is to be understood that such gratuities are given in *addition* to the salaries paid to the Teachers of Workhouse Schools, under the provisions of the Poor Law Act.

5. No Teacher is precluded from receiving the gratuity two or more years in succession, if recommended by the District Inspector as deserving of it; but a Teacher having received a gratuity for one half-year, is not thereby *entitled* to the payment of it for the succeeding half-year.

6. If the Local Guardians know any just cause for withholding the gratuity from the Teacher, they should return the receipt unsigned, and communicate to the Commissioners of National Education the grounds for so doing.

11. *Gratuities to Agricultural Teachers of Workhouse Schools.*

The Commissioners award annual gratuities to Agricultural Teachers of Work-

house Schools, not exceeding £15 to each, on conditions stated in Part II, Section 6.

12. *Scale of Premiums to Masters and Mistresses of National Schools, Vested and Non-Vested, who are most distinguished by the Order, Neatness, and Cleanliness observable in themselves, their pupils, and in the School-houses.*

1. The sum of £22 10s. will be allocated to each of the School Districts, and divided into Thirteen Premiums.

One of £4	. . . . .	£4
Two of £3	. . . . .	£6
Five of £1	10s.	£7 10s.
Five of £1	. . . . .	£5

2. These Premiums are awarded ANNUALLY on the recommendation of the District Inspector, at the expiration of the year.

3. No Teacher is eligible for this Premium for more than two years in succession.

4. These Premiums will be awarded without reference to the Class in which the Teachers may be placed; but none will be deemed eligible to receive such Premiums against whom there is any well-founded charge of neglect in the performance of their duties, of impropriety in their conduct, or whose Schools are not conducted in a satisfactory manner.

5. If the Patron or Manager of a National School knows any just cause for withholding the Premium from the Teacher, he should return the receipt unsigned, and state his reasons for so doing.

VII. *Training of Teachers.*

1. The Commissioners have provided a Normal Establishment in Dublin, for training Teachers, and educating persons who are intended to undertake the charge of Schools.

2. Teachers selected by the Commissioners for admission to the Normal Establishment, must produce a certificate of good character from an officiating clergyman of the communion to which they belong; also, a certificate from a member of the Medical Profession that they are in good health, and free from any cutaneous disease; and must pass through an examination in the books published by the Commissioners. They are boarded and lodged at the establishments provided by the Commissioners for the purpose. They receive religious instruction from their respective pastors, who attend at the Normal Establishment at convenient times appointed for the purpose. On Sundays they are required to attend their respective places of worship; and a vigilant superintendence is at all times exercised over their moral conduct. The Teachers undergo a final examination at the close of the course, and they then receive a certificate according to their deserts. The Teachers for a considerable time previous to their being summoned, are required to prepare themselves for the course.

3. During the absence of the recognized Teacher, a temporary Teacher must be provided to take charge of the School, who is to be paid a portion of the salary falling due to the recognized Teacher during his or her attendance at the Normal Establishment.

4. Should any Teachers present themselves in a delicate state of health, or affected with any cutaneous disease, they will be required to return home at their own expense. No Teacher can be admitted who has not had the Small Pock, or been vaccinated.

5. The Teachers trained in the Normal Institution are divided into three classes, namely:—

First—The General or Ordinary Class, composed of Teachers, (males or females,) of National Schools who have been recommended by the District or Head Inspectors as eligible candidates for training.

Second—The Special or Extra Training Class, composed chiefly of Teachers, (males or females,) who have been selected from the Ordinary or General Class, for additional training.

Third—The candidate or *Extern* Class is composed of a limited number of

respectable and well-informed young persons, who wish to qualify themselves to act as Teachers. The candidates admitted to this class are permitted to attend, without any charge, the Model Schools and the lectures of the Professors, and at the end of the course they are examined and classed as Teachers according to their merits and qualifications. Permission is also given to Teachers of Schools not connected with the Board to attend the Model Schools as *auditors* or *visitors*, for any period that may suit their own convenience.

VIII. Books.

1. The Commissioners furnish gratuitously to each School, a first stock of School-books, in proportion to the attendance of children, which is renewed at the end of every three years. These books are to be kept as a School stock, for which the master or mistress is held responsible, and they are on no account to be sold or taken out of the School. The Commissioners also supply books from time to time for the general use of the children, and also School requisites, such as paper, slates, quills, &c., at reduced rates.

2. The funds of the Commissioners do not enable them to give a free stock sufficiently large for the entire wants of the School. Any additional books and maps, stationery, slates, clocks, and other requisites, must be purchased at reduced rates.

3. The value of the grant of free stock is regulated by the average daily attendance of pupils as ascertained from the reports of the Inspectors. The Managers of Schools have the privilege of selecting their grants of free stock from the *whole* list of books supplied by the Commissioners, and are at liberty to choose such of them as they most approve of, and to omit any to which they object, except in the case of a *first free stock*, when the Commissioners require that a map of the world, and a set each of spelling and arithmetical tablets shall be procured.

4. When books, &c., purchased from the Commissioners at the reduced price, are sold to the children attending a National School, at is directed that in no case shall any advance be made on these prices; and the District Inspectors have instructions to inquire into and report upon any infraction of this rule.

5. Books published by the Commissioners of National Education:—

First Book of Lessons; Second Book of Lessons; Sequel to Second Book, No. 1; Sequel to the Second Book, No. 2; Third Book of Lessons; Fourth Book of Lessons; Supplement to the Fourth Book; Fifth Book, (Boys') Reading Book for Girls' School; Biographical Sketches of British Poets; Selections from the British Poets, Vol I; Selections from the British Poets, Vol. 2; Introduction to the Art of Reading; English Grammar; Key to English Grammar; First Book of Arithmetic; Key to First Book of Arithmetic; Arithmetic in Theory and Practice; (For Key to Arithmetic in Theory and Practice, see "Books Sanctioned;") Book-keeping; Key to Book-keeping; Epitome of Geographical Knowledge; Compendium of Geographical Knowledge; Elements of Geometry; Mensuration; Appendix to Mensuration; Scripture Lessons. (Old Test.,) No. 1; Scripture Lessons, (Old Test.,) No. 2; Scripture Lessons. (New Test.,) No. 1; Scripture Lessons. (New Test., No. 2; Sacred Poetry; Agricultural Class Book; Farm Account Book; Directions for Needlework; Directions for Needlework, with specimens.

6. Books not published, but sanctioned by the Commissioners of National Education:—

Prof. M'Gauley's Natural Philosophy; Prof. M'Gauley's Key to Arithmetic in Theory and Practice; Prof. Sullivan's English Dictionary; Prof. Sullivan's Spelling Book Superseded; Prof. Sullivan's English Grammar; Prof. Sullivan's Introduction to Geography and History; Prof. Sullivan's Geography Generalized; Prof. Sullivan's Literary Class Book; Fleming's Atlas of Outline Maps, colored; Dower's Atlas, 12 Maps, colored; Kirkwood's Atlas, 12 Maps, colored; Dawe's Hints on Secular Instruction; Dr. Hodges' Agricultural Chemistry; Easy Lessons on Reasoning; Easy Lessons on Money Matters; Young's Infant School Manual; Household Work for Female Servants; Patterson's First Steps to Zoölogy, Part I; Patterson's First Steps to Zoölogy, Part II; Patterson's Zoölogy for Schools, Part I; Patterson's Zoölogy for Schools, Part II; Dr. Thomson's Treatise on Arithmetic; Dr. Thomson's Key to Treatise on Arithmetic; Dr. Thomson's Elements of Euclid, Part I; Dr. Thomson's Elements of Euclid, Part II; Dr. Thomson's Introduction to Algebra; Arithmetical Table Book; Hullah's Manual.

7. THE COMMISSIONERS WILL NOT WITHDRAW, OR ESSENTIALLY ALTER ANY BOOK THAT HAS BEEN, OR SHALL BE HEREAFTER, UNANIMOUSLY PUBLISHED OR SANCTIONED BY THEM, WITHOUT A PREVIOUS COMMUNICATION WITH THE LORD LIEUTENANT.

8. All applications for books and requisites at reduced prices must be addressed

to the Secretaries, and be accompanied by a money order for the amount, in favor of Maurice Cross, or James Kelley, Esq., and payable in Dublin on demand.

9. Checks or money orders drawn on country Banks can not be received in payment for books.

10. When a Post office order or letter of credit is transmitted, and the amount is under ten shillings, the cost of the remittance must be paid by the person applying for the same; but if the sum exceeds ten shillings, the cost of the remittance will be allowed, and requisites given for the *full amount paid*.

11. The Patron or Manager should not sign any application for books and requisites without first ascertaining that they are actually wanted for the school, on behalf of which the application is made. The Inspectors are required to report to the Commissioners whenever it appears that an undue quantity of books or stationery has been ordered for a National School.

12. All applications for books and requisites, at reduced prices, are to be prepared by the Managers, or the amount of postage will be deducted from the grant.

13. When there are separate roll numbers for male and female National Schools, the application should state for which of them the books, &c., are required; and if for both, *two* forms should be used.

14. Parcels of books &c., when so desired, will be forwarded, carriage free, to the depot of the district in which the school for which the books are required, is situated, and the Inspectors will inform the Managers on what day they will be ready for delivery; or to the depot of any other district if more convenient; but in the latter case, the Inspector, not knowing the Managers of any schools out of his district, can not give notice.

15. Or the parcel will be forwarded to any place nearest to the Manager's residence to which there is a mode of conveyance. In this case the Manager must point out the precise mode of conveyance by which the parcel is to be transmitted, and he must also defray the cost of carriage.

16. When parcels are forwarded to the depot of a district, it is *not* the duty of the Inspector to transmit the parcel to the Manager's residence or to the school.

17. The Manager is required to send to the depot on the day appointed by the Inspector for delivery of parcels, a Messenger who must present the order on the Inspector, with which the Manager will be furnished; and which order the Inspectors are required to transmit to this office as a proof of the delivery of the parcels.

18. If a parcel is to be sent by a carrier, he must call at the office in Dublin, not sooner than two days after the Manager's directions shall have been received, and must produce the Manager's order to the storekeeper here, for its delivery, on the form supplied for the purpose.

19. The Commissioners do not supply books or requisites to the public, or to schools not connected with the Board of National Education.

IX. Miscellaneous.

1. Persons desirous of obtaining assistance from the Commissioners of National Education, under any of the foregoing heads, will, upon intimating to the Secretaries the nature of the aid required, be furnished with the forms upon which their application must be laid before the Commissioners.

2. Applicants for assistance are not to understand that the Commissioners are bound to grant the full amount of aid, as set forth in the foregoing regulations, in every case; nor can they grant any, unless they have sufficient funds for the purpose, which depends upon the amount placed at their disposal by Parliament.

3. The Commissioners desire it to be distinctly understood, that they do not hold themselves bound to grant aid, unless application shall have been made to them, in the first instance, on the proper form, and unless the application shall have been favorably and finally decided upon by the Board. Applicants, therefore, should not incur any expense toward the payment of which they expect the Commissioners to contribute, until the decision of the Board shall have been communicated to them.

4. All communications in reference to National Schools should be signed and made by the Patron or Manager. The Commissioners do not correspond with Teachers of National Schools.

5. No attention can be paid to "anonymous communications."

VI. LAURA BRIDGMAN.

BY S. G. HOWE, M. D.,

Director of the Perkins Institution for the Blind, Boston.

LAURA BRIDGMAN was born December 29, 1829, in the town of Hanover, New Hampshire.

Her parents were of the average height, and though slenderly built were of sound health and good habits. The fathers' temperament inclined to the nervous, but he had a small brain; while the mother had a very marked development of the nervous system, and an active brain, though not a large one.

They were persons of good moral character, and had received about as much culture as is common in the rural districts of New Hampshire.

The child inherited most of the physical peculiarities of the mother, with a dash of what, from want of a better name, is called the scrofulous temperament. This temperament makes one very liable to certain diseases, but it gives great delicacy of fibre, and consequent sensibility. Laura had a physical organization like that of a delicate plant; very liable to derangement, because very sensitive; also, very difficult as an organization to bring to maturity, but promising great capacity and beauty.

During infancy she was puny and *rickety*. She was subject to disturbances of the nervous system, the outward symptoms of which some persons call 'fits,' and think they explain the whole matter by that name. These disturbances, or fits, usually cause permanent injury to the brain, which shows itself in feebleness of certain mental faculties, in imbecility, or total idiocy. They should always be regarded and treated as symptoms of grave character, and liable to affect the whole future bodily and mental character, even when the apparent proximate cause is "teething," or a derangement of the digestive organs.

In Laura's case these fits recurred, at various intervals, until she was about a year and a half old. During that period, therefore, she lost the healthy growth and development which should have been going on. Such loss is probably always irreparable. For each period, for each moment even, from the first quickening to full maturity of the general organism, there is a peculiar phase of development in each organ, necessary to its final perfection, and which can not go on

equally well at any other period, whether earlier or later. But, besides this negative loss, there must probably always be absolute and permanent mischief, from such long continued morbid action, in an organ so delicate as the brain.

At about twenty months old, she became apparently well, and continued so for four months. During this period all her senses seemed to be in a normal condition; and she showed more intelligence than one would expect, in view of her previous condition.

She sickened again at two years old. The scarlet fever ravaged her system with great fury, destroying utterly the organs of sight and hearing,* blunting the sense of smell, and prostrating her whole system so completely that recovery seemed impossible. She was kept in bed, in a darkened room, for about five months, and was ill and feeble for two years.

The storm of disease gradually abated, however, and the wreck at last floated peacefully upon the stream of life. But, what a wreck! Blind, deaf, dumb, and, moreover, without that distinct consciousness of individual existence which is developed by the exercise of the senses. I say "distinct consciousness," in comparison with that of ordinary persons; for, of course, the general sense of touch, the capacity of muscular contraction, the feelings of hunger, thirst and the like, are parts of the consciousness of existence.

A most interesting psychological question is, how much exercise did she have of the senses of sight and hearing, during the period in which the organs of those faculties remained intact; and how far did such exercise facilitate her subsequent mental development.

We should consider that during most of her early infancy the system was frequently disturbed by disease; that there were only a few months during which the senses could have been in healthy action; and that this period was followed by painful and severe disorders during two years. These disorders must have convulsed the system, and perhaps weakened if not effaced the impressions received through the senses, so that probably very little if any permanent impression was made; and when the child finally was restored to health of body, she was as one born deaf, blind, and without smell. She certainly was in this condition for all practical educational purposes. This conclusion is confirmed by the fact that after she acquired a knowledge of arbitrary language, and was able to take such cognizance of her own mental condition, as to be able to converse freely about it, she said she had no recollections of sight or sound. She is probably right about this. No

* This was literally the case. The eye-balls and contents of the ears were discharged by suppuration.

examination has yet shown that the impressions made upon her organs of sight and hearing, awakened in her mind perceptions that were persistent enough to modify permanently her conscious existence.

Such examination, if skillfully made, and aided by her desire to ascertain the truth, would be more satisfactory than might at first appear. Its value as a test will be seen, if we consider how important a part in the development of the human mind is played by language, and particularly by speech.

Language, whether in the earlier form of visible signs, or the later one of audible sounds, or speech, is the natural result of man's perceptions and sensations. He creates it in order to manifest outwardly what he feels and thinks; and the point is this,—that his language may express less, but can not express more than he has felt or thought. All languages indeed are imperfect; and, even if they were to be so far perfected to-day as to express all the fine modifications of thought and feeling of which man is now capable, they would be imperfect when his mental and moral capacities become more fully developed. The English language is not the most subtle ever invented, yet, having been built up gradually by beings with five senses, it contains a multitude of expressions which are just as incomprehensible to beings with only four senses, as a multitude of expressions in a language built up by persons with six senses would be to us who have only five.

If a man, blind from birth, should pretend that he had possessed sight during his early years, he might be detected by skillful examination of his use of language. He might have learned as many tongues and dialects as a Burritt or a Mezzofanti, and might know them better than those polyglots, and yet be utterly unable to comprehend the meaning and force of many forms of expression in his mother tongue, which are familiar as household words, and as easily comprehended by all who possess the sense which he lacks. What to him can be the word-names of the concrete phenomena of colors, to say nothing of their countless modifications, as in the autumn foliage, or the borealis, where they appear and vanish as quickly as the emotions they excite in us? How much less could he understand that large class of expressions, partly metaphorical, founded upon visible appearances; for instance, "the blushing morn." Should he seek the meaning in his own emotions, he would be wider of the mark than he might be by a random guess; for all he knows of the physical phenomena of a blush is the tingling glow of blood in the cheeks, and "bloody morn" would be quite as appropriate to him as "blushing morn."

These considerations will show that there are means of obtaining evidence, at least of a negative kind, upon the question how far the

exercise of the organs of sight and hearing, during a few months of infancy, modified the psychological phenomena afterward exhibited in Laura Bridgman's case. A metaphysical hair-splitter may say that, because she once saw and heard, she is useless as an instance of what would be the mental and moral condition of a person who had never done so; and he would so object, if she had used these senses only a few moments, instead of a few months. But most people will probably think that for all practical purposes the exercise which she had in the use of these senses was too small to have any practical and permanent effect upon her. All will admit, I think, that it must have been so with regard to what is most important, to wit, the effect of sensation upon the development of her moral nature.

Such considerations show, moreover, that the lack of one sense, as of sight, makes it utterly impossible for a person to attain complete knowledge of an extensive and subtle language like the English; that lack of hearing is a still greater obstacle, removing the sufferer still further from human society; and that the lack of both constitutes a gulf so wide that, unless bridged over, he must be an idiot at least, in the sense which the old Greeks attached to the word, *ιδιωτης*,—an utterly isolated being. It was then not without reason that Blackstone laid it down as a rule, that "a man is not an idiot if he have any glimmering of reason, so that he can tell his parents, his age, or the like matters. But, a man who is born deaf, dumb and blind, is looked upon by the law as in the same state with an idiot; he being supposed incapable of any understanding, as wanting all those senses which furnish the human mind with ideas."

It was not until she was full four years old that her health was so far established that the physician could be dismissed. But the nurse, could she ever be dismissed? Could a child totally blind, utterly deaf, completely dumb, and without any faculty of smell,—could such a child, with only the general sense of feeling, be left alone a moment? And how could she set about that apprenticeship which all must serve before they become masters of their own limbs? These questions she soon solved by learning the geography of her chamber, then feeling her way about the house, and exploring all the recesses thereof.

Near by, there lived an odd, unyoked mortal, the "old bachelor;" a genuine type of a class, one of which is to be found in almost every neighborhood. He lived by himself, but occasionally went round doing odd jobs for the farmers, partly to help them, partly to turn an honest penny for himself. He was a rude, unlettered man; but his lonely self-reliance, and his entire independence of thought

and action, made him to be regarded as a sort of philosopher, with a crack in his skull. He was rough in look, and rude in manner; but, little Laura found under the coarse bark a kind and warm heart, which she contrived to touch, and from which there flowed toward her, as long as it beat, a stream of love and kindness.

He became interested in the little deaf, dumb and blind child; and, as soon as she could walk out, he used to lead her off into the fields and woods. They rambled about, hand in hand, and he contrived to interest and amuse her for hours together, without wearying her. The bare presence of one whose love she could feel by his gentle attentions, would have been enough to make the child happy; but, beside this, the simple man contrived to teach her much in various ways. She tells now, how he taught her the difference between land and water, by leading her to the brook-side, and making her put her hand in the running stream. She loved also to pick up stones, and throw them in, amazed and pleased by feeling the returning splash of water. The good man did not see how soon she would exhaust his resources. He had not the slightest idea of the importance of having some regular system of signs, by which communication could be established with her mind, and her growing thirst for knowledge supplied; and he scouted the notion of any body's being able to teach her more than he could. She knew him from any body else; and she knew a cat from a dog, an apple from a stone, and he could teach her any thing in the same way by which she had learned these things. He looked with great disfavor, therefore, upon the project of her going to school; and after she went he long mourned her loss. When, at last, she knew how to converse in English, and to write, he tried to be again useful to her, and to guide her mind. He began a correspondence, and sent her endless epistles, written in defiance of every rule and precedent in orthography, etymology and syntax; and containing the most extraordinary rigmarole about all manner of things, but especially about the vanity of book-learning. He was forced to grant, grumblingly, that something had been done for her in the way of instruction, but still he thought it a pity that she had been taken from him, who could have done so much more. His love for her, however, lasted to the end; and the child proved a blessing to the old man; and not one of his little early kindnesses was lost. May the grass grow green, and the birds sing blithely over thy grave, good Tenny, Laura's first and most loving teacher.

The first knowledge I had of Laura's existence was from reading an account of her case written by Dr. Mussey, then resident at Hanover. It struck me at once that here was an opportunity of assisting

an unfortunate child, and, moreover, of deciding the question so often asked, whether a blind-mute could be taught to use an arbitrary language. I had concluded, after closely watching Julia Brace, the well-known blind-mute in the American Asylum, at Hartford, that the trial should not be abandoned, though it had failed in her case, as well as in all that had been recorded before. Julia had the advantage of a fine organization, and had brought her senses of touch and smell to a marvellous keenness. It was doubtful which of them served her most. If the gloves of half a dozen persons were thrown into a hat, she could select out and give to each his own, by smelling the hand, and then smelling the gloves, until she perceived which one had the same smell. This is a lower degree of power, indeed, than that possessed by some animals, but it is easy to understand how much the exercise of this sense had helped, in countless ways to put her in relation with the external world.

It was rather a discouragement, therefore, to find that Laura had no sense of smell; or, to be more precise, only the latent capacity for using it; the organ of that sense not having been destroyed by the disease, as had those of sight and hearing. Julia Brace, like other blind-mutes, made constant use of this sense, scenting every new thing, just as some animals do, while Laura did not use it at all. I determined, however, to make an attempt to reach her mind through the one remaining sense, especially as there was something about her which seemed to give promise of her aiding the attempt as much as she could.

The loss of the eye-balls of course occasioned some deformity, but otherwise she was a comely child. She had a good form and regular features; but, what was of vastly more importance, there were marks of fineness in her organization; and the nervous temperament predominated. This gave sensibility, activity, and, of course, capacity.

I found that she had become familiar with much in the world about her. She knew the form, weight, density and temperature of things in the house. She used to follow her mother about, clinging to her dress, and feeling her arms and hands when she was doing any work. The faculty of imitation of course led her to strive to do whatever she perceived others doing, whether she could understand it or not.

She knew every one of the household, and seemed to be fond of them. She loved to be noticed and caressed; but, as she grew up out of infancy into childhood, the necessity of greater means of mental intercourse with others began to be painfully apparent. Endearments and caresses suffice only for infants. As the brain and other parts of the

nervous system were developed, there arose a necessity for the development of the mental and moral capacities, of which the former are the immediate organs. Her mind and spirit were as cruelly cramped by her isolation as the foot of a Chinese girl is cramped by an iron shoe. Growth would go on; and without room to grow naturally, deformity must follow. The child began to have a will of her own. The means of communicating with her were so limited, that she could only understand the pleasure and displeasure of others. Patting her head signified approval, rubbing her hand disapproval; pushing her one way meant to go, and drawing her another to come. There was nothing to reach the moral sense. The earliest exercise of this must be to reverence something; and all that Laura could revere was strength. Then, when thwarted, she began to disregard the will of her mother, and only yielded to the sign made by the heavier hand of her father. This was not laid upon her in anger, but its weight was not lightened, as was that of the mother by woman's timidity. It said plainly, "I am mightier than thou," and she yielded. This however could not have continued long without deplorable results. Laura's mother was discreet and kind, but so occupied by household cares as to be unable to study her case, or give her special attention.

It is often one of the parent's hardest lessons, to learn to yield up timely and gracefully the authority which was once necessarily despotic, but which should soon become responsible, and soon afterward be abdicated altogether. The inner man will not go long on all fours, any more than will the outer man. It will get up, and insist upon walking about. If it can not go openly and boldly, it will go slyly, and this of course makes it cowardly. You may as well refuse to let out the growing boy's trowsers, as refuse larger and larger liberty to his growing individuality. This however is too often done. Irreverence may, perhaps, be too characteristic of the youth of our country; but the cause of it is not always early rational liberty. On the contrary, there are many cases where that resistance to tyranny which is obedience to God, might have saved children who were lost by resorting to hypocrisy and cunning, rather than utterly yield what their instincts told them it was wrong to yield, though dignified by the name of filial duty.

To honor father and mother is a beautiful command; but it may sometimes be best kept by respectful determination to enjoy more and more of that freedom of thought and action, which is as essential to the healthy development of manly character as air and space are to the healthy growth of muscle and limb. It is often difficult for the

parent to hit the right mean, and to give up authority just as fast as the child can wield it, but no faster; for there should not be any interregnum.

It is easy to see that in the case of Laura, all these difficulties were greatly increased; and indeed, that they never would have been overcome while she was limited in her communication with others to the narrow sign language of the sense of touch. There could be little appeal to her intellect, none to her moral sense. She had begun to manifest a reluctance at yielding up her will to the will of others, that would in all probability have grown with her growth and strengthened with her strength. There was danger of the necessity of a final resort to the *ultima ratio* of force, and this is usually demoralizing to both parties.

It is true, hers was a woman's gentler nature; but, to offset this, it must be borne in mind, that nothing can compensate for want of development of moral sense. That alone can properly regulate the development of the animal nature. Laura had the capacity, it is true, for becoming a gentle, docile woman; but she had the liability, also, of becoming a ferocious and unmanageable one.

Her parents, who were intelligent and most worthy persons, yielded to my earnest solicitations, and Laura was brought to the Institution for the Blind, in October, 1837, being then seven years old.

She seemed quite bewildered at first, but soon grew contented, and began to explore her new dwelling. Her little hands were continually stretched out, and her tiny fingers in constant motion, like the feelers of an insect.

She was left for several days to form acquaintance with the little blind girls, and to become familiar with her new home. Then the attempt was made, systematically, to give her a knowledge of language, by which, and by which only, she could ever attain to any considerable development of intellect, or of affections.

One of two ways was to be adopted. The first and easiest was to go on and build up a system of signs upon the basis of the natural language which she had already begun to construct for herself. Every deaf-mute does this. He makes signs for the things which he sees, and he addresses these signs to the sense which he has in common with you, that is, to your sight. He lifts his fingers to his mouth, and makes the motion of putting something into it, to show you that he is hungry or thirsty; or, he holds up one, two or five fingers, when he wants to express his motion of number. Hence, in old English, "to five," was to count; because, among unlettered people, counting was done by five fingers. You see children using their fingers to aid

them in counting; and many grown people have to use audible sounds, or to *count out loud*, in order to aid the mental process which can not go on without a sign.

Laura could not address any sign to the sight, because she had no idea of visual appearances of things. She could, however, make a sign for being hungry, another for being thirsty. She had several signs of her own for several persons and things. It would have been easy to go on and enlarge this list, and make it include all tangible objects. But, of course, this plan would, have required a sign for every object; one for a pin, another for a needle, another for an apple, and so on. She would, in this way, need as many hundreds or thousands of signs as she had objects or thoughts to express by them. Such a language could be taught easily, because she had acquired its rudiments; but it would have been very rude and imperfect. It could hardly go beyond material existencies and tangible qualities. When it came to be applied to abstract matters and moral qualities, it would have been utterly at fault. The other plan was to teach her a system of purely arbitrary signs, by combination of which she could give names to any thing and every thing; that is, the letters of the alphabet. For this she would only have to learn twenty-six signs; but, having learned them, she could express countless modifications of thought by combining them in countless ways.

The obvious difficulty in the way of this plan was to take the first step. There was no such difficulty in the plan of a natural language, for in this the first step was already taken. For instance, her father's whiskers made his face different from her mother's; the sign therefore of drawing her hand down each of her cheeks would express that she was thinking of her father; and, by a natural mental process, it would be made to signify men in general, as distinguished from women. So a motion of her fingers like scratching with claws, would signify a cat; a motion of her two first fingers like cutting with scissors, would signify her thought of that instrument, and the like; because there was, so to speak, in all these a *tangible* likeness. There was some analogy between the thing and its sign; hence such signs were the rudiments of a natural language.

Words, however, though many of them may have originated in a supposed resemblance between the thing and its name, as clang, bang, and the like, have no such analogy. They are purely arbitrary. But Laura could not hear the spoken word, or name of a thing, and she could not see the visible sign of it, or the written word, and learn as deaf-mutes learn; consequently the only way was to make the word *sign*

tangible. But here the main difficulty met us; and it was how to make her understand the arbitrary analogy which we would establish between three, or four, or more letters, and the thing of which it is the name.

That it was possible to do this, however, will be seen, when we consider that however shorn of external organs of sense, the child was not idiotic. She possessed therefore all the ordinary dispositions and capacities innate in man. Among these is the disposition to attach signs to thoughts, so as to manifest them outwardly; that is, to use language. The natural form of this manifestation is that of audible signs, or spoken words; speech not being an elected mode, but the natural one. Where hearing is cut off, the child resorts to visible language, or talks by signs; if sight too is cut off, still the disposition remains, and upon the faith of its being active in Laura, our hope of teaching her to use language was founded.

I had to trust, however, to some chance effort of mine, causing her to perceive the analogy between the signs which I gave her, and the things for which they stood. The hope of success would have been assurance, if I had had the benefit which the experiment with her gave, or which better knowledge of the philosophy of the mind now gives.

It is just as much the natural tendency and disposition of man to go on and build up a complex language of arbitrary signs, such as we now use, as it is to take the first steps by making the natural signs used by the lowest savage, or by the uninstructed deaf-mute. That is, the later and higher stages of man's development are just as natural as the early and low ones are.

However, it is better to leave these crude speculations, and to relate the facts. The first experiments were made by pasting upon several common articles, such as keys, spoons, knives, and the like, little paper labels, on which the name of the article had been printed in raised letters. The child sat down with her teachers, and was easily led to feel these labels, and examine them curiously. So keen was the sense of touch in her tiny fingers, that she immediately perceived that the crooked lines in the word *key*, differed as much in form from the crooked lines in the word *spoon*, as one article differed from the other.

Next, similar labels, on detached pieces of paper, were put into her hands, and she now observed that the raised lines on these labels resembled those pasted upon the articles. She showed her perception of this resemblance by placing the label with the word *key* upon the key, and the label *spoon* upon the spoon. A gentle pat of approval upon her head was reward enough; and she showed a

strong desire to continue the exercise, though utterly unconscious of its purpose.

The same process was then repeated with a variety of articles in common use, and she learned to match the label attached to each one by a similar label selected from several on the table.

After continuing this exercise several days, with care not to weary her, a new step was taken. Articles were placed upon the table without having a label upon them, as a book, a knife, &c. The loose printed labels, *book*, *knife*, &c., were placed upon the articles until she had felt them sufficiently, when they were taken off, and mingled in a heap. She narrowly watched the process by feeling her teacher's hands, and soon learned to imitate it by finding out the label for *book*, and placing it upon the volume; the same with the knife, &c.

This apparently was all done by mere memory and imitation, but probably the natural tendency of the mind to associate things that are proximate in space and time, was leading her to think of the label *book* as a sign for the volume. Let it be borne in mind, that the four letters were to her, not as four separate signs, but the whole was as one complex sign, made up of crooked lines.

The next step was to give a knowledge of the component parts of the complex sign, *book*, for instance. This was done by cutting up the label into four parts, each part having one letter upon it. These were first arranged in order, b-o-o-k, until she had learned it well, then mingled up together, then re-arranged, she feeling her teacher's hand all the time, and eager to begin and try to solve a new step in this strange puzzle.

Slowly and patiently, day after day, and week after week, exercises like these went on; as much time being spent at them as the child could give without fatigue. Hitherto, there had been nothing very encouraging; not much more success than in teaching a very intelligent dog a variety of tricks. But we were approaching the moment when the thought would flash upon her that all these were efforts to establish a means of communication between her thoughts and ours.

It was as though she were under water, and we on the surface over her, unable to see her, but dropping a line, and moving it about here and there, hoping it might touch her hand, so that she would grasp it instinctively. At last it did touch her hand, and she did grasp it; and we pulled her up to the light; or rather, she pulled herself up.

This exercise with the separate letters could not go on long, without her perceiving that it presented a way by which she could make a sign of what was in her own mind, and show it to another mind. At last she did perceive it, and she grasped the end of the cord that

was thrown to her, and was drawn by it up and into human association.

From this moment the way was plain and easy, and the success certain; for Laura perceived what was wanted, and worked most eagerly and untiringly to aid us. The new exercise became delightful, because more intelligible. She was even eager to arrange the letters so as to express the names of whatever things she would lay her hands upon.

In order to facilitate her progress, a set of types was procured, with the letters in high relief upon their ends. Then a metal frame was cast, and the surface perforated with square holes, into which the types could be set, in such a way as to be in rows, and to have only the letters upon their end felt above the surface. With this machine she could arrange the letters which "spelt out" the name of any article; she could have many rows of those names; she could correct any mistake in the spelling; and could pursue her exercise until she wished to take out the types and put in new ones.

Many weeks were passed in this exercise, when the attempt was made to substitute her own fingers and hand for the cumbrous apparatus of the types and metal board. The attempt was successful, and the success was easily gained, because her mind had become very active, and she made constant efforts to aid her teacher.

Acting still upon her disposition to associate things that were placed in apposition, the teacher took a type which she had learned to use, and of which she knew the form, though she could not know that it was called *a*, and, holding it in one hand, made with the fingers of the other hand the sign used in the deaf-mute language to express the letter *A*. This was repeated over and over so often that the child associated the sign upon the fingers with the sign upon the end of the type; and the one became a sign or name for the other.

Next, another letter was taken, say *B*, and the same process gone over and over. Soon the child caught the idea that there were new signs for things. When she had learned those on four types, these were put together, and she was taught that four different positions of the fingers, standing for four signs on the ends of the types, would express *a p p l e*, in the same way she had been doing it by the types.

The process was continued until she had learned all the letters of the alphabet, and then of course she had the key to our language, and every language whose written signs are Roman letters.

It will help the reader, in understanding this rather obscure description of a novel process, if he will bear in mind that it is not by

any means an essential way, perhaps not even the best way to teach common children their letters in alphabetical order,—a, b, c, d, and so on.

Thus far she had been learning only the names of things in common use. The noun was her only part of speech. The process of teaching the other parts of speech,—the adjective, the verb, and the like, were tedious, and the description would be more so, I fear.

A more difficult step was to teach the manner of using words expressive of *qualities*. I began with words expressive of certain concrete qualities, such as hard, heavy, smooth, rough, sweet, sour, (for her sense of taste, though blunted, still distinguished sapid qualities,) and taught her to apply them to objects, as smooth stone, rough stone, sweet apple, sour apple, and the like. Now the transition from concrete qualities to abstract ones is very natural and easy, not only in the first steps, as from sweet apple—sour apple, to sweet temper—sour temper, and the like, but also to terms of purer abstraction.

It would make this article a very long one to explain in detail all the steps in the process of imparting to Laura a knowledge of language, which was to be her instrument for breaking down the obstacles in the way of her intellectual and moral development. It would swell the article to a volume, if I should comment upon these developments as they were successively made. I trust that what I have written will explain the first steps in the process; and they may interest those engaged in instruction, not because they display any ingenuity, but because they were simple, and, above all, successful.

I shall close by some extracts from a report of her case, written about the end of the first year of her course of instruction, and others of a later period.

“During the year, she has attained great dexterity in the use of the manual alphabet of the deaf-mutes; and she spells out the words and sentences which she knows so fast and so deftly that only those accustomed to this language can follow with the eye the rapid motions of her fingers.

But, wonderful as is the rapidity with which she writes her thoughts upon the air, still more so is the ease and accuracy with which she reads the words thus written out by others, grasping their hands in hers, and following every movement of their fingers, as letter after letter conveys their meaning to her mind. It is in this way that she converses with her blind playmates; and nothing can more forcibly show the power of mind in forcing matter to its purpose, than a meeting between them; for, if great talent and skill are necessary for two actors to paint their thoughts and feelings by the movements

of the body and the expression of the countenance as in pantomime, how much greater must be the difficulty when darkness shrouds them both, and the one can hear no sound!

When Laura is walking through a passage-way, with her hands spread before her, she knows instantly those whom she meets, and passes them with a sign of recognition; but, if it be a girl of her own age, and especially if one of her favorites, there is instantly a bright smile of recognition,—a twining of arms,—a grasping of hands, and a swift telegraphing upon the tiny fingers, whose rapid evolutions convey the thoughts and feelings from the outposts of one mind to those of the other. There are questions and answers,—exchanges of joy or sorrow; there are kisses and caresses,—just as between little children with all their senses.”

During this year, and six months after she had left home, her mother came to visit her; and the scene of their meeting was an interesting one.

The mother stood some time, gazing with overflowing eyes upon her unfortunate child, who, all unconscious of her presence, was playing about the room. Presently Laura ran against her, and at once began feeling her hands, examining her dress, and trying to find out if she knew her; but, not succeeding in this, she turned away as from a stranger, and the poor woman could not conceal the pang she felt at finding that her beloved child did not know her.

She then gave Laura a string of beads which she used to wear at home, and which were recognized by the child at once, who, with much joy, put them around her neck, and sought me eagerly, to say she understood the string was from her home.

The mother now tried to caress her child, but poor Laura repelled her, preferring to be with her acquaintances.

Another article from home was now given her, and she began to look much interested; she examined the stranger more closely, and gave me to understand that she knew she came from Hanover; she even endured her caresses, but would leave her with indifference at the slightest signal. The distress of the mother was now painful to behold; for, although she had feared that she should not be recognized, the painful reality of being treated as a stranger by a darling child was too much for woman's nature to bear.

After a while, on the mother taking hold of her again, a vague idea seemed to flit across Laura's mind that this could not be a stranger; she therefore very eagerly felt her hands, while her countenance assumed an expression of intense interest. She became very pale, and then suddenly red. Hope seemed struggling with doubt

and anxiety, and never were contending emotions more strongly depicted upon the human face. At this moment of painful uncertainty, the mother drew her close to her side, and kissed her fondly, when at once the truth flashed upon the child, and all mistrust and anxiety disappeared from her face as, with an expression of exceeding joy, she eagerly nestled to the bosom of her parent, and yielded herself to her fond embraces.

After this, the beads were all unheeded; the playthings which were offered to her were utterly disregarded; her playmates, for whom but a moment before she gladly left the stranger, now vainly strove to pull her from her mother; and though she yielded her usual instantaneous obedience to my signal to follow me, it was evidently with painful reluctance. She clung close to me, as if bewildered and fearful; and when, after a moment, I took her to her mother, she sprang to her arms, and clung to her with eager joy.

I had watched the whole scene with intense interest, being desirous of learning from it all I could of the workings of her mind; but I now left them to indulge, unobserved, those delicious feelings which those who have known a mother's love may conceive, but which can not be expressed.

The subsequent parting between Laura and her mother, showed alike the affection, the intelligence and the resolution of the child; and was thus noticed at the time:

“Laura accompanied her mother to the door, clinging close to her all the way, until they arrived at the threshold, where she paused and felt around, to ascertain who was near her. Perceiving the matron, of whom she is very fond, she grasped her with one hand, holding on convulsively to her mother with the other, and thus she stood for a moment; then she dropped her mother's hand,—put her handkerchief to her eyes, and turning round, clung sobbing to the matron, while her mother departed, with emotions as deep as those of her child.”

At the end of the year 1839, after she had been twenty-eight months under instruction, the following report was made of her case:

“The intellectual improvement of this interesting being, and the progress she has made in expressing her ideas, are truly gratifying.

Having mastered the manual alphabet of the deaf-mutes, and learned to spell readily the names of every thing within her reach, she was then taught words expressive of positive qualities, as hardness, softness; and she readily learned to express the quality, by connecting the adjectives *hard* or *soft* with the substantive; though she generally followed what one would suppose to be the natural order in the succession of ideas, by placing the substantive first.

It was found too difficult, however, then to make her understand any general expression of quality, as hardness, softness, in the abstract. Indeed, this is a process of mind most difficult for any children, especially for deaf-mutes.

Next she was taught those expressions of relation to place which she could understand. For instance, a ring was taken and placed *on* a box, then the words were spelt to her, and she repeated them from imitation. Then the ring was placed *on* a hat, and a sign given her to spell; she spelt, *ring on box*; but, being checked, and the right words given, she immediately began to exercise her judgment, and, as usual, seemed intently thinking. Then the same was repeated with a bag, a desk, and a great many other things, until at last she learned that she must name the thing *on* which the article was resting.

Then the same article was put *into* the box, and the words *ring in box* given to her. This puzzled her for many minutes, and she made many mistakes: for instance, after she had learned to say correctly whether the ring was *on* or *in* a box, a drawer, a hat, a bucket, &c., if she were asked, where is house, or inatron, she would say, *in box*. Cross-questioning, however, is seldom necessary to ascertain whether she really understands the force of the words she is learning; for, when the true meaning dawns upon her mind, the light spreads over her countenance.

In this case, the perception seemed instantaneous, and the natural sign by which she expressed it was peculiar and striking: she spelt *o n*, then laid one hand on the other; then she spelt *i n t o*, and inclosed one hand *within* the other.

She easily acquired a knowledge and use of active verbs, especially those expressive of *tangible action*; as, to *walk*, to *run*, to *sew*, to *shake*.

At first, of course, no distinction could be made of mood and tense; she used the words in a general sense, and according to the order of natural ideas. Thus, in asking some one to give her bread, she would first use the word expressive of the leading idea, and say, *Bread, give, Laura*. If she wanted water, she would say, *Water, drink, Laura*.

Soon, however, she learned the use of the auxiliary verbs; and the difference between past, present and future tense. For instance, here is an early sentence: *Keller is sick; when will Keller well*. The use of *be* she had not acquired.

Having acquired the use of substantives, adjectives, verbs, prepositions and conjunctions, it was thought time to make the experiment of trying to teach her to *write*, and to show her that she might communicate her ideas to persons present.

It was amusing to witness the mute amazement with which she submitted to the process, the docility with which she imitated every motion, and the perseverance with which she moved her pencil over and over again in the same track, until she could form the letter. But, when, at last, the idea dawned upon her that by this mysterious process, she could make other people understand what she thought, her joy was boundless.

Never did a child apply more eagerly and joyfully to any task than she did to this; and in a few months she could make every letter distinctly, and separate words from each other; and she actually wrote, unaided, a legible letter to her mother, in which she expressed the idea of her being well, and of her expectation of going home in a few weeks. It was indeed a very rude and imperfect letter, couched in the language which a prattling infant would use; but still, it shadowed forth, and expressed to her mother, the ideas that were passing in her own mind.

"She is familiar with the processes of addition and subtraction, in small numbers. Subtraction of one number from another perplexed her for a time; but, by help of objects, she accomplished it. She can count, and conceive objects, with probably just notions, to nearly one hundred in number. To express an indefinitely great number, or more than she can count, she says, *hundred*. If she thought a friend was to be absent many years, she would say,—*will come hundred Sundays*; meaning weeks. She is pretty accurate in measuring time, and seems to have an intuitive tendency to do it. Unaided by the changes of night and day, by the light, or the sound of any time-piece, she, nevertheless, divides time pretty accurately."

With the days of the week, and the week itself, as a whole, she is perfectly familiar. For instance, if asked what day will it be in fifteen days more, she readily names the day of the week. She divides the day by the commencement and end of school, by the recesses, and by the arrival of meal-times.

Those persons who hold that the capacity of perceiving and measuring the lapse of time is an innate and distinct faculty of the mind, may deem it an important fact that Laura evidently can measure time so accurately as to distinguish between a half and whole note of music.

Seated at the pianoforte, she will strike the notes, in a measure like the following, quite correctly.



Now, it will be perceived that she must have clear perception of

lapse of time, in order to strike the two-eighths at the right instant; for, in the first measure, they occur at the second beat; in the second measure, at the third beat.

Her judgment of distances, and of relations of place, is very accurate. She will rise from her seat, go straight toward a door, put out her hand just at the right time, and grasp the handle with precision."

These extracts from former Reports bring down the history of her instruction to the commencement of the year 1840, when she had been two years and two months under instruction.

She had attained, indeed, about the same command of language as common children of three years old possess.

To set forth, in a satisfactory manner, the subsequent development of her faculties, and to show her actual mental attainment and moral condition, will require a separate article.

NOTE.

To readers of this article who have a taste for the philosophy of language, I commend a paper in the "Smithsonian Contributions to Knowledge," by Professor Lieber, entitled the "VOCAL SOUNDS OF LAURA BRIDGMAN, COMPARED WITH THE ELEMENTS OF PHONETIC LANGUAGE;" and is marked by the originality and power so apparent in all the writings of that deep thinker.

VII. LIFE AND EDUCATIONAL SYSTEM OF JOHN STURM.

FROM THE GERMAN OF KARL VON RAUMER.

(Continued from No. 10., page 182.)

AS EARLY as the year 1537 Sturm, in his treatise "*On the correct mode of opening literary institutions,*" had designated courses of "Public and Free Lectures," which graduates from the first class of the gymnasium should attend upon during their five collegiate years. He also lays down therein the main branches thus to be taught, which are theology, jurisprudence, and medicine. Beside these, he enumerates five other departments of learning, (which we now associate in a distinct group, and assign to philosophical faculties,) namely, mathematics, history, logic with rhetoric, grammar, and reading of the poets. And he requires a more extended course of private study to be pursued by students at the college than had been provided for at the gymnasium.

Lecturers as well as teachers are provided for, likewise, in his plan for a school organization at Lauingen. After he has here characterized the duties of the various classes, he continues, "In these classes the boys must be kept under the discipline of the rod, nor should they learn according to their own choice, but after the good pleasure of the teacher. But, when they leave the classes, then they go as their inclination prompts them, some to theologians, for the sake of religion, some to naturalists," etc. It appears from the second book of Sturm's "Classic Letters," that even prior to the year 1565 many learned men were giving public lectures in Strasburg, while, at the same time, he was zealously engaged, by means of correspondence with many others, in efforts to increase the number of lecturers. But, it was not until 1567 that the Emperor Maximilian II. accorded permission to the Strasburgers to found a college, which, long afterward, (in 1621,) was invested by Ferdinand II. with all the rights and privileges of a university.

In the year 1569, the Strasburg magistracy empowered Sturm to organize the college, whereupon he composed his "Collegiate Letters," which were addressed to the various instructors in the new institution.

What was the actual course of instruction therein will best appear from the subjoined schedule of lectures for the summer term of the year 1578, which I quote in the original Latin.

Designatio Lectionum publicarum pro hoc aestivo semestri, in academia Argentoratensi; Anno 1578.

*J. Sturm*us, Rector, docebit dialog. Cic. de Senectute.

Melchior Junior, Decanus, libros III., Cic. de Orat. et orationem Cic. Philippicam secundam.

THEOLOG. — *D. Marbachius* perget in explicatione Psalmorum.

D. Joh. Pappus explicabit Danielelem prophetam et acta Apostolorum.

M. Nic. Florus epist. Pauli ad Galatas.

Er. Marbachius Lic. perget in lib. Judicum.

JURECONSULTI. — *D. Laur. Toppius* perget in Pandectis.

D. Obert. Giphanius interpret. libb. IV. Institutionem Justin.

D. Georg. Obrechtus perget in lib. II. Codicis.

MEDICI ET PHYSICI. — *D. Andr. Planerus* leget parvam artem Galeni. Deinde parva naturalia Aristotelis.

E. Lud. Hawenreuterus perget in compendio Physices

HISTORICUS. — *D. Mich. Beuterus* explic. C. Tacitum.

ETHICUS. — *M. Teoph. Golius* perget in libris Ethicis Aristotelis ad Nicomachum.

ORGANICUS. — *M. L. Hawenreuterus* perget in Analyt. prioribus Aristotelis.

MATHEMATICUS. — *M. Cour. Dasypodius* docebit sex libros priores Euclidis, item Theorias Solis et Lunae et doctrinam addet Eclipsium.

LINGUARUM PROFESSORES. — *M. Henning*. Oldendorpius docebit Grammaticam hebraeam Clenardi et adjunget aliquot Psalmorum Davidis explicationem.

M. J. Wilveshemius, graecicae linguae Professor, interpretabitur *Ἔργα καὶ ἡμέρας* Hesiodi.

DISPUTATIONES ET DECLAMATIONES PUBLICAE. — Singulis mensibus singulae attributae sunt disputationes et declamationes, quae publice a Professoribus haberi debent suo ordine, praeter exercitationes illas, quae privatim suscipiuntur cum Studiosis et honorum Candidatis.

The Strasburg college created Baccalaureates and Masters of Philosophy, as we learn from the lists of Melchior Junius, of degrees conferred in the years 1574 and 1578. But, Doctorates in theology, law, and medicine, it did not create; for this only universities could do.

If then, as we see, the Strasburg college was neither a gymnasium nor a university, what, in reality, was it? Manifestly an unfortunate compound of both; a sort of philosophical faculty that laid claim to an isolated, independent existence, almost entirely ignoring the three other faculties. But, a philosophical faculty can not thrive unless it is a branch of a full-grown university, and unless, co-existing with the three other faculties, each sufficiently well represented in itself, it receives life from them, and, in turn, imparts it to them. Those faculties, divorced from the philosophical, but too readily degenerate into mere instrumentalities for gaining a livelihood, while the philosophical, when standing alone and paying no attention to the urgent demands of life and to the future calling of the student, is devoid both of purpose and aim. Such a dubious position exerts a pernicious influence on the character of the pupils of the college. Schoolboys they should not be, students they fain would be; but, they are neither one thing nor the other. For philosophical lectures, which tend to refresh, strengthen, and improve the student in his own special department, appear to the scholars of the college but a mere wearisome continuation of their school studies, that they had hoped were at an end. And if, moreover, the instructors in logic, philology, rhetoric, etc., are altogether of that kind, that their discourses differ

in no respect from those which their hearers have before listened to in the gymnasium, then truly is such hearing fatiguing, and painful even to the most attentive. Sturm felt a deep interest in his Strasburg college, and used every means in his power to impress upon it the stamp of a university. From many of his "Classic" and "Collegiate" letters we see how he invited jurists, physicians, etc., to Strasburg, to deliver lectures upon law, medicine, natural philosophy, and other branches of learning. But, it is impossible thus to improvise a university, by persuading men, who are already filling other and widely different offices it may be, to become professors likewise. For, the appropriate duties of the professor call for the undivided energies of the whole man.

That the lectures of theologians, jurists, and physicians in the Strasburg college were entirely unsuited to impart to the youth, within the Quinquennium from his sixteenth to his twenty-first year, an adequate preparation for his future calling, as Sturm originally designed that it should do, a single glance at the schedule of the college lectures inserted above will abundantly convince us. The theologians, for example, read only upon Old and New Testament exegesis, while one solitary physician confines his labors to the "lesser art of Galen," and "Aristotle's minor philosophy!" And Sturm himself, with all his partiality for the college, most keenly felt its deficiencies. He laments, among other things, the lack of discipline that prevailed there, as well as the neglect of the prescribed lectures, and the want of respect for the instructors. On this point, his letters to Erythraeus, teacher of rhetoric, is especially noteworthy. He has observed, he writes, that it is a difficult task to deliver lectures in their college upon poets, historians, and orators, and he has also been astonished that such lectures have often been wholly unattended. The reason which he assigns for this state of things is this, "the scholars had already, at the gymnasium, become familiar with the principal classic poets, historians, and orators, and, accordingly, if, in the college lectures, they heard nothing new, they would either go away altogether, or would else betake themselves to others, whether jurists, physicians, or mathematicians, who could teach them something that they did not know before. And these laid before the scholars subjects that possessed the freshness of novelty; but the teachers of grammar and rhetoric, on the other hand, only such as they had already learned at school; and, if these teachers could not be persuaded to undertake a better method, then the whole affair would fall through."

But, enough of the Strasburg college: it, however, did not remain in its original form; but, as has been stated, emerged from its chrysalis condition, in the year 1621, a full-fledged university.

We turn now to examine Sturm's educational method critically and to note its operation in the Strasburg gymnasium.

His ideal of culture we have already spoken of as embracing the three-fold attainment of piety, knowledge, and eloquence. How clearly he knew what he wished, how clearly he recognized the means that were best adapted to procure him what he wished, and also with what decision, circumspection, and admirable perseverance he labored to achieve his aim, all this appears from what I have already communicated, both from his own lips and from the authority of others. There was no discordant element in him; he was a whole man, a man of character, in whom a strong will and a wise activity were united in perfect equipoise. And, on this account, it is no marvel that, as I have before mentioned, he was appreciated among his contemporaries, and enjoyed their utmost confidence. Even in the year 1578 the Strasburg school numbered many thousand scholars, among whom were two hundred noblemen, twenty-four counts and barons, and three princes. Not alone from Germany, but also from the remotest countries, from Portugal, and Poland, Denmark, France, and England, youths were sent to Sturm. But his educational efficiency was not limited to the Strasburg gymnasium; he exerted, far and wide, by his counsel, his example, and, through his pupils, a vast influence, as a second "Preceptor of Germany." He himself organized schools at Lauingen on the Danube, Trasbach on the Moselle, and at Hornbach, in the Bipontinate; his pupil, Schenk, planned the Augsburg, a second pupil, Crusius, the Meminger gymnasium.

The school-code of Duke Christopher, of Wirtemberg, of the year 1559, as well as that of the Elector, Augustus I., of Saxony, of the year 1580, would certainly seem to have felt the influence of Sturm's system. The grammar of the lower classes, the logic and the rhetoric of the upper, Cicero in the ascendant, Terence and Plautus acted by the scholars, the rudiments of astronomy in the highest class, and arithmetic here much neglected, while, in the lower classes, it receives no attention at all, music, decurions for monitors,—all these arrangements would appear to have been borrowed from Sturm, and so much the more as they are not to be found, at least, in the Saxon code of 1538. Even the school regulations of the Jesuits are, as we shall find, in many points of view, quite similar to Sturm's, and he himself was surprised at their correspondence. And, hand in hand with Sturm's method, his school-books also penetrated throughout the whole of Germany.

In his letters to the teachers of the Strasburg gymnasium, Sturm appears the experienced teacher and the accomplished rector; clearly,

and in few words, marking out for all the teachers under him their own particular and appropriate duties; and, in his advice, how best to undertake and to discharge those duties, he approves himself the sage and practiced counselor. For, with the kindest expressions, he cheers and strengthens them in their path of labor, and repeatedly calls their attention to the fact that they all have one common cause, since the teachers of the upper classes can do nothing unless those of the lower classes use care in laying the foundation; and, on the other hand, that the latter will have been faithful to no purpose if the former are not as conscientious in building upon the foundation when laid. And he most earnestly insists that they must all instruct after one and the same method, and must keep the same end in view, if they would see the work prosper in their hands. Thus he shows himself to be a pattern rector, and the center and heart of the school. Yet, he is never overbearing, but is a dictator who scarce ever appears to command or to censure, content with requesting and encouraging. Moreover, by constant application, he is keeping pace with those about him; learning Hebrew, for instance, when in his fifty-ninth year.

Now, that I have given full credit to the praiseworthy efforts and achievements of Sturm, I must also pay homage to truth, and exhibit the reverse and unfavorable side of his educational activity. I have praised him, in that he clearly conceived his plan, and then, fixing his steady gaze upon the object before him, worked vigorously and skilfully to accomplish it.

But, shall I bestow unqualified praise upon Sturm's ideal? On a nearer view, I can not do it. The Christian element of his educational system alone deserves entire recognition. But, the other two elements, namely, knowledge and eloquence, or rather Sturm's conception of the kind of knowledge and of eloquence to be inculcated at school; this conception, judged not alone by our present standard, but considered in itself and under any circumstances, is, in many points deserving of censure. Shall I be asked "How can this be? To furnish the pupil with a rich store of scientific knowledge, and, at the same time, to cultivate in him that readiness of expression which will enable him to utter, either orally or by writing, whatever thoughts or fancies he may thus have accumulated; do not these two objects, even at the present day, constitute together the highest aim of education?" They do, indeed; but, let us consider more closely what kind of knowledge and what species of eloquence Sturm had in view. and then we shall be in a better position to see whether we agree with him throughout or not. And, first, as to the knowledge. The thoroughness with which both Greek and Latin grammar were taught

in Sturm's school, our teachers now a-days will approve, although it may be that occasionally their standard of thoroughness does not precisely coincide with that of the old rector, which demanded, for instance, that the second aorist should be formed from the imperfect, or that a future form, "φειξω" should be recognized, and the like. But, could they approve of the classics selected, and the order in which they were read at the Strasburg gymnasium? Hardly; else it would not be that, in our gymnasiums now, far different classical authors are read; or, where the same are taken up, that it is in another order and another spirit. We can overlook the fact that Cornelius Nepos, who is studied in most schools at the present day, was rejected; but, so was Livy, and so was Tacitus. And, of the most important of the classics, only a small portion was read; I need only mention Homer. Such fragments surely can never lead to a spiritual appreciation of the genius and the character of authors. But, how all this has become changed in the progress of time, we shall discuss elsewhere.

On a first glance, we might be led to believe that Sturm was devoted not merely to the knowledge of words, but to that of things also; but, if we examine the matter more closely, we shall alter our opinion. In fact, the scholars of the lower classes acquired Latin words for every possible object that was about them in life, whether in the kitchen or cellar, the garden or stable, the school-room or church. And they were thus taught almost according to the manner of Comenius in the "Orbis pictus," only that they learned the world in the original instead of in pictures. But, with what view were boys taught these Latin names? Was it that they might obtain a knowledge of things likewise? Certainly not. They were only placed thereby in a condition to express themselves in Latin upon common and familiar topics, just as a German who designs to travel in Italy will furnish himself beforehand with a stock of every-day words and phrases.

But, some one will say, "Sturm also demands that boys should project a sort of encyclopædia, in which they should enter the names of various objects under certain pre-arranged heads; as, for example, under the head of 'birds' the ostrich and the wry-neck; or, under the head of 'mammalia,' the lion and the elephant. And, is not this to be regarded as a knowledge of things?" I think not. I think that it is at best only a method of fixing names in the mind, which, however, are the shadows of things to come; for, it is very unlikely that those boys who placed the ostrich and the wry-neck under the head of "birds" had ever seen either the one or the other. Comenius,

by means of his pictorial representations, here affords a far better knowledge of the actual world.

If we now compare the course of study in a modern gymnasium with that in Sturm's school, we shall perceive at once that there are many subjects of instruction not provided for in the latter. But, many will say, "This is the advantage of the Sturmian method, that it restricts itself to a very few branches, while we, on the other hand, teach almost every thing. The greater surface the less the depth," etc.

All such persons I now ask to suspend their judgment until they have accompanied me in a critical survey of Sturm's system of teaching. Boys were received into the gymnasium in their sixth year, and yet I find not one word of any special instruction in reading and writing German correctly. I would not ask for that instruction in the German grammar, which is now so popular, but only for an elementary drilling in German, which is indispensable. When and where they receive this, it certainly does not appear; nor have we any more light on the question whether the older boys wrote German compositions, except what we derive from the fact that they made translations of the Latin classics into German.

And, as it was with elementary instruction in German, so, likewise, in his original plan, Sturm has not a syllable of any instruction in arithmetic for the first eight classes. And, when he comes to treat of the upper classes, he dismisses the subject thus briefly: "Arithmetic must be introduced, Mela examined, Proclus laid before the scholar, and the elements of astrology taught." And yet, in the letters to the teachers of the ten classes, I find not a word said of arithmetic; nor, from the two letters to Conrad Dasypodius, is any thing decisive to be gathered on this point. The second of these last mentioned letters, written in the year 1569, thirty-one years after the establishment of the gymnasium, speaks of instruction in mathematics, yet in a way from which we infer that it had not been long introduced. Later, in the course of instruction dating in 1578, as well as by the examination held during the same year, we see that arithmetic was taught in the second class, and a few problems from the first book of Euclid, together with the elements of astronomy, in the highest. Also, in the school-plan projected by Sturm for the gymnasium at Lauingen, mathematics is not placed among the school studies, but rather classed among those branches which are to be learned afterward, through attendance on college lectures.

All things now considered, there appears to have been at least a gross neglect of mathematical instruction. If the scholar has

learned in the second class but the rudiments of arithmetic, and in the highest only a few problems in Euclid, how can he comprehend even the few first elements of astronomy, taught also in the same highest class? To judge by the astronomical examination communicated herewith, the knowledge that was imparted of the science would seem to have been almost entirely limited to the exhibition and the explanation of an armillary sphere; as the teacher, in the year 1578, made no allusion to the Copernican system which had appeared in 1543, but taught the doctrine of the annual revolution of the sun around the earth. On the other hand, as we have seen, Sturm assigns to astrology a place among the subjects of study.

Never will our present teachers of elementary schools, to say nothing of gymnasiums, look with favor upon such a neglect of mathematics, even though they may advocate the very simplest methods of instruction. And, so much the less, as it is natural to suppose that very many scholars did not take the full course, but only passed through the lowest classes in this Strasburg gymnasium, and, consequently, could learn nothing at all of arithmetic. For, as we have before shown, this branch during the first years after the establishment of the gymnasium probably received no attention at all, and, when introduced later, was assigned to the second and highest classes only.

Likewise, in regard to geography, we have no reason to conclude that it was studied. For the above cited expression of Sturm, "Mela is to be examined," was scarcely called for, if Mela was really read in the gymnasium. But, even Mela, meagre as he is, received no attention there, if we may judge from the schedule and the examination of 1578. Nor among the college lectures either, was any place assigned to geography.

And history, too, was quite as much neglected; even in the college, Beuter, whose name appears on the catalogue as historical lecturer, confines himself to the interpretation of Tacitus.

Of natural history and natural philosophy there was not a single line taught in the gymnasium.

Since, then, all instruction in the German language, mathematics, geography, history, natural history, and natural philosophy, was entirely omitted, to which we may add instruction in Hebrew, in the modern languages, French especially, and perhaps also in drawing, we must conclude that nearly all the time and energies of the scholar were concentrated upon the acquisition of Greek and Latin.

Was now the knowledge of the Greeks and Romans which Sturm's scholars possessed, any the greater, on this account, than that mastered

by the scholars of our gymnasium? or, we should rather inquire, was their readiness, both in speaking and in writing Latin, greater, and did they apply the whole force that was in them principally to acquire these two facilities?

The reply to the first question should be favorable to the scholars of the present day: the reply to the second, perhaps, to Sturm's scholars.

And truly it would have been a wonder if Sturm's scholars had not learned to speak and write Latin, since he himself looked upon the art of writing and reading in classical Ciceronian Latin as the noblest aim of culture; and he deemed no sacrifice too dear so that he might reach it. The first sacrifice, (which we have already alluded to,) was an entire neglect of our mother tongue, and even an absolute alienation from it. We have seen from Sturm's letter to Schirner, the teacher of the ninth class, that he considered the Roman children highly privileged, in that, from their infancy up, they spoke Latin themselves and heard nothing but Latin spoken by others; whereas, with German children, the case was far different. This *evil*, he said, must be removed by the diligence of the teacher, and through the application of his (Sturm's) system. There was only need of a correct method, (and that because Latin was not our mother tongue,) to insure the production, at the present day, of speeches which should compare favorably with those of Cicero. Every effort must be put forth in order to restore again the long lost skill of the Greeks and Romans in teaching, haranguing, disputing, and writing. The first point, therefore, upon which Sturm, as well as most of his contemporaries, both literary men and teachers, insisted, was the completest removal possible of the German mother tongue, that so the Latin might wholly occupy its place. To teachers and to scholars alike, all conversation in German was forbidden; and games were only allowed on the condition that Latin alone should be spoken therein. Had the old Romans still ruled over Alsace in Sturm's time, they could have adopted no more effectual measures to denationalize its inhabitants, to make them forget their country, and to change them wholly into Romans.

Sturm indirectly boasts of this exclusion of the German language from his gymnasium. "He has introduced a mine of choice Latin words and of familiar Latin phrases, and has called up Plautus, Terence, and Cicero from the shades, to speak Latin with the boys."

Plautus and Terence he here mentions in preference, on account of the representations of their plays by the scholars; which representations, as we have seen, he strongly recommended to the teachers

of the three upper classes. In this connection, his letter to Golius, the teacher of the highest class, deserves our special attention. "I could wish," said he, "that the actors of comedy as well as those of tragedy in your class should all be equal to Roscius; and, therefore, far more accomplished than those in the lower classes can be. I desire you never to suffer the week to go by without a performance, so that an assiduous and habitual attendance at the theatre may be encouraged."

If we are to regard this disuse of our mother tongue as one sacrifice to the ideal,—nay, let me call it the idol rather,—of Latin eloquence, then surely these theatrical exercises should be considered as a second sacrifice to this ideal. It appears incredible to us that the committing to memory and acting such licentious plays as are those of Terence could have exerted no evil influence upon the morals of the young. And we are equally at a loss to understand, how it was that so pious a man as Sturm did not object to the pernicious sentiments inculcated by Terence. Could the enthusiastic rector have been blinded by the hope, that his scholars would be moulded, as it were, into expert Latinists by these theatrical performances, and by acting comedy? If the bare reading of an author, like Terence, is dangerous to the scholar, how much more dangerous is it, when, from the necessities of acting, he is obliged to assume the characters and imagine himself in the situations of the drama.

Sturm's endeavor to make boys adepts in Latin eloquence had, moreover, a very great, and in my judgment, a very injurious influence upon his manner of reading and of treating the classics. It is true that he aimed, first of all, as every intelligent school-teacher should do, at a correct understanding of the language of authors; for he insists that the teacher should dwell upon the grammatical construction of the text long enough to arrive at such understanding.

But why is it,—if I may ask so simple a question,—that we trouble ourselves to understand the language of a classical author as thoroughly as we do our own, so that we can read him with as great ease as if he had written in our own tongue? Doubtless it is, that, having arrived at an appropriate understanding of the language, we may penetrate through the language to the sentiment, and so at last may educe the intellectual individuality of the author from his works, and at the same time recognize in the author the characteristics of the nation, to which he belonged. But such an aim of classical studies is nowhere visible in Sturm's method; to him, to use a Kantian expression, the author himself is not an end, only a means to an end; that is, every author must be used for the cultivation of this deified Roman eloquence in boys. And how? Precisely as the peacock was

used by the jackdaw. They borrow the author's words and phrases, group them together, and learn them by heart, perhaps, in order to apply them again in speech or in writing. Borrow, is too feeble an expression; the jackdaw designed not merely to borrow the peacock's feathers, but to represent them as his own. The doctrine of imitation as we find it set forth by Sturm and others, is, after all, a mere jackdaw theory. The scholar is taught how, by a slight alteration, to disguise phrases from Cicero and others, and then to use them in writing or in speech, exactly as if they were his own production; so adroitly smuggling them in, as it were, that the reader or hearer may not suspect whence they were taken. "Is the teacher," says Sturm, "to give out themes for composition,—he will draw attention to those points where imitation is desirable, and will show how similarity can be concealed by a superadded variation." "We must, in the first place, take care, that the similarity shall not be manifest; but its concealment may be accomplished in three ways; by adding, by taking away, or by alteration."

"The objection, perhaps, will be made," says Sturm in another place; "that, if we appropriate entire passages from Cicero, we shall be guilty of plagiarism." This would be so, if we should make extracts from Cicero and call them our own; but our memory is our own, so is the use to which we put our memory, so is our style, so is the caution and the moderation which we exercise in making use of the classics, and so likewise is our method of imitation, as well as of borrowing, provided that we do borrow. And truly, in such case, we shall borrow of one, who no longer is here to begrudge it; of one, who wrote for others, yea, for all time. Thus Sturm justifies this extremely censurable practice,—a practice which, as we have seen, Erasmus had already condemned. Thus his effort to restore Roman eloquence, had a great influence upon the choice of authors to be read in his gymnasium; for hardly any were introduced but such as were the most faultless models of this eloquence. Cicero was placed at the head. Even the boy of eight read the "select epistles" of Cicero, and there was no class from the eighth up to the highest, in which he was not read. Terence, Sturm commends most highly, next to Cicero. Every Roman author who, measured by the Ciceronian standard, did not vindicate his claim to be considered a pure classic, Sturm appears to have rejected. Livy, as we have before mentioned, was not one of the Strasburg school text-books, probably on account of his provincialism, (Patavinity;) we are less surprised at the absence of Tacitus, and in short, of every author, who hindered or at least did not further the main object of learning to write and to speak like Cicero.

In the eighth class, in the eighth year of the pupil, a beginning was made in exercises in Latin style. Sturm commends them to the teachers in the most urgent manner; but they appear, when closely examined, to have been almost wholly composed of attempts at that spiritless imitation, above alluded to; the preparation for them consisted in singling out and committing to memory, phrases, which they had noted in their lessons, as suitable to be used in Latin discourse or in these exercises. Do I now need to declare emphatically, that those youth, who, in reading the classics, have been engaged merely in a hunt after phrases for future use, or rather misuse, never arrive at a true understanding of these classics, and, what is more, that this method renders such an understanding wholly impossible? Do I need to observe, that youth thus trained will not learn either to admire or to understand even, very many writers, who, like Tacitus, are essentially different from Cicero? And as little will they attain to an understanding of the poets, if it is made their chief aim in reading to compose Latin verses themselves, and if for this purpose they are instructed to gather poetical flowerets from the *Æneid*, as they have before culled prose gems from Cicero; or if, again, with a view to their exercises in prose, they are constantly directed to those peculiarities which the oratorical style, *mutatis mutandis*, may borrow from the poets.

I have put the question "shall I bestow unqualified praise on Sturm's ideal?" and have answered it in the negative. I have now given the reasons for my opinion. I have shown how, in the undivided pursuit of Roman eloquence in speaking and in writing, the German language was not only neglected, but crushed under foot; how, in order to gain ease and readiness in Latin expression, the most licentious of the plays of Terence were acted by the scholars; and how, further, since the requisitions of this eloquence absorbed all the energies and all the time of the young, there was no opportunity left for any thorough mathematical training; neither was any instruction given in geography, history, Hebrew, or the modern languages, and I might add, in natural philosophy and drawing, but for the little attention that was generally paid to these two branches, at that period. And finally I have indicated how it was, that this unlucky reaching out after Roman eloquence was a decided hindrance to a correct exegesis, and a full appreciation, of the classics. And now the question naturally arises in our minds, "if Sturm and so many of his contemporaries in this chase after Roman eloquence, made great sacrifices, and neglected almost every thing else,—did they see their desires realized in the end?"

But I have already answered this question to the satisfaction of the intelligent reader, where I spoke of this wretched method of reading the classics, only to cull out phrases and piece them together anew, to be used in exercises in style, in order, haply, to equal the ancients. For all their imitation of classical authors resolved itself at last into a mere paltry connoisseurship; since they attained, at the furthest, only to a philological phariseism, which, after a repulsive, pseudo-classic fashion, composed works that disclosed not a particle of the classical spirit. When we peruse their "Examples of Roman eloquence," we imagine ourselves walking amongst the ghastly spectres of the ancients, and Cicero stalks to and fro before our eyes, an indistinct phantom.

Sturm however, as was natural, regarded the fruits of his labors in a far different light. He believed that he really had called the ancients to life again, and he fancied, that if we but laid the foundations aright, there was no reason why we should not produce Latin works as full of the fire of genius as were the originals. In one place he says: "the Romans had two advantages over us; the one consisted in learning Latin without going to school, and the other, in frequently seeing Latin comedies and tragedies acted, and hearing Latin orators speak. Could we," he continues, "recall these advantages in our schools, why could we not then, by persevering diligence, gain that, which they possessed only by accident and habit; namely, the power of speaking Latin to perfection." In another passage he uses a still stronger expression, where he says, "I hope to see the men of the present age, in their writing, commenting, haranguing and speaking, not merely followers of the old masters, but equal to those who flourished in the noblest age of Athens or of Rome." What pedantic narrow-mindedness, to indulge the delusive notion, that an ever so judiciously-managed Strasburg school could effect the production of works of genius, equal to those that bloomed amid the splendor of the age of Pericles or the grandeur of Imperial Rome!

This notion of Sturm's, as erroneous as it was presumptuous, if we might not rather call it extravagant, stands in quite a surprising contrast with the following feeble and spiritless sentiment, which we find in another place. "It is astonishing," he here says, "that while there are in our day many as good intellects as the ancients could boast of, while we possess the same philosophical sources to draw from as did they, while our advantages for the attainment of eloquence and our opportunities for displaying it are no fewer than with them, and while, moreover, all our gifted men have striven to distinguish themselves by eloquence, yet almost all have shrunk back in terror from the course

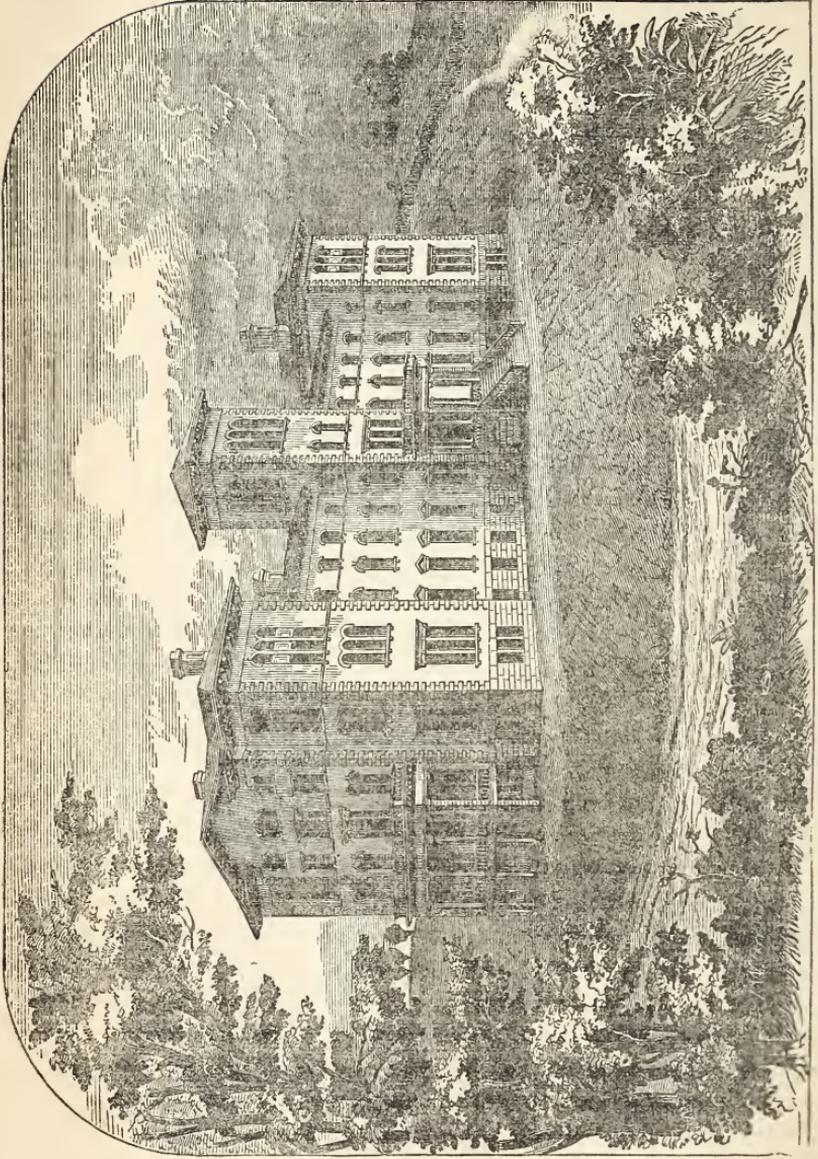
of training that it demands, and so few have accomplished any thing by means of it."

"We can not," continues Sturm, "lay the entire blame of this result upon the scholars. Year after year there have been many at the Strasburg Gymnasium, who have united to superior talents a strong desire to excel and great diligence. It has been so likewise at Louvain and at Paris. Now how is it, that among so many thousand, there have been so very few, who have applied the requisite diligence to Latin writing and declamation?" On a careful consideration, he concludes that the fault lies with the teachers, and with himself, and is partly inherent in the fact, that Latin is not the native tongue of the scholar.

If we examine this admission of Sturm carefully, we shall be at no loss to discover where the truth lies. Men of the very highest capacities, he says, were exceedingly desirous to become eloquent, but have been appalled before the *style* of eloquence taught in his school. Had Latin only been their native tongue, then they would have succeeded. But German was their native tongue, and in this, according to Sturm's own theory, they would have succeeded to perfection. And he asserts this in so many words, but a few lines further back. "Eloquence," he here remarks, "is by no means confined to the Latin tongue. Can not Italians, Spaniards, French and Germans be eloquent in their own language? The prose of Boccaccio is a model of purity and elegance to the Italians, and so is the sweet-sounding poetry of Petrarch. Comines charms the French as truly as ever Thucydides did the Greeks. And as for Luther," he continues, "has he not stood forth, a perfect master of our language, whether we look to purity of idiom or to opulence of expression? Princes, counselors, magistrates, ambassadors, and jurists, all concede to him, the theologian, this praise. Luther truly vindicated a righteous cause, which in itself deserved the victory; but it was with the sinews of an orator that he wielded the weapons of controversy. Had there been no Reformation, had no sermons of Luther ever appeared, and had he written nothing at all save his translation of the Bible, this alone would have insured him an immortality of fame. For, if we compare with this German translation either the Greek, the Latin, or any other, we shall find them all far behind it, both in perspicuity, purity, choice of expression, and resemblance to the Hebrew original. I believe that, as no painter has ever been able to surpass Apelles, so no scholar will ever be able to produce a translation of the Bible that shall excel Luther's."

If we were compelled on other grounds to conclude that Sturm had become altogether denationalized, and a Roman to the core, this

passage just cited proves to us that it was not altogether so. But why, in view of his deep and heart-felt recognition of the great German master-piece of Luther, and why especially in view of his acknowledgment that Italians, French and Germans, had written classical works, each in their own language,—why, I repeat the question, did he continue, like a second Lisyphus, his fruitless endeavors to metamorphose German into Roman youths, and to impart to them, in defiance of the laws of human nature, another native tongue? The entire age in which he lived was in fault, not he: it was only at a later period, that the claims of our own country and our own language came to be properly regarded.



NEW YORK ASYLUM FOR IDIOTS, AT SYRACUSE.

VIII. NEW YORK STATE IDIOT ASYLUM,

AT SYRACUSE.

On the 13th of January, 1846, Hon. F. F. Backus, of Rochester, in the Senate of the Legislature of New York, of which he was a member, moved a reference of that portion of the State Census which related to idiots to the committee on Medical Societies. Of this committee he was chairman, and on the 15th of the same month, in behalf of the committee, he submitted a report, in which an institution for the care and instruction of idiots was proposed, and which was followed on the 28th of March by a bill for the purchase of a site, and the erection of suitable buildings for an asylum. The bill, after passing the Senate, was lost in the House. The subject was again presented to the Senate by Dr. Backus, in 1847; but no further action was taken till 1851, when the Legislature, influenced by an exhibition by Dr. S. G. Howe of the results of the training and teaching of this class, in a number of pupils from the Massachusetts Experimental School, provided for an experimental school at Albany, under the management of Dr. H. B. Wilbur, who had, since July, 1848, conducted a private institution for idiots at Barre, Massachusetts.

The success of the experimental school at Albany was such that the Legislature, in the winter of 1853-54, made provision for the erection of a suitable building for the accommodation of the school and for its annual expenses.

On the 8th of September, 1854, the corner-stone of the first state institution for this important class was laid, with religious ceremonies and appropriate addresses, by Ex-Governor Hunt, Dr. H. B. Wilbur, Dr Seguin, Rev. S. J. May and Dr. F. F. Backus. The building, with accommodation for one hundred pupils, was so far completed in August, 1855, as to be opened for the reception of the school from Albany.

The building occupies a commanding site, one mile from the center of Syracuse. It is 153 feet front, with two wings each 53 feet from front to rear. The main building is three stories, and the wings four, including the basement. The cost of building and furniture is about \$80,000, and the grounds, eighteen acres in extent, about \$10,000; of which, ten acres, (valued at \$7,500,) was the gift of the citizens of Syracuse.

The government of the New York State Idiot Asylum is committed to a board of nine trustees, of whom four are members *ex officio*, viz., the Governor, Lieutenant-Governor, Secretary of State, and Treasurer, and the remaining five are elected by the Senate on the nomination of the Governor.

The trustees have the general direction and control of all the property and concerns of the asylum, and take charge of its interests; they receive no compensation for their services, though they are reimbursed for their actual and reasonable traveling expenses in attending the meetings of the board. They hold semi-annual meetings, and, during the intervals between these meetings, they exercise a proper supervision over the affairs of the asylum through their executive committee. This committee visit the asylum on the first Monday of every month, to examine into its management, inspect the condition of its pupils, audit all bills presented for payment, and decide upon the admission and dismissal of pupils; they also keep a record of their proceedings for the inspection and approval of the board.

The treasurer draws from the State Treasurer all monies appropriated by the Legislature for the institution, and receive all monies collected from counties for the clothing of pupils, as well as the sums derived from the tuition fees of paying pupils. He pays all bills properly audited and indorsed by the executive committee, making a report of the bills thus paid, and a return of the vouchers thus received, at the semi-annual meetings of the board. This statement of the treasurer is embodied in the annual report of the trustees to the Legislature. The few contingent expenses of the asylum are presented in the form of a monthly bill from the superintendent, and are audited as any other bill. By this arrangement the pecuniary responsibility resides in the executive committee, and no bills are paid by the treasurer, except they are indorsed by at least two of that committee.

The general supervision of the affairs of the institution, with the advice and counsel of the executive committee at its monthly meetings, is intrusted to the superintendent.

He has the sole charge of the management and instruction of all the pupils sent to the asylum, and the direction and control of all persons employed in any capacity about the establishment. He makes provision for all the wants of the asylum, and is responsible for a prudent and judicious expenditure of its funds. He keeps a journal of all his proceedings, for the inspection of the executive committee at its monthly meetings, and subject at all times to the examination of any member of the board.

The success of Dr. Wilbur's management and training of the asylum has more than justified the anticipations of its founders, and of the parents and friends of the pupils, "in the exercise of more judgment in small matters, in improved habits, in more ready obedience, in more self-control, and finally, as the result of all these, in a greater capacity for useful occupation. The capability for useful occupation, and willingness to be thus occupied, satisfies the greatest need of the idiot, and will insure his future comfort and happiness, if he is subjected to right influences, after he shall have left an educational institution."

The following brief description of some of the pupils who have been in the asylum during the past five years is taken from Dr. Wilbur's sixth annual (1857) report :

EXAMPLES OF TRAINING AND INSTRUCTION IN THE NEW YORK STATE IDIOT ASYLUM, AT SYRACUSE. *From Dr. Wilbur's Report for 1857.*

A. T.—A boy 7 years old. In this case the organs of hearing were very slightly affected, but there existed an almost complete want of perception of sound. He did not speak, and had very little idea of language: he was quite a good looking and active boy; he has been under instruction a year; he is now beginning to read simple words, both printed and written; writes in a very good hand a great variety of words, names of familiar objects, names of all the pupils in school. He displays considerable imitative faculty in copying various figures from drawing cards and upon the blackboard. In geography, he has learned the principal points on the map of the United States; he is just beginning in numbers, writing them as far as fifty. He hears more readily, and articulates most common words. He would not now attract attention by any peculiarities, even in a common school.

M. R.—A little girl, nine years old, came Oct., 1855; deaf and dumb as well as imbecile. She has now been with us a year, and is in a condition to enter an asylum for deaf-mutes. She knows many written words; can herself write the names of all familiar objects; has been taught to sew and many other household occupations. No one can doubt the success of our labors in this case.

M. A.—A boy of twelve years, small of his age, and with a very idiotic look and very disagreeable habits. He was described, when brought to the Asylum, as generally good tempered; but, if aroused, dangerous in his intercourse with other children—as not being very cleanly in his habits. There was a want of development in his physical frame, his extremities being very short. He spoke with effort: he is now in our first class in reading, and with but little difficulty reads words of two syllables; he is very studious, and is making marked and constant progress; he copies from a book the written characters, and forms sentences simple and compound; he writes easily and quite accurately; he is very familiar with the map of the United States, and tolerably so with that of Europe; he is but just beginning with numbers—writes numbers up to fifty, and can add two to any number. There has been a great change in his personal appearance; he will undoubtedly be capable in a few years of useful labor on a farm.

A. P.—A boy of ten years, who came only about four months since, an idiot from birth; he was not cleanly in his habits; was very mischievous, passionate and troublesome; he could not speak distinctly; could not distinguish forms or colors; had no idea of written language; he is now improved in his habits; he speaks much more distinctly; can distinguish quite a variety of colors and give their names; can read forty or fifty printed words, and can count as far as eighty.

S. Q.—Came November, 1853; a little girl, twelve years old; she was small of her age, and with a very small head; she could not speak, but attempted to say yes and no; the saliva was constantly flowing from her mouth; she had received no instruction; was very passionate, and when once aroused, it seemed almost impossible to conquer her, either by coercion or kindness. She has now been with us three years; is in our first class; she is improving in her articulation, and is very earnest in her attempts to speak; she can read and write a great number of words; is a good scholar in geography; can count and write numbers to one hundred, and can add two to numbers as far as twenty; she is now very easily managed; can sew very well, and is very useful in household matters, performing daily duties in making beds, washing dishes, &c.

J. W. R.—A boy of twelve years, rather small of his age: his head is smaller than any whose dimensions I have seen recorded; the greatest circumference of his cranium is only 13 1-4 inches; he was not cleanly in his habits; had but little idea of language; was passionate; could not speak at all; he has now been under instruction a year; he can distinguish a variety of forms and colors; he knows the names of all objects in the school room and about the house, and also the names of all the pupils in school; he recognizes a great number of pictures of objects; he is beginning to speak, and has already learned several printed words as the representatives of familiar objects; he is now making sensible progress every day.

J. M.—A boy of eleven years, who came to the asylum December 11, 1851. He was well formed and healthy, though slightly affected with chorea; his eyes were prominent and staring, he had an inordinate appetite, and ate ravenously whatever was placed before him; there was an excessive flow of saliva, but otherwise he was cleanly in his habits. In appearance he was quite imbecile; he was an imbecile from birth, and had an idiot sister; he had none of the every-day knowledge of childhood, having lived only for the gratification of his appetite; his speech was imperfect and indistinct; he was very good tempered and affectionate, and easily managed. The change of residence, in his case, insured more reliably the gratification of his appetite, and he was contented and free from homesickness; he had never had any instruction; he could not distinguish forms or colors; had, therefore, no idea of pictures as the representatives of objects; he is quite a neat looking boy; he has improved very considerably in school

matters, but is especially changed in his capacity for useful labor; he works quite intelligently on the farm, conversing very well about common concerns.

L. S.—A boy of twelve years old; came November, 1853; he was stout and healthy; his speech was peculiar; the attempt had been made to instruct him, but without any success; he could neither read, nor write, nor count; he had been three years under instruction. He can read understandingly in words of two or three syllables; he can write a tolerable hand; he can construct sentences, introducing different parts of speech, such as the noun, pronoun, verb, adjective, &c.; he is quite a good scholar in geography, being familiar with nearly all the common outline maps, the geographical definitions, &c.; in numbers he is making good progress; he can add and multiply, performing simple problems in these rules very rapidly; he spent the past summer at work in the garden and on the farm, making himself very useful and not requiring any oversight; he can be instructed to go to the city or to church; he will soon be in a condition to be bound out on a farm.

C. E.—A little boy, 4 1-2 years old; came to the asylum in the autumn of 1851. He had been apparently healthy and intelligent till about two years of age, when he began to have convulsions. These continued till a short time before he was brought to the institution, affecting his intellect till, in the language of his father, "his mind was a complete blank;" he had begun to speak before the appearance of his convulsions, but the later ones had entirely severed the connection between the brain and his vocal organs, so that, for the space of two or three years, he never made or attempted to make an articulate sound; he was small of his age, but with a large head and lustrous eye. He not only did not speak, but had no idea of language; he had no ideas of form, or size, or of color; he had no idea of obedience; no sense of danger. His father mentioned, in illustration of this point, that he would walk into a stream of water like the canal without fear. Not having any legitimate exercise for his nervous and muscular power, he was constantly restless, constantly occupied in the simplest acts of mischief; he had no idea of personal cleanliness, and in all respects required more care than an infant. Commencing with the simplest physical exercises, this boy has been through the whole course of our system of training. He now associates with our best class of pupils; he understands almost every thing that is said to him; he can articulate almost any word of two syllables; he can count; he can read in the first reading-book used in our school; also reads the written character; he is in a class in geography, being able to point out on the outline map of the United States all the prominent points; he is now much more quiet, and withal quite free from his former mischievous habits.

J. H. C.—Came November, 1853, a boy 12 years old; deaf and dumb and quite deficient in intellect; he was a stout boy, well formed, but very awkward; the son of a poor widow, he had run at large with the boys in a city till he acquired many vagrant and mischievous habits; his tongue protruded from his mouth, and his chin and dress were wet with saliva. Though naturally good tempered, he had grown by bad companionship to be very quarrelsome and uncontrollable. Our whole course of instruction was necessarily modified by his deafness. He remained with us nearly three years; when he left he was a neat, good-looking and well-behaved boy; he wrote a beautiful hand; he could draw well; he could read many words; he understood the principles of addition and multiplication; he was very capable and useful on the farm and in the garden; he left us to enter the institution for the deaf and dumb in New York.

N. and W., now eleven and twelve years of age, were taken from the idiot house on Randall's Island by Dr. Wilbur, in December, 1851. Their appearance, as described by persons who saw them at that time, must have been painful and disgusting in the extreme. Both had been idiots from birth, both were partially paralyzed, and both entirely dumb, and not capable of understanding more than a dozen words. So hopeless was their condition that the physician at Randall's Island, who was absent when Dr. Wilbur selected them, on his return, wrote to Dr. W., expressing his regret at his selection, as he feared that it would only bring disgrace upon the effort to instruct idiots, to attempt the instruction of those who were so evidently beyond the reach of improvement.

Both now exhibit as much intelligence as ordinary children of their age. Neither speaks very fluently, in consequence of some paralysis still existing, but both are improving rapidly in this respect. Both write well on the blackboard. In thorough knowledge of grammar and geography very few children of their age are their equals. In a very severe and protracted examination in geography, embracing minute details in regard to the topography of most of the countries on the globe, and many particulars in regard to physical geography, and drawing maps upon the blackboard, neither they nor the other members of a class of six or seven missed a single question. In grammar, both supplied adjectives, nouns, verbs, or adverbs, to given verbs and nouns, with remarkable promptness, and to an extent which would have severely tasked my vocabulary. In arithmetic both exhibited perfect familiarity with the ground rules, and Nattie gave at once any and all multiples of numbers as high as 132, and added, multiplied, and divided fractions with great readiness.

IX. LUTHER'S VIEWS OF EDUCATION AND SCHOOLS.

FROM THE GERMAN OF KARL VON RAUMER.

IF Melancthon obtained the name "Præceptor Germaniæ," inasmuch as he was a most consummate scholar, and, at the same time, the intellectual leader, especially of the literary class of his countrymen, then Luther should be called the pastor of his people, who, with a strong faith and an active love, watched, labored, and prayed that all his beloved Germans, small and great, might be led, by means of pious discipline and sound learning, to walk humbly before God.

In Luther's writings, we find much on the subject of education, both in sermons, expositions of scripture, letters, and the table-talk; and some of his works treat of this theme exclusively. He appeals, now to parents, now to magistrates, and now to teachers,—urges them, each and all, in the most pressing manner, to interest themselves in children, while, at the same time, he lays before them blessings and curses,—blessings on right training, and curses on neglect. And withal, he presents the most admirable doctrines, on the nature of discipline, the knowledge suitable for children, the best manner of imparting it, etc.

The following extracts from Luther's works, express his views, both upon the training and the instruction of the young.

I. HOME GOVERNMENT. TRAINING OF CHILDREN.

Luther saw that good family government was the sole foundation of good civil government and of continued national prosperity. In his exposition of Exodus 20: 12., he says:

We have now explained, at sufficient length, *how* father and mother are to be honored, and what this commandment includes and teaches, and have shown of what vast consequence it is in the sight of God, that this obedience toward father and mother should become universal. Where this is not the case, you will find neither good manners nor a good government. For, where obedience is not maintained at the fire-side, no power on earth can insure to the city, territory, principality, or kingdom the blessings of a good government; and it is there that all governments and dominions originate. If now the root is corrupt, it is in vain that you look for a sound tree, or for good fruit.

For what is a city, but an assemblage of households? How then is a whole city to be wisely governed, when there is no subordination in its several households, yea, when neither child, maid-servant, nor man-servant submit to authority? Again, a territory: what is it, other than an assemblage of cities, market-towns and villages? Where, now, the households are lawless or mis-governed, how can the whole territory be well-governed? yea, nothing else will appear, from one end of it to the other, but tyranny, witchcraft, murders, robberies, and disobedience to every law. Now, a principality is a group of territories, or counties; a kingdom, a group of principalities; and an empire, a group of

kingdoms. Thus, the whole wide organization of an empire is all woven out of single households. Wherever, then, fathers and mothers slack the reins of family government, and leave children to follow their own headstrong courses, there it is impossible for either city, market-town or village, either territory, principality, kingdom or empire, to enjoy the fruits of a wise and peaceful government. For the son, when grown up, becomes a father, a judge, a mayor, a prince, a king, an emperor, a preacher, a schoolmaster, etc. And, if he has been brought up without restraint, then will the subjects become like their ruler, the members like their head.

For this cause, God has established it as a matter of irrevocable necessity, that men should by all means rule over their own households. For where family government is well-ordered and judicious, all other forms of government go on prosperously. And the reason is, as we have seen, that the whole human race proceeds from the family. For it has pleased God so to ordain, from the beginning, that from father and mother, all mankind should forever derive their being.

The duties of parents to their children Luther dwells upon, in his exposition of the fifth commandment.

Now let us see what parents owe to their children, if they would be parents in the truest sense. St. Paul in Eph. 6: 1,—when commanding children to honor their parents, and setting forth the excellence of this commandment, and its reasonableness, says, “children, obey your parents in the Lord.” Here he intimates that parents should not be such after the flesh merely, as it is with the heathen, but *in the Lord*. And, that children *may* be obedient to their parents in the Lord, he adds this caution to parents, directly afterward in the fourth verse: “And, ye fathers, provoke not your children to wrath,” lest they be discouraged; “but bring them up in the nurture and admonition of the Lord.” The first and foremost care that he here enjoins upon parents with reference to their children, in what pertains to the mind and heart, (for of the nurture of the body he does not speak here at all,) is, that they provoke them not to wrath and discouragement. This is a rebuke to such as display a violent and impetuous temper in the management of their children. For, under such an evil discipline, their disposition, while yet tender and impressible, become permanently clouded with fear and diffidence; and so there grows up in their breasts a hatred toward their parents, in so far that they run away from them, and pursue a course that otherwise they never would have entered upon. And, in truth, what hope is there of a child, who exercises hatred and mistrust toward his parents, and is ever downcast in their presence? Nevertheless St. Paul in this passage does not intend to forbid parents altogether from being angry with their children and chastening them; but rather, that they punish them in love, when punishment is necessary; not, as some do, in a passionate spirit, and without bestowing a thought upon their improvement.

A child, who has once become timid, sullen and dejected in spirit, loses all his self-reliance, and becomes utterly unfitted for the duties of life; and fears rise up in his path, so often as any thing comes up for him to do, or to undertake. But this is not all;—for, where such a spirit of fear obtains the mastery over a man in his childhood, he will hardly be able to rid himself of it to the end of his days. For, if children are accustomed to tremble at every word spoken by their father or mother, they will start and quake forever after, even at the rustling of a leaf. Neither should those women who are employed to attend upon children, ever be allowed to frighten them with their tricks and mummeries, and, above all, never in the night-time. But parents ought much rather to aim at that sort of education for their children, that would inspire them with a wholesome fear; a fear of those things that they ought to fear, and not of those which only make them cowardly, and so inflict a lasting injury upon them. Thus parents go too far to the *left*. Now let us consider how they are led too far to the *right*.

St. Paul teaches, further, that children should be brought up in the nurture and admonition of the Lord; that is, that they should be instructed respecting that which they ought to know, and should be chastised when they do not hold to the doctrine. For instance, they need both that you teach them that which they do not know of God, and also that you punish them when they will not

retain this knowledge. Wherefore, see to it, that you cause your children first to be instructed in spiritual things,—that you point them first to God, and, after that, to the world. But in these days, this order, sad to say, is inverted. And it is not to be wondered at; for parents themselves have not learned by their own experience what is this admonition of the Lord, nor do they know much about it from hearsay. Still we had hoped that schoolmasters would remedy this evil,—that in school, at least, children would learn something good, and there have the fear of God implanted in their hearts. But this hope, too, has come to nought. All nations, the Jews especially, keep their children at school more faithfully than Christians. And this is one reason why Christianity is so fallen. For all its hopes of strength and potency are ever committed to the generation that is coming on to the stage; and, if this is neglected in its youth, it fares with Christianity as with a garden that is neglected in the spring time.

For this reason children must be taught the doctrine of God. But this is the doctrine of God, which you must teach your children,—namely, to know our Lord Jesus Christ, to keep ever fresh in their remembrance how he has suffered for our sakes, what he has done, and what commanded. So the children of Israel were commanded of God to show to their children, and to the generation to come, the marvelous things which he did in the sight of their fathers in the land of Egypt.—Psalm 78: 4, 12. And when they have learned all this, but nevertheless do not love God, nor acknowledge their obligations to him in grateful prayer, nor imitate Christ,—then you should lay before them the admonition of the Lord; that is, present to their view the terrible judgments of God, and his anger at the wicked. If a child, from his youth up, learns these things, namely, Gods mercies and promises, which will lead him to love God, and his judgments and warnings, which will lead him to fear God,—then, hereafter, when he shall be old, this knowledge will not depart from him.

For God calls upon men to honor him in two ways; namely, to love him as a father, for the benefits which he has rendered, is now rendering, and ever will render toward us; and to fear him as a judge, for the punishments which he has inflicted, and which he will inflict upon the wicked. Hear what he speaks by the mouth of the prophet Malachi, 1: 6, “If then I be a father, where is mine honor? And if I be a master, where is my fear?” Therefore, the children of God should learn to sing of mercy and judgment.—Ps. 101: 1. And St. Paul intends to convey this two-fold meaning, when he says that children should be brought up in the nurture and admonition of the Lord. It belongs to nurture, to tell your children how God has created all things, and how he has given them their senses, their life, and their soul, and is daily providing them with the good things of his creation. Again, how he has suffered for us all, worked miracles, preached to us, and how he has promised yet greater things. And with all this you should exhort them to be grateful to God, to acknowledge his providence, and to love him as a father. It belongs to admonition, that you tell them how God, aforetime, smote with great plagues the Egyptians, the heathen, the inhabitants of Sodom, the children of Israel, yea, all men in Adam; again, how he is now daily smiting many with pestilence, the sword, the gallows, water, fire, wild beasts, and all manner of diseases, and how he menaces the wicked with future punishment.

This admonition God requires us to make much more prominent to our children than that of men, or human penalties. And this, not without reason; for thus they will be taught always to look out of themselves, and up to God, and to fear not men, but God. For, should they be accustomed to fear their parents alone, it will finally come to pass that, even in respect to things which are pleasing to God, that they will fear the opinions of men, and so will become vacillating and cowardly. On this account children should be educated alone, not to fear their parents, but to feel that God will be angry with them if they do *not* fear their parents. So will they not be faint-hearted, but courageous, and, should they be deprived of their parents, they will not depart from God, either while good betides them, or when evil days come upon them; for they have learned with the fear of God to fear their parents, and not through their fear of their parents to stand in awe of God.

But what an acceptable sacrifice it is to God, to bring up children thus, we perceive in Genesis, 18: 19, where it is said that God could not hide from Abraham what he was about to do, and that, for this reason; “for I know him,” God

said, "that he will command his children, and they shall keep the way of the Lord." Do you not see that God herein indicates that the knowledge of the doom, which was to come upon Sodom, would prove to the pious Abraham a strong motive to lead him to bring up his children in the fear of the Lord? So Jonadab, a father among the Rechabites, was gloriously extolled and blessed in his children; and that, because he had brought them up in a pious and godly manner, in the fear of the Lord. In such a manner were Tobias, Joachim and Susanna brought up. On the other hand, the judgment pronounced against Eli, because he restrained not his sons, stands forever to warn us in 1 Sam., 3: 13.

II. BAD TRAINING.

Luther points out the consequences of the bad training of children in the following paragraphs:

Are we not fools? See, we have the power to place heaven or hell within reach of our children, and yet we give ourselves no concern about the matter! For what does it profit you, if you are ever so pious for yourself, and yet neglect the education of your children? Some there are, who serve God with an extreme intensity of devotion,—they fast, they wear coarse garments, and are assiduous in such like exercises for themselves; but the true service of God in their families, namely, the training up their children aright,—this they pass blindly by, even as the Jews of old forsook God's temple, and offered sacrifice upon the high places. Whence, it becomes you first to ponder upon what God requires of you, and upon the office that he has laid upon you; as St. Paul spake in 1 Cor., 7: 20,—“Let every man abide in the same calling, wherein he was called.” Believe me, it is much more necessary for you to take diligent heed how you may train up your children well, than to purchase indulgences, to make long prayers, to go on pilgrimages to distant shrines, or to impose numerous vows upon yourselves.

Thus, fathers and mothers, ye see, what course it is your duty to adopt toward your children, so that you may be parents indeed, and worthy of the name; wherefore, be circumspect, lest you destroy yourselves, and your children with you. But those destroy their children, who knowingly neglect them, and suffer them to grow up without the nurture and admonition of the Lord; and though they do not themselves set them a bad example, yet they indulge them overmuch, out of an excess of natural affection, and so destroy them. “But” they say, “these are mere children; they neither know nor understand!” That may be; but look at the dog, the horse, or the ass; they have neither reason nor judgment, and yet we train them to follow our bidding, to come or go, to do or to leave undone, at our pleasure. Neither does a block of wood or of stone know whether it will or will not fit into the building, but the master-workman brings it to shape; how much more then a man! Or will you have it that other people's children may be able to learn what is right, but that yours are not? They who are so exceedingly scrupulous and tender, will have their children's sins to bear, precisely as if these sins were their own.

There are others who destroy their children by using foul language and oaths in their presence, or by a corrupt demeanor and example. I have even known some, and, would God there were no more of them, who have sold their daughters or their wives for hire, and made their living thus out of the wages of unchastity. And truly, murderers, beyond all question, do better for their daughters than such parents. There are some who are exceedingly well pleased if their sons betray a fierce and warlike spirit, and are ever ready to give blows, as though it were a great merit in them to show no fear of any one. Such parents are quite likely in the end to pay dear for their folly, and to experience sorrow and anguish, when their sons, as often happens in such cases, are suddenly cut off; nor, in this event, can they justly complain. Again, children are sufficiently inclined to give way to anger and evil passions, and hence it behooves parents to remove temptation from them, as far as possible, by a well-guarded example in themselves, both in words and in actions. For what can the child of a man, whose language is habitually vile and profane, be expected to learn, unless it be the like vileness and profanity?

Others again destroy their children by inducing them to set their affections on the world, by taking no thought for them further than to see that they

cultivate graceful manners, dress finely, dance and sing, and all this, to be admired, and to make conquests; for this is the way of the world. In our day, there are but few who are chiefly solicitous to procure their children an abundant supply of those things that pertain to God, and to the interests of the soul; for, the most strive to insure them wealth and splendor, honor and pleasure.

Thus Luther censures a rough, passionate severity in parents, as well as a spirit of indulgence; and wisely commends to them to inspire their children with a dread, rather of God's displeasure than of human penalties, to chasten them betimes, etc.

Of the like import are his reflections when commenting on 1 John, 2: 14.

There is that in the nature of young children, which exults, when the reins of discipline are slackened. Nor is the case otherwise with youth, and if they are held in, even with so firm a hand that they can not break away, nevertheless they will murmur. The right of fathers over their children is derived from God; he is, in truth, the Father of all, "of whom the whole family in heaven and earth is named."—Eph. 3: 15. Wherefore, the authority of earthly fathers over their children should not be exercised in a hard and unfriendly manner. He who governs in anger only adds fuel to the fire. And, if fathers and masters on earth do not acknowledge God, he so orders it that both children and servants shall disappoint their hopes. Experience, too, shows us abundantly, that far more can be accomplished by love, than by slavish fear and constraint. But it is the duty of children to learn the fear of God first of all; then, to love those who labor for their improvement. The fear of God should never depart from them; for, if they put it away, they become totally unfit to serve God or man. Correction, too, which includes both reproof and chastisement, saves the soul of the child from the endless punishment of hell. Let not the father spare the rod, but let him remember that the work of training up children is an honor which comes from God; yea, if they turn out well, let him give God the glory. Whoso does not know to do this, hates his children and his household, and walks in darkness. For parents, who love their children blindly, and leave them to their own courses, do no better in the end than if they had hated them. And the ruin of children almost invariably lies at the door of parents, and it commonly ensues from one of these two causes; namely, either from undue lenity and foolish fondness, or from unbending severity, and an irritable spirit. Both these extremes are attended with great hazard, and both should be shunned alike.

Against indulging children Luther likewise inveighs, in a sermon on the married state.

There is no greater obstacle in the way of Christianity than neglect in the training of the young. If we would re-instate Christianity in its former glory, we must improve and elevate the children, as it was done in the days of old. But, alas! parents are blinded by the delusiveness of natural affection, so that they have come to regard the bodies of their children more than their souls. On this point hear the words of the wise man; Prov. 13: 24.—"He that spareth the rod, hateth his son; but he that loveth him, chasteneth him betimes." Again, 22: 15.—"Foolishness is bound in the heart of a child; but the rod of correction shall drive it far from him." Again, Prov. 23: 14.—"Thou shalt beat him with the rod, and shalt deliver his soul from hell."

"Wherefore it is the chief duty of the father of a family, to bestow more, greater, and more constant care upon the soul of his child than upon his body; for, this is his own flesh, but the soul is a precious immortal jewel, which God has intrusted to his keeping, and which he must not suffer either the world, the flesh or the devil to steal or to destroy. And a strict account of his charge will be required of him at death and the judgment. For whence, think you, shall come the

terrible wailing and anguish of those, who shall there cry out, 'Blessed are the wombs that never bare, and the paps which never gave suck?'—Luke 23 : 29. Doubtless, from the bitter thought that they have not brought their children back to God, from whom they had only received them in trust."

III. MONKISH TRAINING OF THE YOUNG.

Luther disapproves of isolating children from the world, after the usage of the monks. "Solomon," says he, "was a right royal school-master. He does not forbid children from mingling with the world, or from enjoying themselves, as the monks do their scholars; for they will thus become mere clods and blockheads, as Anselm likewise perceived. Said this one; 'a young man, thus hedged about, and cut off from society, is like a young tree, whose nature it is to grow and bear fruit, planted in a small and narrow pot.' For the monks have imprisoned the youth whom they have had in charge, as men put birds in dark cages, so that they could neither see nor converse with any one. But it is dangerous for youth to be thus alone, thus debarred from social intercourse. Wherefore, we ought to permit young people to see, and hear, and know what is taking place around them in the world, yet so that you hold them under discipline, and teach them self-respect. Your monkish strictness is never productive of any good fruit. It is an excellent thing for a young man to be frequently in the society of others; yet he must be honorably trained to adhere to the principles of integrity, and to virtue, and to shun the contamination of vice. This monkish tyranny is moreover an absolute injury to the young; for they stand in quite as much need of pleasure and recreation as of eating and drinking; their health, too, will be firmer and the more vigorous by the means."

IV. OFFENSE GIVEN TO CHILDREN.

In Luther's exposition of the sixth commandment, he pointedly condemns the offense which is given to the young by the use of foul language. "It is a great sin to use such infamous language in the presence of innocent boys and girls. Those who do it are guilty of all the sins which their inconsiderate words beget. For the tender and inexperienced minds of children are very quick to receive an impression from such words; and, what is far worse, this filthy language clings to their memory, and long abides with them, even as a stain on a fine white cloth is much harder to efface than if it came on one that is rough and coarse. This the pagans, too, learned from experience: Horace, for example, who says that a new vase long retains the odor of that substance that happened first to have been put into it!

'Quo semel est imbuta recens servabit odorem

Testa diu.'

And Juvenal, 'you should pay the utmost regard to your boy; and, if you meditate any thing base, think not that his age is too tender to remain unsullied.'

*'Maxima debetur puero reverentia, si quid
Turpe paras, hujus tu ne contemseris annos.'*

"We will now inquire more particularly what these people do, who thus offend children? Since it is a good thing to pay regard to their tender years, and to keep them in the observance of propriety and decorum, (for it is an acceptable sacrifice to God, to seek the welfare of souls,) we should, therefore, with all diligence, watch over young boys and girls, and prevent them either from seeing or hearing any thing infamous; for their evil tendencies are strong enough by nature. If you seek to quench fire, not with water, but by adding fuel to it, what good do you think you will do? But, alas! how many wicked people there are, who make themselves the tools of the devil, and destroy innocent souls with their poisonous and corrupt language. The devil is truly called a destroyer of souls, but he does not do his work, unless with the help of the infamous tongues of such as are on his side, and take pattern by his example.

"Can a child root out of his soul the vile word, that has once passed in at his ear? The seed is sown, and it germinates in his heart, even against his will. And it branches out into strange and peculiar fancies, which he dares not utter, and can not rid himself of. But, woe to thee! whoever thou art, who hast conveyed into an artless mind, that had otherwise been free from the guile, such troubles, perils and poison! Thou hast not, indeed, marred the body; but, as much as in thee lay, thou hast disfigured that much nobler part, the soul. Thou hast poured, through the ear of a fellow-being, a deadly bane into his life-blood; yea, thou hast slain his soul. Such people are of the race of Herod, who slew the innocents in Bethlehem. You would not suffer your own children to be murdered before your eyes;—why then will you destroy souls that are not yours, but God's. St. Louis, king of France, said that his mother would rather have seen her children die by violence than commit a deadly sin. And what a terrible condemnation does our Lord pronounce upon such corruption of children. 'But whoever shall offend one of these little ones, which believe in me, it were better for him that a mill-stone were hanged about his neck, and that he were drowned in the depth of the sea.' Matt., 18 : 6. See what care Christ bestows on innocent little children, in that he affixes a new and peculiar penalty upon the sin of those who offend and injure them; a penalty that is denounced upon no other sin. By this he would doubtless indicate, that such persons

shall undergo an aggravated punishment in the world of woe. And hear him further, in the 7th verse, 'Woe unto the world, because of offenses! for it must needs be that offenses come; but woe to that man by whom the offense cometh!' And, in the 10th, 'Take heed, that ye despise not one of these little ones; for I say unto you, that in heaven their angels do always behold the face of my Father which is in heaven.'

"If any one should be disposed to judge these persons mildly, and say their words may raise a blush, but they themselves are clean, as Ovid falsely alledges of himself,

My manners differ widely from my verse;
The muse may dally,—I am none the worse.

let him hear what Christ says, and *keep silence*. 'Out of the abundance of the heart the mouth speaketh.' 'A tree is known by its fruits.'

"And hence it is, too, that the Christian faith is at so low an ebb, because the children have been led out of the way; and, if the Christian church is again to rise from the dust, we must begin with a careful instruction of the young."

V. DEGENERATE CHILDREN.

When, despite the conscientious efforts of parents and teachers, children turn out ill, Luther casts a consoling view upon the case. "What is greater and more glorious than this your labor, ye faithful taskmasters? You are, in all truthfulness, to instruct, to teach, to chasten and admonish the youth committed to your care, in the hope that some will keep in the way of wisdom, though some too may turn aside. For whoever will do any good, must bear in mind, that this effort may prove all in vain, and his benevolence be thrown away; for there are always many who scorn and reject good counsel, and but few who follow it. We should be satisfied, if our good deeds are not wholly fruitless; and if, among ten lepers, one returns and gives thanks, it is well.—Luke, 17: 17. So, if among ten scholars, there is but one who bends to discipline and learns with zeal, it is well; for our kindness is not wholly lost; and Christ himself bids us, after the example of his Heavenly Father, do good to the thankful and the unthankful alike.

"Therefore, stand in your lot, and labor with all diligence; and, if God does not crown you with success, yet ascribe to him glory and dominion in the highest, and faint not, neither be impatient. Think what an admirable example Solomon has set us; for Solomon himself, or any other king, may train up his son from infancy in the best, most pains-taking, and most godly manner, thinking and hoping,

he shall succeed, and may fail, notwithstanding all. Have you a pious son;—then say, ‘thanks be to God, who has made him and given him to me;’—but, if your son has grown up to evil courses, you can but say,—‘such is this poor human life; I have toiled to train up my son aright; but it was not the Lord’s will he should prosper; yet blessed be the name of the Lord.’

“Nor must parents ever cease to seek their children’s good, however degenerated and ungrateful they may be.”

VI. ALLOWED DISOBEDIENCE.

But should parents, in the training of their children, transgress God’s commandments, then, Luther thinks, they can not justly claim their obedience.

If parents act with such thoughtless folly, as to bring up their children to worldly pleasure and dissipation, then the children may cease to obey them. For we see by the first three commandments that God will be honored before earthly parents. By bringing them up to the world, I mean, pointing them to nothing higher than pleasure, honor and worldly good.

VII. SCHOOLS.

The establishment of institutions of learning by magistrates, as a means of providing a constant succession of well-educated and able men for the church, the school and the government, and a defense of study, especially the study of the languages, and the founding of libraries, are treated of in “*Dr. Martin Luther’s Address to the Councilmen of all the towns of Germany*, calling upon them to establish and sustain Christian schools. A. D., 1524.”

To the Mayors and Councilmen of all the towns of Germany:—

Grace and peace from God the Father and our Lord Jesus Christ. Beloved rulers, wise and sagacious men, ye all do know that I have been under ban and outlawry for well nigh three years; and I surely would keep silence now, if I feared the commandments of men more than I fear God; for which cause also, many in this our German land, both high and low, are even now denouncing my words and deeds, and shedding much blood over them. But, for all this, I can not refrain from speaking; for God has opened my mouth, and commanded me to speak, yea, to cry aloud, and to spare not, while at the same time he has ever been giving strength and increase to my cause, and that too without any device or act of mine; for the more “they rage and set themselves, the more he laughs and has them in derision.”—*2nd Psalm*. And by this one thing alone, whosoever is not hardened in unbelief may see that this cause is of God. For this is ever the way with God’s word and work here on the earth; they manifest the greatest power precisely when men are the most eager to overthrow and destroy them. Therefore, I will speak, and, as Isaiah saith, “I will not hold my peace, till the righteousness of Christ go forth as brightness, and his salvation as a lamp that burneth.” And I beseech you all, my beloved rulers and friends, receive this my writing and exhortation with joy, and lay it to heart. For whatever I am in myself, yet in this matter I can say of a truth, with a pure conscience in the sight of God, that I have not sought mine own good, (which I could the more easily have secured by silence;) but, out of a true heart, I speak to you and to the whole of Germany, even as God has ordained me to do, whether ye hear, or whether ye forbear. And I would have you freely, cheerfully and in a spirit of love, give me your attention; since, doubtless, if ye obey me herein, ye obey not me, but Christ, and whoever does not follow my precepts, despises Christ, and not me.

Wherefore I beseech you all, beloved rulers and friends, for the sake of God and of poor neglected youth, do not count this a small matter, as some do, who, in their blindness, overlook the wiles of the adversary. For it is a great and solemn duty that is laid upon us, a duty of immense moment to Christ and to the world, to give aid and counsel to the young. And in so doing we likewise promote our own best interests. And remember, that the silent, hidden and malicious assaults of the devil can be withstood only by manly Christian effort. Beloved rulers, if we find it necessary to expend such large sums, as we do yearly, upon artillery, roads, bridges, dykes, and a thousand other things of the sort, in order that a city may be assured of continued order, peace, and tranquillity, ought we not to expend on the poor suffering youth therein, at least enough to provide them with a schoolmaster or two? God the Almighty, has, in very deed, visited us Germans with the small rain of his grace, and vouchsafed to us a right golden harvest. For we have now among us many excellent and learned young men, richly furnished with knowledge, both of the languages and of the arts, who could do great good, if we would only set them to the task of teaching our little folks. Do we not see before our very eyes, that a boy may now be so thoroughly drilled in three years, that, at fifteen or eighteen, he shall know more than hitherto all the high schools and cloisters put together have ever been able to impart? Yea, what other thing have the high schools and cloisters ever achieved, but to make asses and blockheads? Twenty, forty years would they teach you, and after all you would know nothing of Latin, or of German either; and then, too, there is their shameful profligacy, by which how many ingenuous youths have been led astray! But, now that God has so richly favored us, in giving us such a number of persons competent to teach these young folks, and to mould their powers in the best manner, truly it behooves us not to throw his grace to the wind, and not to suffer him to knock at our door in vain. He is even now waiting for admittance; good betide us if we open to him, happy the man who responds to his greeting. If we slight him until he shall have passed by, who may prevail with him to return? Let us bethink ourselves of our former sorrow, and of the darkness wherein once we groped. I do not suppose that Germany has ever heard so much of God's word as now; certainly we may search our history in vain for the like state of things. If we let all this slip away, without gratitude and praise, it is to be feared that worse calamities and a deeper darkness will come upon us. My dear German brothers, buy, while the market is at your door; gather in, while the sun shines, and the weather is fair; apply the word and the grace of God to your hearts, while they are here. For this you should always bear in mind, that God's word and grace are a passing shower, that goes,—never to return. And do not, my German brothers, indulge in the delusive dream that it will abide with you forever. For an ungrateful and a scornful spirit will drive it away. Wherefore, lay hold of it, and keep it, ye, who may; idle hands reap never a harvest. God's command, so often communicated through Moses, to the effect that parents should teach their children, is thus taken up and enforced in the 78th Psalm, 3rd verse, *et seq.*, "which our fathers have told us, we will not hide them from their children, showing to the generations to come the praise of the Lord." And the 5th commandment God deemed of such vast importance, that the punishment of death was decreed upon stubborn and disobedient children. And why is it, that we, the elder, are spared to the world, except to train up and instruct the young? It is impossible that the gay little folks should guide and teach themselves; and accordingly God has committed to us, who are old and experienced, the knowledge which is needful for them, and he will require of us a strict account of what we have done with it. Listen to Moses, in Deuteronomy, 32: 7.—"Ask thy father, and he will show thee; thine elders, and they will tell thee." But with us, to our sin and our shame be it spoken, it has come to this, that we must drive and be driven, before we can bring up our children aright, and seek their good; and yet, nature itself would seem to prompt us what to do, and manifold examples among pagan nations, to incite us to do it. There is not a brute animal that does not direct and instruct its young to act as befits its nature; unless we except the ostrich, of which God saith, in Job, 39: 14, 16; "which leaveth her eggs in the earth," "she is hardened against her young ones, as though they were not hers." And what would it profit us, if we were faithful in the discharge of every other duty, and should become well-nigh perfect, if, withal, we failed to do

precisely the thing for which our lives are lengthened out, namely, to cherish and watch over the young? I truly think that, of outward sins, there is none, for which the world is so culpable, and for which it merits such severe condemnation, as this which we are guilty of with regard to our children, in not giving them a right training. Woe to the world, ever and forever! Children are daily born, and are suffered to grow up among us, and there is, alas! no one to take the poor young people to himself, and show them the way in which they should go; but we all leave them to go whither they will. But, you say, "all this is addressed to parents; what have councilmen and magistrates to do with it?" "This is very true, I grant you; but how if parents should not do it,—what then?" Who, I ask, will? Shall it be left undone, and the children be neglected? Will magistrates and councilmen *then* plead that they have nothing to do in the matter? There are many reasons why parents do not deal as they should by their children.

And, first, there are some who are not so pious and well-meaning as to do this, even when they have the ability; but, like the ostrich, which leaveth her eggs in the dust, and is hardened against her young ones, so they bring children into being, and there is an end of their care. But these children are to live among us, and to be of us in one common city. And how can you reconcile it with reason, and especially with Christian love, to permit them to grow up uncared for and untaught, to poison and to blast the morals of other children, so that at last these too will become utterly corrupt; as it happened to Sodom, Gomorrah, Gaba and many other cities? And again, the majority of parents are, alas! entirely unfit to educate their children, knowing neither what to teach them, nor how to teach it. For they have learned nothing themselves, save how to provide for the body; and they must look to a special class, set apart for the purpose, to take their children and bring them up in the right way. In the third place, there are quite a number of parents who, though both willing and capable, yet, by reason of their business or the situation of their families, have neither the time nor the place, convenient; so that necessity compels them to get teachers for their children. And each would be glad to have one entirely to himself. This, however, is out of the question, for it would be too great a burden for men of ordinary means to bear; and thus, many a fine boy would be neglected, because of poverty. Add, that so many parents die, and leave orphans behind them; and what care guardians commonly give to them, if observation did not teach us, yet we could judge from what God calls himself, in Psalm 68: 6, "a father of the fatherless,"—which is as much as to say that they are forsaken by all others. There are some, again, who have no children themselves, and who, on this account, take no interest at all in the welfare of the young.

In view of all this, it becomes councilmen and magistrates to watch over youth with unremitting care and diligence. For since their city, in all its interests, life, honor, and possessions, is committed to their faithful keeping, they do not deal justly by their trust, before God and the world, unless they strive to their utmost, night and day, to promote the city's increase and prosperity. Now, a city's increase consists not alone in heaping up great treasures, in building solid walls or stately houses, or in multiplying artillery and munitions of war; nay, where there is great store of this, and yet fools with it, it is all the worse, and all the greater loss for the city. But this is the best and the richest increase, prosperity and strength of a city, that it shall contain a great number of polished, learned, intelligent, honorable, and well-bred citizens; who, when they have become all this, may then get wealth and put it to a good use. Since, then, a city must have citizens, and on all accounts its saddest lack and destitution were a lack of citizens, we are not to wait until they are grown up. We can neither hew them out of stones, nor carve them out of wood; for God does not work miracles, so long as the ordinary gifts of his bounty are able to subserve the use of man. Hence, we must use the appointed means, and, with cost and care, rear up and mould our citizens. Whose fault is it, that now in every city there is such a dearth of intelligent and capable men, but that of the magistrates, who have left the young to grow up like the trees of the forest, and have not given a thought to their instruction and training? You see how wild the trees grow; they are only good for fences or for fire-wood, and are by no means fit for the use of the builder. Yet, we must have governments here upon the earth. And how wild and senseless

is the hope, if clods and addle-brains rule us, that somehow they will get wisdom, and all will go well with us. Rather let us elect so many swine or wolves for rulers, and place them over such as know not what it is to be ruled by men. And besides, it is brutish recklessness, to act merely for the present time, and to say, "as for us, we will rule now; but, we care not how it shall be with those who come after us." Such men as these, who use their power only for their own individual honor and profit, ought not to rule over men, but over dogs or swine. For even when we exert our utmost diligence to train shrewd, learned, and competent men for rulers, we do not find it a very easy matter to reach our aim. What then can we expect, when we do absolutely nothing?

"This may be so," you reply; "but, though we ought to have schools, and must have them, still what will it profit us to have Latin, Greek, Hebrew, and your other liberal arts taught in them? Will not German suffice to teach us all of the Bible and the Word of God that is essential to salvation? Alas, I fear me, that we Germans must ever be and continue to be mere brutes and wild beasts, as our neighbors with such good reason style us. I wonder that you do not say, "what have we to do with silks, wine, spices, and other productions of foreign lands; inasmuch as we have wine, corn, wool, flax, wood, and stone here in Germany, not only to supply our wants, but enough and in variety enough to minister either to comfort, dignity or luxury?" And yet, these languages and these arts, which do us no harm, but are agreeable and useful alike, sources both of honor and profit, throwing light upon the Scriptures, and imparting sound wisdom to rulers, these we despise; while the productions of other lands, which do us no good whatever, we fret and worry ourselves after to that degree that even success oftentimes proves no better to us than failure. Of a truth, we are rightly called German fools and beasts! Surely, were there no other good to be got from the languages, the bare thought that they are a noble and a glorious gift from God, wherewith he has visited and enriched us, almost beyond all other nations, this thought, I say, ought to be a powerful motive, yea, an allurements to cultivate them. The cases are rare, indeed, where the devil has suffered the languages to be in repute in the universities and the cloisters; nay, these have almost always raised a hue and cry against them in the past ages, as likewise they do now. For the prince of darkness is shrewd enough to know that, where the languages flourish, there his power will soon be so rent and torn that he can not readily repair it. But now, since he can not keep them from expanding into a vigorous growth, and from bearing fruit, he is at work, devising how he may render them dwarfed and sickly, if so be that they may decay and die of themselves. If an unwelcome guest comes to his house, he sets before him so meagre an entertainment, that he is forced to shorten his visit. Few of us, my good friends, perceive this craft and snare of the devil. Wherefore, my beloved countrymen, let us open our eyes, and, thanking God for this precious jewel, let us keep fast hold of it, lest it be filched away from us, and the devil see his malicious purposes accomplished; for, though the gospel came in former times as now, day by day it comes to us, by the Holy Spirit alone, yet we can not deny that at the first it was received through the languages, that its blessings are now spread abroad by their means, and by their means that it is to be kept in the world. For when God, by the apostles, sent the gospel to men, he sent the gift of tongues with it; and, before that time, he had used the Roman power as an instrument to diffuse the Latin and Greek languages far and wide over the whole world, in order that the gospel might spread rapidly through all the nations. And, in the same manner, he has worked at the present day. No man understood the reason why God caused the languages again to put on bloom and vigor, until now, at last, we see that it was for the sake of the gospel, which he purposed to bring to light and thereby make manifest, and overthrow the kingdom of Anti-Christ. For that cause it was that he gave Greece into the hands of the Turks, in order that the Greeks, hunted out of their own land and scattered over the face of the earth, might carry with them out amongst the nations the knowledge of the Greek language, and thereby cause a beginning to be made of learning the other languages also. Now, since the gospel is so dear to us, let us hold fast to the languages. Nor should it be in vain to us that God has caused his Scriptures to be written in two languages only,—the Old Testament in the

Hebrew, and the New Testament in the Greek. These languages God has not despised, but has chosen them for his word, to the exclusion of all others; and we too ought therefore to honor them above all others. And St. Paul glories in this, as a special honor and advantage of the Hebrew, namely, that God's word was written therein. "What advantage then hath the Jew? Much every way; chiefly because unto them were committed the oracles of God."—Romans, 3: 1, 2. King David, too, bestows a like praise upon it, in Psalm, 147: 19.—"He sheweth his word unto Jacob, his statutes and judgments unto Israel. He hath not dealt so with any nation," "nor to any nation revealed his judgments;" as though he would say, "God hath, in this, consecrated and set apart the Hebrew tongue." And St. Paul, in Romans, 1: 2, calls the *Scriptures* holy; doubtless, because the Holy Word of God, is contained therein. In like manner, also, may the Greek be called a sacred language, in that it was chosen before all other languages as that one in which the New Testament should be written, and out of which it should flow, as out of a fountain, into other languages by the means of translations, thus consecrating these too. And let us bethink ourselves, that haply we may not be able to retain the gospel without the knowledge of the languages in which it was written. For they are the scabbard, in which this sword of the spirit is sheathed; they are the casket, in which this jewel is enshrined; the vessel, in which this drink is kept; the room, where this meat is stored. And, as we are taught in the gospel itself, they are the baskets, in which were gathered this bread, these fishes, and these fragments. Yea, should we overlook all this, and (which God forbid!) let go our hold on the languages, then we would not only lose the gospel, but would finally fall away to that degree, that we should be able neither to speak nor to write either German or Latin. And in this, let us take a lesson and a warning by the sad example of the universities and cloisters, where they have not only let the gospel slip away from their grasp, but have also either lost or corrupted both Latin and German, so that the creatures have become but little better than brute beasts, knowing neither how to read nor write, and, more than this, have well-nigh lost even their native intellect too. For this reason, the apostles themselves felt constrained to enclose and bind up, as it were, the New Testament in the Greek language; without doubt, to preserve it for us safe and intact, as in a holy ark. For they saw all that, which was to come to pass, and which even now has been fulfilled; namely, if it were committed to tradition alone, that, amid many a wild, disorderly, and tumultuous clash and commingling of opinions, Christianity would become obscured; which event it would be impossible to guard against, and equally impossible to preserve the plain and simple truth, unless the New Testament were made sure and immutable by writing and by language. Hence, we may conclude that, where the languages do not abide, there, in the end, the gospel must perish. That this is true, is manifest, moreover, from history; for soon after the apostles' time, when the gift of tongues ceased, the knowledge of the gospel, faith in Christ, and the whole system of Christianity, fell away more and more; and later, since the time that the languages went into disrepute, there has very little transpired in Christendom that has been worthy of note; but a vast number of frightful enormities have, on the other hand, been engendered, in consequence of ignorance of the languages. And now, that the languages have again dawned upon us, they have brought such light with them, and they have accomplished such mighty results, that all the world is lost in amazement, and is forced to confess that we have the gospel in as great purity almost as did the apostles; nay, that it has come again in its pristine purity, and is, beyond all comparison, purer than it was in the time of St. Jerome or St. Augustine. And, in fine, the Holy Spirit understands this matter: he does not employ any light or needless means for his work; and he has deemed the languages of such importance, that he has often brought them with him from heaven. Which fact alone ought to be a sufficient inducement to us to cultivate them with diligence and to pay them due honor; and not, by any means, to despise them, now that he is again breathing into them the breath of life throughout the world. "But," you will say, "many of the Fathers have died without the languages, and they nevertheless have been saved." Very true. But what do you say to this, that they so often missed wide of the true sense of the Scriptures? How often is St. Augustine at fault in his commentaries on the Psalter, and elsewhere; and

Hilary, too; yea, and all who, without the aid of the languages, have undertaken to expound the Scriptures? And, though they perhaps may have spoken the right thing, yet have they not betrayed an uncertainty, whether the passage in hand would bear the construction that they have put upon it? But, if we thus, with our own doubtful arguments and our stumbling references, approach to the defense of the faith, will not Christians be contemned and derided by such of their antagonists as are well-versed in the languages? And will not these become more stubborn in their unbelief, inasmuch as they will have good reason to conclude our faith a delusion? To what is it owing, that religion is now so generally scandalized? To the fact alone, that we are ignorant of the languages; and there is no help for it, but to learn them. Was not St. Jerome constrained to translate the Psalms anew from the Hebrew, solely because when there came up any controversy with the Jews, they silenced their opponents with the sneering remark, that the passage cited did not read thus and so in the Hebrew. Now, all the expositions of the ancient fathers, who treated the Scriptures without the aid of the languages, (though perhaps they advocated no unsound doctrines,) are nevertheless quite often based upon doubtful, inaccurate or inappropriate renderings. And they groped about, like a blind man at a wall, quite often failing altogether of the right text, and stupidly overlooking it in their enthusiasm, so that even St. Augustine himself was obliged to confess, in his treatise on the Christian doctrines, that a Christian teacher, who would interpret the Scriptures, must understand not only Latin and Greek, but Hebrew likewise; "for otherwise, it is impossible but that he will stumble on all hands." And truly, there is need of labor enough, even when we *do* know the languages. For this reason, it is one thing with the unlettered preacher of the faith, and quite another with the interpreter of the Scriptures, or the prophet, as St. Paul calls the latter. The unlettered preacher has at his command such a number of clear and intelligible texts and paragraphs in the vernacular, that he can understand Christ and his doctrine, lead a holy life himself, and preach all this to others; but, to set forth the sense of the Scriptures, to put one's self in the van, and to do battle against heretics and errorists, this can never come about, except with the help of the languages. And, accordingly, we must ever, in the Christian church, have such prophets, who shall study and expound the Scriptures, and, besides, shall be stalwart champions of the faith; for all which, a holy life and sound precepts are not enough. Hence, the languages are of the first necessity to a pure Christianity, as they are the source of the power that resides in prophets or commentators; although, we ought not to require every Christian or preacher to be such a prophet, as also St. Paul admits, in 1st Cor., 12: 8, 9, and Eph., 4: 11.

We thus see how it is that, since the apostles' time, the Scriptures have remained so obscure; for, nowhere have any sure and reliable commentaries been written upon them. Even the holy fathers, as we said before, have often fallen into error, and, because they were ignorant of the languages, they very seldom agree, but one says one thing, and another another. St. Bernard was a man of great genius; so much so, that I would place him above all the eminent doctrinists, both ancient and modern. But yet, how often does he play upon the language of the Scriptures, (albeit in a spiritual sense,) thus turning it aside from its true meaning. Hence, the sophists averred that the Scriptures were obscure, and that the word of our God was couched in perplexing and contradictory terms. But they did not see that all that was wanted, was a knowledge of the languages in which it was recorded. For nothing is more plain-spoken than God's word, when we have become thorough masters of its language. A Turk might well seem obscure to me, because I do not understand his speech, when a Turkish child of seven shall easily discern his meaning. Hence, it is a rash undertaking, to attempt to learn the Scriptures through the expositions of the Fathers, and through reading their numerous treatises and glosses. For this purpose you ought to go direct to the language yourself. For the beloved Fathers, because they were without the languages, have at times desecrated at great length upon a single verse, and yet cast such a feeble glimmer of light upon it, that their interpretation was, at last, but half right, and half wrong. And yet you will persist in painfully running after them, when, with the languages, you might be yourself in a position rather to lead than to follow. For, as the light of the sun dispels the shadows of the night, so do the languages render

useless all the glosses of the Fathers. Since now, it becomes Christians to regard the Scriptures as the one only book, which is all their own, and since it is a sin and a shame for us not to be familiar with our own book, nor with the language and the word of our God;—so it is a still greater sin and shame, for us not to learn the languages, especially now that God is bringing to us and freely offering us learned men, and suitable books, and every thing which we need for this purpose, and is, so to speak, urging us to the task, so desirous is he to have his book open to us. O, how joyful would those beloved Fathers have been, if they could have come to the knowledge of the Scriptures, and have learned the languages so easily as we now may do it! How great was their labor, how constant their diligence in picking up but a few of the crumbs, while we may secure half, yea, even the whole of the loaf, with scarce any trouble at all. And how does their diligence put our inactivity to the blush? Yea, how severely will God punish this our apathy and neglect! Again, in order to follow Paul's precept, in 1 Cor., 14: 29, to the effect that we must judge of every doctrine of Christianity, we must, of necessity, first learn the languages. For it may chance that the teacher or preacher shall go through with the whole of the Bible, explaining it as seemeth to him good, whether that be right or wrong, and none of his hearers can dispute him, if none of them is competent to judge of his truth or error. But, to judge, we must know the languages, else we shall have nothing to guide us. Hence, though the faith of the gospel may be set forth in a certain measure by the unlettered preacher; yet such preaching is weak at the best, and we soon become wearied and discouraged, and we faint for lack of nutriment. But, where the languages are well understood, there all is freshness and strength, the Scriptures are thoroughly winnowed, and faith is renewed day by day. Nor should we suffer ourselves to be led astray, because some magnify the spirit, while they despise the letter. So, too, some, like the Waldensian brethren, deem the languages of no account whatever. But, my good friends, the spirit is here,—the spirit is there. I too have been in the spirit; and, I too have seen spirits, (if I may glory of myself.) And my spirit has proved some things, while your spirit has been quietly sitting in a corner, and doing little more than making a vain-glorious boast of its existence. I know, as well as another, that it is the spirit alone which does almost every thing. Had I passed my days in obscurity, and had I received no aid from the languages toward a sure and exact understanding of the Scriptures, I might yet have led a holy life, and in my retirement have preached sound doctrine; but then I should have left the pope and the sophists, together with the whole body of Anti-Christ, just where I found them. The devil does not regard my spirit of near so much account as my thoughts, and my writings upon the Scriptures. For my spirit takes nothing from him, save myself alone; but the Holy Scriptures, and the sayings therein contained, make the world too narrow for him, and strip him of his power. Therefore, I can not accord my praise at all to my Waldensian brothers, for the low esteem in which they hold the languages. For, though their precepts square with the truth, yet they can not but fail often of the right text, and they must necessarily ever be unprepared and unequipped for the defense of the faith, and the uprooting of false doctrines. And for this reason are they so obscure; and their speech is so warped from the standard of the Scriptures, that I greatly fear they *are* not or else *will not abide* in a pure faith. For it is very dangerous to speak of the things of God otherwise, or in other words, than God himself employs. In a word, it *may* be that they have the witness of a holy life and sound doctrine among themselves; but, while they remain without the languages, they will fail precisely where others have failed, namely, in not searching the Scriptures with thoroughness and care, in order thereby to render themselves useful to others. But, since they now have the opportunity to do this, and yet will not do it, let them consider how they will answer for themselves before God.

Thus far I have spoken of the usefulness and the necessity of the languages in their bearing on spiritual concerns and on the welfare of the soul. Now let us look to the body and ask, were there no soul, no heaven, nor hell, and were temporal affairs to be administered solely with a view to this world, whether these would not stand in need of good schools and learned teachers much more even than do our spiritual interests? Nor hitherto have the sophists interested themselves in this matter at all, but have adapted their schools to the spiritual order

alone; so that it was counted a reproach to a learned man, if he was married; and such an one was told, "you are of the world, for you have severed yourself from our order entirely;" as if the spiritual order alone were pleasing in the sight of God, while the temporal, (as they style it,) was given over to the devil and Anti-Christ. It is needless for me here to argue, that all temporal government is of Divine origin and authority; for on this point I have spoken elsewhere, and that so fully that no one, I hope, will venture to deny it; but, the question now is, how to provide able and competent men to govern us. And in his the heathen might justly put us to shame and confusion of face; for they, the Greeks and Romans especially, gave diligent heed to the teaching and training of boys and girls, to fit them for all the various stations of temporal trust and authority, and yet they were entirely ignorant whether this was pleasing in the sight of God or not; so that I blush for our Christians, when I think of it, and for our Germans, above all, who are clowns; yea, brute beasts, one might call them. For they say, "of what use are schools, unless you intend to enter the service of the church?" But surely we know, or ought to know, how necessary, how proper, and how pleasing in the sight of God it is, for a prince, a lord, a magistrate, or any one in authority, to excel in learning and in wisdom, so that he may discharge the duties of his office in a Christian manner. If now, as for argument's sake, I have supposed there *were* no soul, and if we had no need at all of schools or of the languages for the sake of the Scriptures, or of God, yet it would be a sufficient reason for establishing in every place the very best of schools, both for boys and girls, that the world, merely to maintain its outward prosperity, has need of shrewd and accomplished men and women. Men to pilot state and people safely, and to good issues; women to train up well and to confirm in good courses both children and servants. Now, such men must first be boys, and such women, girls. Hence, it is our duty to give a right training and suitable instruction to these boys and girls. "Yes," you will say, "but every one can do this for himself, and can teach his sons and daughters, and bring them up under a good discipline." I answer, verily we see but too well, what sort of teaching and discipline this is. For where it is carried to the farthest extent, and turns out well besides, it does not go any further than this, to impart an easy air, and respectful carriage; otherwise, the children appear to no more advantage than so many machines, who do not know how to converse well upon a variety of topics, and who are the very farthest from being able to give aid and counsel to others. But, if they were taught and trained in schools or elsewhere, where the masters and mistresses were learned and discreet, and could instruct them in the languages, arts, and histories, they would thus become familiar with the great deeds and the famous sayings of all times; would see how it fared with such a city, kingdom, province, man, or woman, and would bring before their eyes, as it were in a mirror, the whole world from the beginning, with all its character and life, its plans and achievements, its successes and failures: by all this they would shape their sentiments, and to all this conform the course of their life in the fear of God. From the same histories, too, they would gain wit and wisdom, and learn what to pursue and what to avoid in life, and so, by and by, be able to counsel or to govern others. But, the instruction which is imparted at home, without such schools, will make us wise only through our own experience. And before we get wisdom thus, we shall be an hundred times dead, and shall have passed our lives in folly; for, to perfect our experience, we need a long series of years. Since, then, young people are always full of frolic and life, and always seeking something to do, and finding their pleasure in action; and since you can not curb their spirits, nor would it be a good thing even if you could; why should we not establish such schools, and unfold before them such arts? For now, by God's grace, matters have taken such a turn, that children are enabled to learn by means of pleasure, and, in sport, as it were, every thing, whether it be languages, arts, or histories. And our schools are no longer hells and purgatories, as they once were, where a boy was forever tormented with their *cases* and their *tenses*, and where he learned nothing, absolutely nothing, by reason of ceaseless flogging, trembling, woe and anguish. If now, we take so much time and trouble to teach children to play at cards, to sing and to dance, why shall we not also spend time enough to teach reading and the other arts, while they have youth and leisure, and while they show both an aptness and a fondness for such things?

As for myself, if I had children and were able, I would teach them not only the languages and history, but singing likewise; and with music I would combine a full course of mathematics. For what would it all require but a mere child's play, as the Greeks brought up their children of old? And what a wonderful people they were, and how well-fitted for all manner of occupations. And alas! how often do I lament my own case, in that I read so few of the poets and historians when I was young, and that there was no one to direct me to them. But, in their place, I was compelled to flounder in all manner of vain philosophies and scholastic trash, true Serbonian bogs of the devil, and with much cost and care, and vast detriment besides, so that I have had enough to do ever since, in undoing the harm they did me.

But, you say, "we can not bring all our children up to be students; we can not spare them; we need them at home to work for us." I answer, "I do not ask for the establishment of such schools, as we have had hitherto, where our young men have spent twenty or thirty years over Donatus or Alexander, and yet have not learned any thing at all. We have now another world, and things are done after a different pattern. And I ask no more than this, namely, that boys shall attend upon such schools as I have in view, an hour or two a day, and none the less; spend the rest of their time at home, or in learning some trade, or doing whatever else you will; thus both these matters will be cared for together, while they are young and opportunities are favorable. For else, they would haply spend tenfold this time in gumming and ball-playing. So, too, your little girls may easily find time enough to go to school an hour a day, and yet do all their household duties; for they now devote more than that to over-much play, dancing, and sleep.

It is very plain that all we need, is a cordial and earnest determination to train up our youth aright, and by this means furnish the world with wise and efficient men. For the devil is better pleased with coarse blockheads and with folks who are useful to nobody; because where such characters abound, then things do not go on prosperously here on the earth.

Now, as for the most promising children, those who we may hope will become fitted for the position of teachers, either male or female, or of preachers, or whom we shall look to to fill other offices in the world and in the church; these we should leave more and longer at schools, or perhaps keep them there altogether: as we read concerning the blessed martyrs, who educated St. Agnes, Agatha, Lucia, and the like. For this purpose, too, were cloisters and monasteries first founded; but now, they have been turned aside to subserve other and most unholy uses. And perhaps it must needs have been so; for the shorn flock are well-nigh fleeced altogether: they have become for the most part wholly unfit either to teach or to guide, for they know nothing except how to pamper their bodies; and this is no wonder, for no one thing besides have they ever learned. But, verily, we must have men of another sort; men who shall dispense to us God's word and his ordinances, and who shall watch for the souls of the people. Such men, however, it will be in vain for us to look for, if we suffer our present schools to decay, without establishing other and *Christian* schools in their place. And though the schools, as hitherto kept, may be still in existence, yet they can only furnish us with blind guides, perverse and corrupt in all their ways.

Hence, there is great need, not for the sake of the young alone, but also for the welfare and the stability of all our institutions, temporal and spiritual alike, that we should begin at once, and in good earnest, to attend to this matter. For, if we delay too long, we may haply find no place for effort, however much we shall desire it, and our most poignant regrets will then be unavailing forever. Consider, for example, the great diligence that King Solomon exercised in this matter, and the interest that he shewed in the young, in that, amid all his royal occupations, he found time to compose a book for their special instruction, viz: the Book of Proverbs. Consider Christ himself: how he called little children to him; with what care he commended them to us, telling us withal that angels wait upon them.—Matt. 18: 2. And in this, he shews us how great a service it is to bring them up well, and, on the other hand, that he is ever exceedingly angry when we offend or pervert them.

Wherefore, dearly beloved rulers, bend yourselves to the work which God so strictly enjoins upon you, which your office involves, which our youth stand

so much in need of, and which neither the world nor the spirit can afford to do without. We have lain, alas! too long in the darkness of corruption and death; too long have we been German beasts. Let us now act as becomes reasonable beings, so that God may mark our gratitude for the good things he has given us, and that other lands may see that we, too, are men; nay, more, that we are men who can either learn somewhat from them, or impart somewhat to them: so, through us, the world shall be made better. I have done my part; and with longing have I desired to bring aid and counsel to this German land. That some, who ought to know better, detest me for it, and throw my faithful counsel to the wind,—all this I must let pass. I well know that others might have done better than I; but, since these have remained silent, I have spoken out, as well as it lay in me to do. Poorly though it has been said, it were better thus, than had I held my peace. And I am in hopes that God will awaken some of you, so that my true admonitions shall not be spilt upon the ground; and that, taking no thought of him who speaks, you may be moved, by the things spoken of, to bestir yourselves.

Finally, it is well for all those who eagerly desire to see such schools and studies established and sustained over Germany, to bear in mind the importance of sparing neither trouble nor expense, to the end that good libraries may be founded, especially in the large cities; since in them both means and opportunities are greater than elsewhere. For if the gospel, together with all the arts and sciences, are to be perpetuated, they must be enclosed and bound up in books and writings. And the prophets and apostles themselves, as I said before, did this very thing. And this was not only that those who minister to us both in temporal and in spiritual things might have wherewithal to read and to study; but also that good books themselves should be preserved and not be lost, so that we might have that knowledge of the languages, which now, by God's grace, we possess. We see, too, the importance that St. Paul attaches to this matter, where he commands Timothy, (1st Ep. 4: 13,) "to give attendance to reading;" and also where he bids him, (2nd Ep., 4: 13,) bring with him when he came the parchments that he left at Troas. Yea, all nations eminent in history have paid attention to this matter; the Israelites more than all. Moses, who made their first record, commanded the book of the law to be preserved in the ark of God, and committed it to the keeping of the Levites. And, whoever desired it, could there have a copy made for himself; Moses, also, laid his prophetic injunction on the king that was to come, to obtain such copy from the Levites. Thus we see clearly that God ordained the Levitical priesthood, that they might, in connection with their other duties, keep and guard the books of the law. Afterward, the collection was enriched and rendered more complete by Joshua, Samuel, David, Solomon, Isaiah, and other kings and prophets. Hence, arose the Holy Scriptures of the Old Testament, which would never have been brought together or preserved, had not God so solemnly and repeatedly commanded it to be done. With this example in view, the monasteries and cloisters in former times founded libraries, albeit they contained but few good books. And what a pity it was, that more pains had not been taken to collect good books, and form good libraries, at the proper time, when good books and able men were in abundance; but, alas, we know too well that, in the gradual lapse of time, all the arts and the languages went to decay, and, instead of books having the ring of the true metal, the devil brought in upon us a flood of uncouth, useless, and pernicious monkish legends; the "Florista," "Græcista," "Labyrinthus," "*Dormi Secure*," and the like; by the means of which the Latin tongue has become corrupt, and there are nowhere any good schools, doctrines, or systems of study remaining. But now, in these latter times, as it has been told us, and as we ourselves may see, there have arisen men who have restored, though as yet in a very imperfect manner, the languages and arts; having picked them out of a few pieces and fragments of old books, that had long been given over to the dust and worms; nor have they yet ceased from their labors, but are renewing them daily. So we search for gold or jewels amid the ashes of some ruined city. In this matter it would be right, and God would justly punish our ingratitude, in not acknowledging his bounty, and taking means in time, and while we can, to keep good books and learned men among us, (but letting them pass by, as though they did not concern us:) it would be right, I say, if he should suffer all this to leave us, and instead of the Holy Scriptures and good books, should bring us Aristotle back again, together with other pernicious books, which

serve only to lead us ever further away from the Bible, that so we might be delivered over again to the monks, those minions of the devil, and to the vain hummeries of the scholastic. Was it not a burning shame that formerly a boy must needs study twenty years or longer, only to learn a jargon of bad Latin, and then to turn priest and say mass? And he, who finally arrived at this pinnacle of his hopes, was accounted happy; and happy was the mother who had borne such a son. But, for all this, he remained a poor illiterate man all his days, and was neither good to cluck nor to lay eggs. Such are the teachers and guides that we have had to put up with, who knew nothing themselves, and accordingly were unable to teach any thing that was either good or true. Yea! they did not even know how to learn any more than they did how to teach. And, why was this so? It was because there were no other books accessible, save the barbarous productions of the monks and sophists. Of course, in such a state of things, we could not look for any thing else than scholars and teachers as barbarous as the books which taught them. A jackdaw hatches never a dove; neither will a fool make a wise man. Such is the reward of our ingratitude, in not using diligence in the establishment of libraries, and in leaving good books to perish, while we have cherished and preserved useless ones. But, my advice is, that you do not carry home all sorts of books, without distinction, thinking of numbers only. I would have a choice exercised in this matter, so that we should not heap together the commentaries of all the jurists, the writings of all the theologians, the researches of all the philosophers, nor the sermons of all the monks. Nay, I would banish all such muck and mire, and provide me a library that should contain sterling books,—books commended to me by learned men. In the first place, the Holy Scriptures should be there, both in Latin, Greek, Hebrew, and German; also in all other languages in which they might be contained. Next, I would have those books which are useful in learning the languages; as, for instance, the poets and orators, and that without inquiring whether they are Pagan or Christian, Greek or Latin. For, from all such are we to learn grammar and style. Next, there should be books pertaining to the liberal arts; and likewise treatises on all the other arts, and on the sciences. And lastly, books on jurisprudence and medicine; though here, too, a wary choice is to be exercised. But, foremost of all, should be chronicles and histories, in whatever languages we could procure them; for these are of singular usefulness, to instruct us in the course of the world, and in the art of government; and, in these, too, we may see the manifestation of God's wonderful works. Oh! how many a worthy saying, how many a noble deed, said and done here in Germany, might we now have had, if they had not, alas! passed clean out of the memory of man! And this, for the reason that there was no one to record them; or, if they were recorded, that no one has preserved the record. This, too, is the reason that they know nothing of us in other lands; and all the world must fain call us German beasts, who only know how to get substance, and then consume it in gluttony and riotous living. But the Greeks and the Romans, and, for the matter of that, the Hebrews, too, have described the events that took place in their midst so minutely and faithfully, that, if but a woman or a child said or did any thing worthy of note, forthwith it was chronicled, so that all the world should read it and know of it; and yet, we Germans remain bound up in ourselves, having neither a thought nor a wish that looks beyond our own interests.

But since, now in these days, God has so graciously come to our aid with all fullness both of art, learned men and books, it is time that we should reap and gather in of the choicest that we can find, and lay up great store of treasure, that we may have wherewith to maintain ourselves in the future out of these golden years, by reason of having improved the opportunity of this rich harvest. For there is danger that it may finally come to this, (and already things are tending that way,) that, through the agency of the devil, good books, which have been restored to us by the art of printing, shall be submerged under a flood of dissolute and pernicious works, in which there is neither sense nor reason; a flood that shall pour in again, as aforetime, and fill every nook and corner of the land. For the devil is surely plotting to bring back the former state of things, so that men shall again painfully stagger under a load of "catholics," "floristas," "modernistas," and all the vile and abominable trash of the monks and sophists; so we shall again be ever learning, and never coming to the knowledge of the truth.

Wherefore, I beseech you, my beloved rulers and friends, let this my faithfulness and diligence bear fruit in you. And, though there be some who deem me of too little consequence to give heed to my counsel, and despise me as one under the ban of tyrants, yet, I hope that one day they will see that I did not seek my own, but only the welfare and the happiness of the entire German nation. And though I were a fool, and yet should light upon some good path, it would be no disgrace to a wise man to follow me. And though I were a Turk and a heathen, yet, should Christians perceive that what I had said was not to my own profit but to that of others, even thus, they could not justly despise my efforts to serve them. There are times, too, when a fool may give better advice than a whole army of counselors. Moses suffered himself to be taught by Jethro.—Exodus, 18: 17.

Now, I commend you all to the grace of God, and I pray him to soften your hearts, so that you may right earnestly espouse the cause of poor, needy, forsaken youth, and through Divine help assisting you, and for the sake of a good and a Christian government here in our Germany, that you may aid and counsel them, in body and in soul, with all fullness and superfluity, to the praise and glory of God the Father, through our Saviour, Jesus Christ. Amen."

VIII. DUTY OF SCHOOL ATTENDANCE OF CHILDREN.

In his sermon, "On keeping children at school," Luther says:

God has given you children and the means of their support, not that you should idolize them, or lead them into the vanities of the world. But he has laid his most solemn injunctions upon you, to train them up for his service.

He speaks in terms of praise of the learned classes, especially the clerical, and presses conviction upon consciences of parents, when, out of avarice, they withhold from study a boy who is strongly bent upon learning.

Cheerfully let thy son study, and should he the while even be compelled to earn his bread, yet remember that you are offering to our Lord God a fine little block of marble out of which he can hew for you a master-piece. And do not regard the fact that in these days the lust for gain is everywhere throwing learning into contempt; nor say, in your haste, "If my son can write and read German and keep accounts, it is enough; I will make a merchant of him;" for they will soon be brought to such a pass, that they would gladly dig ten ells deep in the ground with their fingers, if, by so doing, they could find a learned man; for a merchant, methinks, would not be a merchant long, should law and theology perish. Of this I am full sure, we theologians and jurists must remain with you, or the whole world will go to ruin together, and that without remedy. If theologians turn aside, then the word of God will come to naught, and we shall all become heathen, yea, very devils; if jurists turn aside, then law will fly away, bearing peace with it; and, amid robbery, murder, outrage, and all manner of violence, we shall sink below the beasts of the forest. But, how much the merchant will make and heap together, when peace shall have fled from the earth, his ledger will tell him better than I; and how much good his possessions will do him, when preaching shall be no more, this let his conscience declare.

Luther did not mean, however, to insist that all boys should go through a complete course of study, as we may perceive from the "Letter to the German nobles." He expresses himself in the most decided terms, on the duty of magistrates to compel the attendance of children at school.

I hold it to be incumbent on those in authority to command their subjects to keep their children at school; for it is, beyond doubt, their duty to insure the permanence of the above-named offices and positions, so that preachers, jurists, curates, scribes, physicians, schoolmasters, and the like, may not fail from among

us; for we can not do without them. If they have the right to command their subjects, the able-bodied among them, in time of war, to handle musket and pike, to mount the walls, or to do whatever else the exigency may require; with how much the more reason ought they to compel the people to keep their children at school, inasmuch as here upon earth the most terrible of contests, wherein there is never a truce, is ever going on, and that with the devil himself, who is lying in wait, by stealth and unawares, if so be that he may drain city and kingdom, and empty quite out of them all the brave and good, even until he has removed the kernel utterly, and naught shall be left but a mere shell, full of idle mischief-makers, to be mere puppets in his hands to do his pleasure. Then will your city or your country suffer a true famine, and, without the smoke of conflict, will be silently destroyed from within, and that without warning. Even the Turk manages in another way; for he takes every third child throughout his empire, and trains him to some calling perforce. How much more, then, ought our rulers to put at least some children to school; not that I would have a boy taken away from his parents, only that he should be educated, for his own good and the general welfare, to some calling that shall yield him abundant fruits of his industry. Wherefore, let magistrates lay these things to heart, and let them keep a vigilant look-out; and, wherever they see a promising lad, have him pledged at school.

Those fathers, who feared that learning would be pernicious to their children, Luther pacified by using their own arguments.

But, you say, "how if it turns out ill, and my son become a heretic or a villain? For the proverb says, the scholar's skill turns oft to ill?" Well, and what of it? Venture, nevertheless. Your diligence and toil will not be thrown away. God will reward you according to your faithfulness, whether your work prosper or fail. Besides, you must act on uncertainties in respect to any pursuit whatever, that you may train him for. How was it with good Abraham, when his son Ishmael disappointed his hopes? How with Isaac and Esau? Or with Adam and Cain? Was Abraham on that account to neglect training Isaac up for the service of God? Or Isaac, Jacob? Or Adam, Abel?

IX. THE DIGNITY AND DIFFICULTY OF THE WORK OF TEACHING.

In the same sermon, Luther takes especial pains to magnify the office of the school-teacher.

Where were your supply of preachers, jurists, and physicians, if the arts of grammar and rhetoric had no existence? These are the fountain, out of which they all flow. I tell you, in a word, that a diligent, devoted school-teacher, preceptor, or any person, no matter what is his title, who faithfully trains and teaches boys, can never receive an adequate reward, and no money is sufficient to pay the debt you owe him; so, too, said the pagan, Aristotle. Yet we treat them with contempt, as if they were of no account whatever; and, all the time, we profess to be Christians. For my part, if I were, or were compelled to leave off preaching and to enter some other vocation, I know not an office that would please me better than that of schoolmaster, or teacher of boys. For I am convinced that, next to preaching, this is the most useful, and greatly the best labor in all the world, and, in fact, I am sometimes in doubt which of the positions is the more honorable. For you can not teach an old dog new tricks, and it is hard to reform old sinners, but this is what by preaching we undertake to do, and our labor is often spent in vain; but it is easy to bend and to train young trees, though haply in the process some may be broken. My friend, nowhere on earth can you find a higher virtue than is displayed by the stranger, who takes your children and gives them a faithful training,—a labor which parents very seldom perform, even for their own offspring.

To the like effect, does Luther speak of school-teachers in the Table Talk.

I would have no one enter the ministry, who has not first been a schoolmaster. Our young men, now-a-days, do not think so; they shrink from the toil of teaching,

and rush at once for the sacred office. But, after one has taught school for ten years or thereabouts, he may, with a good conscience, break off; for the labor is great, and the reputation small. Still, as much depends in a city on a schoolmaster as on the preacher. And, if I were not a preacher, I know not the position on earth which I had rather fill. You must not be swayed in this matter by the opinions or the rewards of the world, but consider how God regards the work, and how he will exalt it at the last day.

Though Luther thought so very highly of the office of the teacher, yet he remarks, in his commentary on Galatians, that this office is for the most part in ill-repute with children, and that severe teachers, particularly when their severity is habitual, are any thing but loved by their pupils.

It is impossible that a disciple, or a scholar, can love the teacher who is harsh and severe; for, how can he prevail on himself to love one who immures him, as it were, in a dungeon; that is, who constrains him to do that which he will not, and holds him back from doing that which he will; and who, when he does any thing that has been forbidden him, straightway flogs him, and, not content with this, compels him to kiss the rod too. A most gracious and excellent obedience and affection this in the scholar, that comes from an enforced compliance with the harsh orders of a hateful taskmaster! My friend, do you suppose that he obeys with joy and gladness? But, what does he do when the teacher's back is turned? Does he not snatch up the rod, break it into a thousand pieces, or else throw it into the fire? And, if he had the power, he would not suffer his teacher to whip him again; nay, he would turn the tables on him, and not simply take the rod to him, but cudgel him soundly with a club. Nevertheless, the child needs the discipline of the rod; but it must be tempered with admonition, and directed to his improvement; for, without this, he will never come to any good, but will be ruined, soul and body. A miserable teacher, indeed, would that man be, who should only know how to beat and torment his scholars, without ever being able to teach them any thing. Such schoolmasters there have been, whose schools were nothing but so many dungeons and hells, and themselves tyrants and gaolers; where the poor children were beaten beyond endurance and without cessation, and applied themselves to their task laboriously and with over-pushed diligence, but yet with very small profit. A well-informed and faithful teacher, on the other hand, mingles gentle admonition with punishment, and incites his pupils to diligence in their studies, and to a laudable emulation among themselves; and so they become rooted and grounded in all kinds of desirable knowledge, as well as in the proprieties and the virtues of life, and they now do that spontaneously and with delight which formerly, and under the old discipline, they approached with reluctance and dread.

X. PLAN FOR SCHOOL ORGANIZATION.

Luther writes, in 1524, to Spalatin:

I send you my sketch of the school as it should be, that you may lay it before the elector; and though I do not expect that much heed will be given to it, yet I must venture, and leave the issue with God.

Four years later, (1528,) Melancthon's "Manual of Visitation," made its appearance, in which he communicated a full and complete plan for the organization of schools, which had received the sanction of the elector, and which was, undoubtedly, based upon the sketch that Luther had sent to Spalatin.*

* Luther's plan, above referred to, I have never seen, nor is it, so far as I am aware, on record. That Melancthon's, however, essentially agrees with it we have abundant cause to conclude. Especially does this appear from a letter that Melancthon wrote to Camerarius on the subject of the Manual. He says in this, "you will see that I have written nothing more than what Luther has propounded, *passim*."

XI. UNIVERSITIES.

In the letter to the Christian nobles of the German nation on the elevation of the Christian order, Luther takes occasion to express himself on German universities as follows.

Our universities need a good thorough purging; I must say it, let whoever will be offended. For, what are they, save a few recently instituted, but "places of exercise for the chief young men," as the 2nd Book of Maccabees, 4: 12, hath it; where a free life is led, after "the glory of the Grecians;" where the Holy Scriptures and faith in Christ are lightly accounted of; and where that blind pagan, Aristotle, reigns solitary and alone, even to the dethroning of Christ? Now this is my counsel, that Aristotle's books on physics, metaphysics, the soul, and ethics, which have been ever esteemed his best, should be thrown away, with all the host of those which pretend to treat of natural science, while in reality nothing can be learned from them, of things natural or things spiritual either: add, that what he does advance not a soul has hitherto understood, and yet so many noble intellects have been weighed down and paralyzed under the cost, toil, time and study that they have been forced to devote to him.

But I would, nevertheless, be willing to retain his logic, rhetoric and poetics—abridged, I would prefer them,—for they are useful to direct the young to a good style of speaking, either for the bar or the pulpit; but the commentaries and glosses are useless. Cicero's rhetoric, likewise, may be read, but only the pure and simple text, unencumbered with your unwieldy and interminable commentaries. But now, they teach neither how to plead nor how to preach, but all the result they shew is mere wrangling and stupidity. And we ought, moreover, to adopt the languages, Latin, Greek, and Hebrew, the mathematics and history, all which I commend to the more intelligent. But, the claims of these studies will need no urging, as soon as there is a right earnest desire for a reformation. And truly, this is a matter of the utmost consequence. For, here our Christian youth, and our nobles, in whom rest the hopes of Christianity, are to be taught, and to be fitted for action. And, accordingly, it is my firm belief that a reformation and a renovation of our universities would be a work of greater magnitude than pope or emperor ever undertook, since there is not a more crafty, or a more devilish device on the face of the earth than a university overgrown with the thorns and the briars of godless ignorance.

XII. THE STUDY OF THE BIBLE.

We have given, in the preceding pages, Luther's opinion of many of the university studies. It is not desirable, he says, to read a multitude of books; among such as are read, however, the Holy Scriptures demand our chief care.

Books should be fewer, and we must choose out the best. For many books do not impart knowledge, nor much reading either; but, that which is good, if it be read often, no matter how small its compass, that it is which throws light upon the Word, and inspires piety besides. Yea, even the works of the holy Fathers, are to be read only as a means by which we may the better come at the sense of the Word; but now we read them for themselves and abide in them, without ever coming to the Scriptures; in this, we are like men who look at the guide-posts, but who never follow the road. The dear Fathers would have their writings lead us into the Scriptures; let us, then, carry out their intention. For the Scriptures, and they alone, are our vineyard, in which we are to exercise ourselves, and to labor.

Above all things, let the Scriptures be the chief and the most frequently used reading-book, both in primary and in high schools; and the very young should be kept in the gospels. Is it not proper and right that every human being, by the time he has reached his tenth year, should be familiar with the holy gospels, in which the very core and marrow of his life is bound? Even the spinner and the seamstress impart the mysteries of their craft to their daughters, while these are yet in girlhood. And, again, when the high schools shall have become grounded

in the Scriptures, we then are not all of us to send our sons there, as is the practice now, when numbers alone are regarded, and each will have his boy a doctor; but we ought to admit only those who are best fitted, and who have previously been well trained in the preparatory schools; to which matter, princes or magistrates ought to pay special attention, not allowing any to be sent to the high schools but the most capable. But, where the Holy Scriptures do not bear sway, there I would counsel none to send his child. For every institution will degenerate, where God's word is not in daily exercise; in proof of this, we need but look at those who have been moulded by, or who are now in the high schools. The high schools ought to send forth men thoroughly versed in the Scriptures, to become bishops and pastors, and to stand in the van, against heretics, the devil, and, if need be, the whole world. But, what do we find them? I greatly fear they are no better than broad gates to hell, wherever they do not busily exercise and practice our youth in the Holy Scriptures.

XIII. STUDY OF THE LANGUAGES.

In what high esteem Luther held the languages, we have already had occasion to remark. To Hebrew, in particular, he frequently recurs in terms of praise.

The Hebrew tongue surpasses all others; it is the richest in words of any, and it is pure; it borrows nothing, but has its own independent hue. The Greek, the Latin, and the Germans all borrow; they have, moreover, many compound words, whereas the Hebrew has none. From a simple word the Germans make twenty compounds, which all proceed from it, and are pieced together out of it; as, from *laufen*, to run, come *entlaufen*, to run away from; *verlaufen*, to run wrong; *umlaufen*, to run about; *belaufen*, to run to see; *zulaufen*, to run toward; *ablaufen*, to run from a place; *weglaufen*, to run from one's duty; *einlaufen*, to run in; etc. On the contrary, the Hebrew has no compound, no patchwork word, but each idea is expressed by a word wholly its own. So, again, the word heart, for instance, has with us quite a generic use. For it means a part of the body, as if we should say, he has no heart; that is, he is spiritless and cowardly; or again, my heart tells me that his heart burns within him; that is, that he is angry. In each of these cases, the Hebrew employs a special and peculiar word.

In reference to the manner of learning the languages, Luther lays great stress upon continual practice, though he does not undervalue grammar, by any means.

We learn German or other languages much better by word of mouth, at home, in the street, or at the church, than out of books. Letters are dead words; the utterances of the mouth are living words, which in writing can never stand forth so distinct and so excellent, as the soul and spirit of man bodies them forth through the mouth.

Tell me, where was there ever a language, which men could learn to speak with correctness and propriety by the rules of grammar? Is it not true that even those languages, like the Latin and the Greek, which possess the most unerring rules, are much better learned by use and wont, than from these rules? Is it not then extremely absurd, for one who would learn the sacred tongue, in which divine and spiritual things are discoursed of, to neglect a straightforward and pertinent search into the subject-matter, and attempt, instead, to pick the language out of grammar alone?

He gives his view of the relation of the things signified to the words which express them, as follows, holding that an understanding of words is only possible where there is an understanding of things first.

The art of grammar teaches and shows, what words imply and signify; but we must first learn and know what the things are, and what the matters mean.

Hence, must he, who would teach and preach, first know his subject and its bearings, before he can speak of it; for grammar only teaches the names and forms of the words which we use to set forth our subject.

Our knowledge is two-fold; relating to words on the one hand, and on the other to things. And accordingly, he who does not possess a knowledge of the thing or the subject of which he is to speak, will not find a knowledge of words of any service to him. There is an old proverb, which runs thus: If you do not know what you are talking of, you may talk forever, and no man will be the wiser. Many such people there are in our day. For we have many very learned and very eloquent men, who appear exceedingly foolish and ridiculous, because they undertake to speak of that which they have never understood.

But, whoever has the matter inwrought into his being, so that he comprehends it fully, is an able teacher, and reaches the heart, whether he be eloquent, and have a ready flow of words, or not. So Cato, when he spoke in the council, had more influence than Cicero, albeit, his language was rough and devoid of all polish and elegance; and, though his speech was not skillfully framed to produce conviction, yet no one ever gave a thought to his manner.

Accordingly, the understanding of words, or grammar, is easy, when we well understand the subject; as Horace also says: that words come of their own accord, when the subject has been duly admitted to the mind, retained there, and fully considered; but, where the subject is obscurely apprehended, there the utmost knowledge of words will do no good. I have dwelt upon this point so fully for this reason, namely: that you may know, if you shall ever read the Rabbins, what sort of masters you will have; they may well understand the language, but the subjects that are conveyed in it they know nothing about, nor can they ever teach them in a true and proper manner.

But, through the goodness and the grace of God, we have the knowledge and the understanding of the matters, of which the Holy Scriptures treat, while they are left in blindness. Hence, though they know the grammar, yet they have no correct understanding of the Scriptures; but, as Isaiah, (29, 11,) saith: "And the vision is become as the words of a book that is sealed. Who then shall follow them?"

Now let no one think or conclude from all this that I would reject the grammar, for this is altogether necessary; but this much I do say: he who, with the grammar, does not study the contents of the Scriptures also, will never make a good teacher. For, as a certain one has said, "the words of the teacher or preacher should follow the subject, and grow, not in his mouth, but out of his heart."

XIV. NATURAL SCIENCE.

In commenting on Erasmus' want of appreciation of natural science, Luther remarks:

We are now in the morning-dawn of a better life; for we are beginning again to recover that knowledge of the creation which we lost through Adam's fall. By God's grace, we are beginning to recognize, even in the structure of the humblest floweret, his wondrous glory, his goodness, and his omnipotence. In the creation we can appreciate in some measure the power of Him, who spake and it was done, who commanded and it stood fast. Consider the peach-stone: although it is very hard, yet, in its due season, it is burst asunder by the force of the very tender germ which is inclosed within the shell. But all this Erasmus passes by, not regarding it for a moment; and views this new knowledge of the creature only as cows look upon a new gate.

XV. HISTORY.

The importance that Luther attached to history, we have before adverted to; he has more, to the same purport, in his preface to Galeatti Capella's history of the Duke of Milan.

Says the highly-renowned Roman, Varro, (so this preface runs,) the best instruction is that which combines illustration and example with precept. For through these we apprehend the speech or the doctrine more clearly, and also

retain it the more readily in our memories ; but, where the discourse is without illustration, no matter how just and excellent it may be in itself, yet it does not move the heart with such power, neither is it so clear, nor so easily remembered. Hence, we may see what a priceless value resides in histories. For all that philosophers, sages, and the collective wisdom of humanity can devise or teach, relative to the conduct of life, this, history, with her incidents and examples, enforces, causing it all to pass before our eyes, so to speak, as if we ourselves were on the spot, beholding those things in action, whose nature we had heard before in doctrine or in precept. There we learn what things those who were pious and wise pursued, what they shunned, and how they lived, and how it fared with them, or how they were rewarded ; and again, how they lived who were wicked and obstinate in their ignorance, and what punishments overtook them.

And did we but think of it, all laws, arts, good counsels, warnings, threatenings, terrors,—all solace, strength, instruction, foresight, wisdom, prudence, together with every virtue,—flow from records and histories as from a living fountain. For histories are an exhibition, memorial, and monument of the works and the judgments of God ; how he upholds and rules the world, and men more than all, causing their plans to prosper or to fail, lifting them on high, or humbling them in the dust, according as their deeds are good or evil. And though there be many who neither know nor regard God, yet even such can not fail to start back before the portraiture of history, and to fear lest the same evils come upon them, too, that overtook this or that person, whose course is graven, as a warning, forever upon the page of history ; whereby they will be far more deeply moved, than if you should strive to restrain and curb them with the bare letter of the law, or with mere dry doctrine. So we read, not in the Holy Scriptures alone, but in pagan books too, how the men of old instanced and held up to view the example of their forefathers, in word and in deed, when they wished to arouse the enthusiasm of the people, or when on any occasion they would teach and admonish, or warn and deter.

Hence, too, historians are the most useful of men, and the best of teachers. Nor can we ever accord too much praise, honor, or gratitude to them ; and it should be the work of the great ones of the earth, as emperors, kings, and the like, to cause a faithful record to be made of the history of their own times, and to have such records sacredly preserved and set in order in libraries. And, to this end, they should spare no expense, which may be needful, to educate and maintain those persons whose talents mark them out for this task.

But he who would write history, must be a superior man,—lion-hearted and fearless in writing truth. For most manage to pass by in silence, or at least to gloss over the vices or the mischances of their times, to please great lords or their own friends ; or they give too high a place to minor, or it may be, insignificant actions ; or else, from an overweening love of country, and a hatred toward foreign nations, they bedizen or befoul histories, according to their own likes or dislikes. Hence it is, that a suspicious air invests histories, and God's providence is shamefully obscured ; so the Greeks did in their perverseness, so the Pope's flatterers have done heretofore, and are now doing, till it has come to this, at last, that we do not know what to admit or what to reject. Thus the noble, precious, and highest use of history is overlooked, and we have only a vain babble and gossip. And this is because the worthy task of writing annals and records is open to every one without discrimination ; and they write or slur over, praise or condemn, at their will.

How important, then, is it, that this office should be filled by men of eminence, or at least by those who are worthy. For, inasmuch as histories are records of God's work, that is, of his grace and his displeasure, which men should believe with as much reason as if the same stood written in the Bible, surely they ought to be penned with all diligence, truth and fidelity. This, however, will, I fear, never come to pass, unless the enactment which was in force with the Jews shall again bear sway. Meanwhile, we must rest content with our histories as they are, and reflect and judge for ourselves, as we peruse them, whether the writer has been warped through favor or prejudice, whether he praises or blames either too little or too much, according as the persons or the events that come under his notice, please or displease him ; just as in such a loose government as ours, we must endure to have carriers dilute their foreign wine with water, so that we can not buy the pure growth, but must content ourselves with getting some part pure, be this more or be it less.

XVI. LOGIC—RHETORIC.

Luther has much to say, in the "Table Talk," both on logic and on rhetoric.

Logic is a lofty art; it speaks direct, whether of wrong or right, as if I should say, "give me some drink." But rhetoric adds ornament, as thus: "give me of the pleasant piece in the cellar, the curling, sparkling juice, that makes the heart merry."

Logic tells us *how* to teach every thing; still, for all this, though we have learned it so that we thoroughly understand it, it does not, of itself, give us the *ability* to teach any thing; for it is only an instrument and a tool, by means of which we may impart, in a correct and methodical manner, that which we already understand and know. For instance, I can not speak of mining or of the duties of the overseer of a mine, because I neither know how to open a mine, nor how to sink a shaft, nor can I tell where the galleries should run; but, had I searched into this matter, and become familiar with it, I should then be better able to speak on the subject than the surveyor himself. Logic does not furnish the subject of which we are to speak, or the branch that we are to teach; it only directs us how to teach such branch, or to speak of such subject, in a just and appropriate manner, with method, directness, and brevity.

Logic is a useful and a necessary art, which we ought with as much reason to study and to learn as we do arithmetic or geometry. And, though there are some heads so sharp by nature, that they can draw conclusions and form judgments, on almost any subject, from the impressions they receive from it, yet this is an uncertain and a dangerous gift, unless art come to its aid. For logic gives us a clear, correct, and methodical arrangement, showing us the grounds of our conclusions, and how we may know, to a certainty, from the nature of the subject itself, what is right or wrong, and what we should judge and decide.

Logic teaches, rhetoric moves and persuades; the latter controls the will, the former the understanding. St. Paul includes them both, in Romans, 12: 7, 8: "He that teacheth, let him wait on teaching; or he that exhorteth, on exhortation."

The most excellent fruit and use of logic is to define and describe a thing with completeness and brevity, and, in accordance with its nature, neither more nor less than it is. Hence, we should accustom ourselves to use good, pointed, and intelligible words, words that are in common use, and thereby fitted to call up and set forth the matter, so that men may understand just what it includes. And, if any man has this power, let him give God the glory, for it is a special gift and grace, since blinded writings often disguise their sentiments designedly, with astonishing, far-fetched, or obsolete words; inventing a new style and mode of speaking, so double-sided, double-tongued, and intertangled, that, when convenient, they can bend their language into whatever meaning they choose, as the heretics do.

Eloquence does not consist in a tinsel flourish of gaudy and unfamiliar words, but in that chaste and polished expression, which, like a beautiful painting, shows the subject-matter in a clear, suitable and every way admirable light. They who coin and foist in strange words, must also bring in strange and novel things, as did Scotus, with his "hiecity," "nominality," etc., or the Anabaptists, with their "immersion," "purification," "quietism," etc. Hence, you should beware, above all things, of those who make frequent use of new, unfamiliar and useless words; for such a mode of speaking is at war with all true eloquence.

XVII. MATHEMATICS.

Luther was desirous, as we have seen, to have the mathematics introduced into the universities. In astronomy, he took ground against Copernicus. Nevertheless he could not abide astrology, though Melancthon maintained its truth. Among other arguments against it, that of Augustin was his chief stronghold, namely, that Esau and Jacob were both born at the same time, consequently under the same constellation, and were, nevertheless, wholly unlike each other in all respects.

XVIII. PHYSICAL EXERCISE.

Exercise and music both, Luther commends highly; and he opposed, as we have seen, the moping and joyless tenets of the monkish teachers.

It was admirably provided and ordered by the ancients that the people should have honorable and useful modes of exercise to resort to, so that they might not fall into gluttony, lewdness, surfeiting, rioting, and gambling. Accordingly, I pronounce in favor of these two exercises and pastimes, namely, music, and the knightly sports of fencing, wrestling, etc.; of which, the one drives care and gloom from the heart, and the other gives a full development to the limbs, and maintains the body in health. And another argument for them is this, that they keep men from tippling, lewdness, cards, and dice, which, alas! are now so common every where, at court and in the town, where we hear nothing but "fair play!" "more wine!" and the like phrases. And then, in their flush, they stake you, perhaps, an hundred gulden or more, at a cast. So it goes, when those other honorable exercises and knightly sports are scorned and neglected.

XIX. MUSIC.

Music was Luther's joy and delight.

Music is one of the fairest and best gifts of God; and Satan hates it, nor can he bear it, since by its means we exorcise many temptations and wicked thoughts. Music is one of the best of the arts. The notes breathe life into the words. It chases away the spirit of melancholy, as we may see by the case of King Saul. Some of our nobility think that they have done some great thing, when they give three thousand gulden yearly toward music, and yet they will throw away, without scruple perhaps, thirty thousand on follies. Kings, princes and lords must maintain music, (for it is the duty of great potentates and monarchs to uphold excellent, liberal arts, as well as laws,) inasmuch as the common people and private individuals desire it, and would have it if their means were sufficient. Music is the best solace to a wearied man; through it, the heart is again quieted, quickened, and refreshed; as that one says, in Virgil:

"Tu calamos inflare leves, ego dicere versus."

Do you play the air, and I will sing the verse.

Music is a half-discipline, and it is a teacher; it makes men gentler and milder, more mannerly and more rational. And even poor violinists or organists do us this service, they show us what a noble and excellent art music is, as we can distinguish white the better if we place black beside it.

On the 17th of December, 1538, while Dr. M. Luther was entertaining some musicians at his house, who sung many sweet tunes and lofty cantatas, he exclaimed, in his rapture: "If in this life our Lord God has scattered around and heaped upon us such noble gifts, what will it be in that immortal life, where all is perfection and fullness of delight? But here we have only the beginning, the *materia prima*. I have always loved music. He who knows this art is in the right frame, and fitted for every good pursuit. We can not do without music in our schools. A schoolmaster must know how to sing, or I would not allow him to teach. Nor ought we to ordain young theologians to the sacred office, unless they have first been well-tried and practiced in the art in the school." As they sang a cantata of Senffel's, Luther was filled with emotion and wonder, praising it highly. He then said: "Such a cantata it is not in my power to compose, even though I should try to my utmost; nor, on the other hand, could Senffel expound a psalm as well as I. For the gifts of the Holy Spirit are of divers kinds; so in one body there are different members. But no one is contented with his own gift, no one rests satisfied with what God has bestowed upon him, for all wish to be, not members merely, but the whole body.

Music is a fair, glorious gift of God; and it lies very near to theology. I would not part with my small faculty of music for vast possessions. We should practice the young continually in this art, for it will make able and polished men of them.

Singing is the best art and exercise. It has nothing in common with the

world ; it is far-removed from the jar and wrangling of the court and the lawsuit. Singers, too, are never overwhelmed with care, but are joyful ; and, with their singing, they drive care out and away."

And he said further : "How comes it to pass that, in carnal things, we have so many a fine poem, and so many a sweet song, while, in spiritual things, all is so cold and listless ?" He then recited some German odes, *The Tournament*, by Bollen, etc. "I hold this to be the reason, as St. Paul has expressed it, in Romans, 7 : 23 ; 'I see another law warring in my members,' a law that will not be overcome, and that does not yield up its power so readily as does the law in the soul. If any one despises music, as all the fanatics do, I can not confide in him. For music is a gift and bestowment of God ; it does not proceed from man. And it drives away the devil, and makes men happy : in it, we forget all anger, lasciviousness, pride, and every vice. Next to theology I rank music, and hold it in almost equal honor. For look how David and all holy men have uttered their heavenly meditations in verse, rhyme and song. *Quid pacis tempore regnat musica.*"

I am convinced that my readers would feel aggrieved, were I to offer them an apology for dwelling so long upon Luther. In fact, were any apology in place, it would be for my having omitted so much ; and this I have done because I feared lest I might communicate some passages that we were all perfectly well acquainted with. Among such I would place the admirable preface to *the* little book,—the book which he composed at the same time with the writings above cited,—the shorter catechism.

Who will not be delighted to recognize this great man as a reformer of German education, also ? His admonitions have reached the hearts of myriads of our countrymen, awakened many sleeping consciences, and strengthened many feeble hands ; his utterances have been to both princes and people as the voice of God.

And he has deserved such confidence in the fullest measure, because he also received into his own heart, so abundantly, that faith which worketh by love. What could not such a divinely-governed, and untiring love accomplish, seconded as it was by such great gifts ; so clear an eye, so sound an understanding, such aptness for the languages, such creative skill in speech, such a soaring imagination, and such profound speculation ? Who among all of Luther's contemporaries can compare with him in genuine, comprehensive culture ? Only let us not gauge culture with the measuring-rod of the Latinized school pedant, neither with that of the Mephistophelian scoffer ; for we have to do with large spiritual gifts, which were brought into the service of a consecrated, determined, irresistible will,—a will made free by the Son, a will that governed itself, inasmuch as it purposed to serve God, and God's will alone.

* On this head, also compare Luther's letter to Louis Senffel, musician to the Duke of Bavaria. De Wette, 4, 180

X. LETTERS TO A YOUNG TEACHER.

BY GIDEON F. THAYER,

Late Principal of Chauncy-Hall School, Boston.

IN this age of *steam*, when utility and conservatism are often compelled to yield to pretension and hurry, irrespective of positive gain or loss to the community, no one thing connected with school education seems to have suffered more at the hands of the would-be reformers or "new lights" among the teachers of our times, than *penmanship*, or the methods of teaching it in schools. And, consequently, the handwriting of our young men is very inferior to that of the last generation, comparing like classes with like. This may be shown by comparing the signatures to the Declaration of Independence, or the names of the members of the Cincinnati, as they were enrolled at the close of the Revolutionary War, with any similar number of signatures to any public document of the present day. And yet it cannot be denied that this department of elementary education has lost nothing of its importance, either positive or relative, by the introduction into the schools of a variety of other studies, — studies unquestionably useful, but not to be pursued at the sacrifice of a good handwriting, whatever their grade or character. Men may live and thrive, occupy responsible and useful positions in society, serve their fellow-men, become good patriots, philanthropists, and Christians, and know little or nothing of geometry or physiology, but to write illegibly or badly is almost to forfeit one's respectability. Of course, there are exceptions to the rule. We all know individuals, eminent for their talents, knowledge, and position, whose handwriting is as difficult to decipher as the hieroglyphics of Egypt; men who seem to glory in this peculiarity, and who lose nothing in the public estimation from its indulgence. Still, they are not suitable examples for others, in this respect. No merchant would employ them in his counting-room; no author would choose such for amanuenses; and surely they would be the last placed in the teacher's chair.

We must, therefore, assume that it is as indispensable to *write* well as to do any other thing well. This idea was believed and practised upon until within twenty-five or thirty years ago. When what is called the "double-headed system" was universally prevalent in the public schools of the then town of Boston, the writing-master was appointed on account of his supposed dexterity in the teaching of penmanship, and no one was chosen, either master or assistant, who was not himself a good penman. And what was the consequence? The pupils of these schools became distinguished for the beauty of their chirography. They needed no better recommendation to the favor of merchants in distant cities, than to have been educated at one of them. It is true, the range of their attainments was not extensive; but what they professed to do they did well; and when they left school for the counting-room, they were prepared to enter upon the first steps of a business life, to the satisfaction of their employers, and with a rational prospect of personal success.

It must be acknowledged that this preparation was obtained at too great a cost of time and labor to the teacher, and that more occupation should have been furnished to the pupil; but let it be remembered that this was before the introduction of metallic pens into the schools, when two persons — the master and the usher — were obliged to make and mend a thousand quill pens a day in a single school; which service occupied so considerable a portion of the time as to leave but little, comparatively, for other duties. Besides, there were two large apartments in each building, one of which was devoted to instruction in Reading, Grammar, Geography, and (occasionally) Composition; and the other to Writing and Arithmetic, — a portion of the scholars attending one department in the forenoon, and the other in the afternoon — alternating between the two. But, if the very most was not made of the hours in school for the benefit of the children, a greater evil was avoided — that of an excess of lessons for study, not only in the school halls, but at the fireside at home. This evil practice has, of late, attained such a point as to threaten the health and life of the children, and to entail upon the community a race of enfeebled beings, crushed or enervated in body, by overloading and overworking the mind, while little or no physical relaxation or exercise is allowed, to neutralize the effect of the unnatural process.

In some respects the system of these schools has been improved; and most of the large towns and cities in Massachusetts have followed, or are following, the lead of the metropolis. It is well to have *one* head, and make him responsible for the condition of all the

departments; but where this last thing is not done, — where the several teachers of a large school act independently of the principal teacher, — the arrangement may prove to be a retrograde step; and this, in fact, I apprehend to be the condition of some of the schools about us and elsewhere.

But, on the particular topic under consideration, — the value of penmanship, and its present deterioration, — I have some additional remarks to make, and some views to offer, corroborative of my own, from other quarters.

EDWARD EVERETT is indebted to the public schools of Boston for his early education. His handwriting is not only perfectly legible, but neat and handsome. In one of his recent speeches, at a school-gathering in the city, he says, — alluding to the subject of writing, as taught in the days of his boyhood, — “that beautiful old Boston handwriting, which, if I do not mistake, has, in the march of innovation (which is not always the same thing as improvement), been changed *very little for the better.*” And this sentiment, divested of the Governor’s courteous manner, means, I presume, “has been changed” *very much for the worse.*

HENRY WILLIAMS (late *junior*), for seventeen years principal of the Winthrop School in Boston, and second to no one of the public teachers in the beauty of his penmanship, — acquired under the instruction of BENJAMIN HOLT, formerly of the Mayhew School, — says, in an article on Writing, in the *Massachusetts Teacher* for Nov., 1855: “Writing is an *imitative art*, which requires a careful and exact training. The eye and the hand, the taste and the judgment, are constantly employed in producing the desired result, until the hand has attained a cunning which enables it to execute, almost mechanically, every required movement. We mean that volition becomes so rapid, that execution seems, after long practice, to be but the habit of the hand; illustrated thus by Pope:

‘ True ease in *writing* comes from art, not chance,
As those move easiest who have *learned* to dance ;’

affixing to ‘writing’ the technical meaning which is often assigned to it. This *art* is partly mechanical and partly a mental operation. At first the mental operation needs as much to be watched over and aided as the mechanical operation of the hand; indeed, much more. You give a child a letter to imitate. What is the process which the task involves? He observes the character, but not with the practised eye, the taste and judgment of a penman. He then attempts to put

into form and outline his own idea of the letter. The result is a feeble abortion. He tries again and again. His teacher will tell him, we think, if he is judicious, to do it slowly, until he is quite successful. Those who have had much experience in teaching young children, will credit the assertion, that it will generally require two or three years' training before the fifty-two characters of the large and small alphabets are mastered. Hurrying only retards the child's progress. After he has learned, by long and careful painstaking, to imitate these forms, he then learns to combine them; to exercise his judgment in spacing the characters; to discern the fitness of their relative lengths and proportions; and to preserve carefully an exact parallelism in their formation."

The following article, from a late Boston paper, — I know not what one, — is evidently the work of an individual well acquainted with his subject, as far as *Writing* is concerned, — although I dissent from his views of what is doing in *Arithmetic*, believing that that subject receives at least as much attention in the schools as it can fairly claim; — and I gladly avail myself of his testimony to strengthen my position :

"PENMANSHIP. — Within the present generation there has been more deterioration in penmanship than in any other branch of education. In days of yore a good, round, legible handwriting was considered indispensable to our youth; and our fathers, if they could get no more of an education, were pretty sure to understand Arithmetic as far as the Rule of Three, and to write a good hand. And we are heterodoxical enough to believe that for the practical purposes of business, that education, limited as it was, is preferable to the cramming which boys undergo now-a-days, to the neglect of chirography, and the simple rules of Arithmetic. * * * *

"Why are the writers of the present day less rapid and less legible, chirographically, than they were fifty or even twenty years ago? We answer, first, because they are not properly taught. A writing-master in the olden time always insisted upon three points — first, that the pupil should commence with, and be drilled upon, large letters, until he knew how to shape them regularly and well; secondly, that there should be a rotundity to all the letters which admit of it; and, thirdly, that the pupil, in school, should always write slowly.*

* The *third* point was a school axiom fifty years ago, and was embodied in the distich,

"Learn to write *slow*; all other graces
Will follow in their proper places." — T.

“Now mark the consequence of such teaching. The pupil made straight marks until he could make really straight ones, and write them parallel to each other. Then he was advanced to curve letters, and finally to those letters combined of straight lines and curves. He was required to consume an hour in writing his copy of twelve lines, or one line in five minutes. By this slowness his eye became accustomed to form. After writing single letters, he was taught to write words, and then sentences, and for the first year or two he was kept exclusively upon what the schoolmasters call large hand. Then he was allowed to write copies of a medium hand, and finally of fine hand.

“No flourishing was then allowed upon copy-books. Boys were not taught to draw ornithological specimens with the pen, nor to use the pen for any other than its proper purpose. They, therefore, came from school legible penmen. Of course the reader will ask what is the cause of more illegibility in penmanship now? We propose to answer.

“Some ten or fifteen years ago a new race of writing-masters appeared on the stage, who proposed to make their pupils exchange a very bad for a very good style of writing in from ten to twenty lessons. They called their systems by inappropriate names, such as ‘anti-angular,’ and the like. For a time they claimed to be, and on the surface appeared to be, successful. Their systems, mainly professing to be anti-angular, were peculiarly a combination of straight marks and very acute angles, so as to destroy the proper rotundity of the letters. An incautious observer, from the pains that they took to make their pupils observe *size* in the formation of the letters, would say that their handwriting looked better after the twenty lessons than before; but, if he would attempt to read it, he would find the new hand more illegible than the old.

“Multitudes were duped in this manner, and, having expended their money and their time, soon after relapsed into the old hand which they had previously acquired, and such did not again trouble the writing-masters who teach in a very few lessons. That experience taught the people, what they ought to have discovered by a little reflection, that chirography is a mechanical art, and needs long-continued practice to make its subject a good penman. To make a bad penman into a good one, in from ten to twenty, or even in a hundred lessons, is precisely similar to giving a boy a skilful use of the plane in just so many hours. Nay, worse than that; for the plane can be skilfully managed by an eye competent to judge of smoothness alone; but the penman must appreciate size, form, regularity,

and beauty. Unless he does all this, his penmanship will be poor; and he must not only appreciate these qualities, but be able to execute them in his copy. Talk of imparting this in twenty lessons! The proposition is simply absurd. If he has a correct taste and a fancy for chirography, he will get a good handwriting by years of attention, and then he may write fast without writing illegibly. There is no shorter road to good penmanship, maugre the pretensions of quacks and sciolists."

Another reason for the falling off in the quality of the writing of the present day is, I apprehend, a low estimate of its value in the minds of those who appoint the teachers.* If the candidate is found to be what is called a "good scholar," deficiency in penmanship is hardly considered a bar to his election; although to write well is as essential a qualification in a good teacher of a common school, as proficiency in any one of the studies embraced in the school course. There should be an acknowledged standard by which to determine merit in this important branch of learning. The spirits of the past renowned penmen of England and our own country should be evoked, — Champion, Milne, Tileston, Carter, Fox, the Webbs, Holt, and others, possessed like them of undisputed skill in teaching and executing good writing. If candidates for places could make no approach to a good degree of skill like theirs, they should not be chosen. Let the voice of the community resolutely demand this, and it would be forthcoming. It is attainable by most of those who wish to become teachers, — on the condition of determined resolution and perseverance; and they who are unable or unwilling thus to secure it, would do well to adopt some other sphere of labor.

In pointing out the details in the method of teaching penmanship, I should accept most of the sentiments and suggestions quoted above from the Boston newspaper, not only for their being time-honored, but because they are consonant with methods that have been found

* It is possible that our fathers exaggerated the worth of good writing; but the effect of their estimate of it on the young was highly beneficial. It excited their enthusiasm and their most earnest efforts, while they wrote, as one of their "pieces" for "Selectmen-day," in a style of perfect beauty:

"Three things bear mighty sway with men:
The Sword, the Sceptre, and the Pen;
Who can the least of these command,
In the first rank of Fame shall stand!"

A revival of a portion of this spirit would be a decided improvement on the now prevalent apathy on the subject.

successful wherever they have been steadily practised. As in Drawing, so in Writing, the straight line should constitute the first lesson, and should be practised till the pupil can form it perfectly. He should have a clear and distinct model of what he is to imitate, from the first mark to the last lesson in finished penmanship. Let the strokes be made in pairs, thus: // ¹; it will aid him to secure perfect parallelism, or equality of slope. This accomplished, the stroke with a curve at the bottom follows, thus: *l* ²; next, the first element of the small *n*, thus: *o* ³; then the second element, thus: *z* ⁴; next the *o* ⁵; then the *f* ⁶. He is now prepared to practise on the *o* and all the letters formed from the *o*, — *a*, *d*, *g*, *q* ⁷. Let him next practise on all the letters whose elements he has become familiar with, namely, *a*, *d*, *g*, *h*, *i*, *j*, *l*, *m*, *n*, *o*, *p*, *t*, *u*, *y* ⁸; dividing them into several portions for practice; and, finally, the others, which are more or less irregular: as, *b*, *c*, *e*, *f*, *k*, *r*, *s*, *v*, *w*, *x*, *z*, *S* ⁹, also broken into divisions.

Having thus mastered the small alphabet, he may pass to the capitals,¹⁰ either broken up into their elements, or taken whole in their alphabetical order. If the drilling up to this point has been successful, he may attempt the full-formed capitals at once. After sufficient practice on the single letters, small and large, he is prepared for combinations. Let him then join an *m* to each of the other letters of the alphabet, as *am*, *bm* ¹¹, &c., following this combination with a still further practice of the *m* connected with each of the other letters, large and small, thus: *Amma*, *Bmmb* ¹², &c. This method, well persevered in, will have prepared him for what teachers call joining,¹³ or joining hand; in it we begin to introduce in the copies sentiment, facts in History, Geography, Art, Chronology, as far as it can be done in a single line, and make it the vehicle of important scraps of knowledge, which the pupil inevitably stores away in his memory, for use in all future time.

And here it may not be amiss to say that, on taking up *joining*, you should insist on attention to everything in the copy; not merely the dotting of the *i*'s, and crossing the *t*'s, but to the punctuation, —

¹ This may be called No. 1 in the series of copies; ² this No. 2; ³ No. 3; ⁴ No. 4; ⁵ No. 5; ⁶ No. 6; ⁷ No. 7; ⁸ No. 8; ⁹ No. 9; ¹⁰ No. 10; ¹¹ No. 11; ¹² No. 12; ¹³ No. 13.

allowing no comma, apostrophe, admiration mark, question, or other point due, to be omitted. Although this may not, strictly speaking, belong to the teaching of penmanship, it should not be separated from it when thought is to be expressed in what is written; and the injunction is introduced here because of the very general neglect of the matter in the schools.

Require, also, the name of the writer, with the date, correctly pointed, too, to be placed at the foot of every page in the writing-book.

After a practice continued till the principles are mastered in all the relations into which they may be introduced, let the medium hand¹⁴ be attempted, with little variation in the style of the letters, excepting in the size. Next the fine hand,¹⁵ which is that of the ordinary business of practical life.

As nothing acquired by teaching and training can be long retained but by careful practice, a general system of (so to call them) reviews should be adopted; thus: when No. 1 of the series of copies has been well mastered, let it be still practised on the left-hand page of the copy-book, and No. 2 be commenced on the right; this conquered, let No. 3 take the place of No. 2 on the right, and No. 2 fall back to the left-hand page; and thus onward, till No. 13—the large joining hand—be reached. Let the copies be arranged alphabetically, and the whole alphabet be carried through several times before the next grade—the medium hand—is undertaken, and this in like manner till fine hand be introduced; the same order of grading as before still continued—large hand on the right, to half-joining (No. 12) on the left; medium on the right to large on the left; and fine on the right to medium on the left. In this manner all that the pupil gains is retained, and the whole system held together as by the links of a chain.

The use of the pencil and slate precedes that of the pen; and, generally, the form of the figures used in numbers is learned before writing with a pen is begun. But, if you would have these figures finished with taste and beauty, let them be included in your regular lessons in the copy-books. And, to secure this with certainty, let, say, every eighth page be devoted to figures; and, if you do not “set the copies” in the books yourself, let the books, when new, be marked with an F on one side of every fourth leaf, that the figure copies may not be forgotten. If the pupils in your school who write are few, set the copies for them. They will enjoy it, and strive the more to

¹⁴ No. 14; ¹⁵ No. 15.

imitate your style, and will doubtless improve the faster for it. But if the writers are too numerous for this, write the copies, — don't use engraved ones, — as well as possible, on slips of paper pasted to card or pasteboard; and require the pupil, when writing, to point the fore finger of the left hand at every letter or figure before attempting to make it himself, and he can hardly fail to write like his teacher.

If your own writing should not satisfy you as a model, procure sets of the old Boston slips, even though engraved.

We have thus run over all the steps in the order of the lessons; and general and business-like practice is now to follow. Portions of well-selected poetry may occasionally, at this stage, take the place of the single-line copies, intermitting with mercantile forms, such as Receipts, Bills of Parcels, Notes of Hand in variety, Bills of Exchange, Accounts Current, Invoices, &c., in general use, every step in which will tend to qualify the boy for what he will have occasion to know and to use, on emerging from the school-room and entering on the career of manhood. If convenient, it would be well to have some instruction and practice with the pen in the various kinds of printing; at least, as far as the large and small letters in Roman and Italic are concerned;* and would often be found of important use on leaving school.

In sitting to write, the left side of the body should be partially turned toward the table, desk, or form, touching it gently, but not pressing it, while the right arm should be drawn nearly to the other side of the body. The pen should be held with some degree of freedom under and between the nail of the thumb and that of the second finger, while the fore finger falls upon the pen to steady it and aid in guiding its motion; the first and second fingers to be kept as nearly straight as practicable; the thumb to be bent. The third and fourth fingers should rest, partially bent, under the others, for their support, yet permitting the latter to play easily over them; and the top of the pen should incline toward the shoulder, thus bringing the nib to press squarely on the paper.

With *beginners* it is essential to insist on a uniform observance of this manner of holding the pen. It is deemed by persons of experience, teachers and non-teachers, to be the true method, approving itself to taste as well as to utility. But if pupils, when first falling under your care, have already, by the indulgence of years in bad habits of holding the pen, rendered the task of correcting them nearly

* This was done in the schools half a century ago, with the addition of German Text and Old English.

hopeless,—especially if they have acquired a good handwriting,—it is better to allow them to continue holding it in the way that has become to them the easiest and most successful, lest an attempt to improve it should impair the quality of their writing. We have sometimes found persons holding the pen in the most ungraceful and awkward fashion, and yet writing elegantly, who, on being required to adopt the legitimate mode, have degenerated into a stiff and graceless style.

I have, thus far, spoken only of writing in copy-books; but the addition of lessons and practice on the black-board would prove a very effective auxiliary. As far as your school arrangements will admit of it, teach in *classes*. Standing in front of the board, write the model in large, fair characters, and require as many pupils as the board will accommodate to imitate it. Others may use their slates for the purpose. Call upon the members of the class to criticize each other's work, and add your own summing up, with reasons for your statements. Guard particularly against the most common faults, such as joining the *o* in the wrong place, or not joining it at all; [it should invariably be joined on the right-hand side, so that when changed into an *a*, *d*, *g*, or *q*, the point of connection may not be visible;] making the lower turn of the *m*, *n*, &c., much broader and thicker than the upper; the loop of the *y*, *j*, &c.,—which is rarely symmetrical with beginners,—too long, or too short, too full, or too narrow, and often having the double curve of the *f*, instead of the single one of the *f*; separating the parts of the *n*, *h*, *p*, &c., instead of carrying the hair stroke from the first shade to the second, &c.; making the stem of the *p*, *q*, &c., either sharp at one end, and square at the other, or both of them sharp,—they should be perfectly *square*; taking the pen from the paper, between two letters connected by a hair-stroke, as in *an*, &c.

Constant vigilance, and continual correction of errors, are indispensable to the formation of a good hand. To know how to execute well, then, is the first grand requisite in the teacher; the next, to furnish good models; and the third, to have a quick eye to detect faults, and a persistent determination for their correction. These conditions existing, and the principle carried out, your pupils *will write well*, with a reasonable amount and duration of practice.

This course is recommended for those who have the privilege of attending school during the years usually devoted to school education.

For those whose school-days are few, — who are to be withdrawn to assist in domestic or other employment, or for some cause that cannot be overruled by the teacher or the school-directors, — a briefer method must be adopted; a method that has little to recommend it, but which is better than nothing in the way of learning this valuable art. It consists in writing, from the start, simple and single words, on a slate, and requiring the pupil to imitate them, without the gradual steps indicated above; copying the same words over many times, as well as possible, and advancing, according to his skill, to more and more difficult words, until he is able to form them into sentences, and read them himself. He will then be prepared, to some extent, to write on paper; and may at once begin upon *joining*, in a book prepared for the purpose. It will not be expected that pupils will, with so imperfect a mode of training, become elegant penmen; nor even, excepting in some few rare instances, attain to a style above mediocrity; but they will acquire, under a faithful teacher, who believes in the importance of a means, though an imperfect one, of communicating thought, an inestimable prize; and no one, if his stay at school should be limited to a single year, or even less, should fail of the opportunity of turning this little to the best account. And, in order that time should not be lost, the fact should be ascertained, on the boy's entering school, whether he is intended to continue for a long period or a short one, that the course of instruction best suited to the circumstances may be adopted for him. For want of such information in advance, boys, in our cities particularly, often leave school destitute of a sufficient amount of instruction to enable them to write their names.

To secure the best results for the members of your school, will, I doubt not, be your earnest aim. And, whether their stay with you be longer or shorter, you should strive to imbue them with a resolution to excel. Your own efforts will produce little fruit without their coöperation. Good writing comes not from careless habits, but from a laborious, constant, painstaking, earnest imitation of suitable models. Such models being furnished, perhaps the whole matter might be embraced in the simple words of the trite copy-slip, "*Imitate the copy.*"

XI MONTAIGNE ON LEARNING AND EDUCATION.

FROM THE GERMAN OF KARL VON RAUMER.

Montaigne's thoughts upon learning and education are to be found in the first book of his *Essays*. The 24th chapter of this book treats upon PEDANTRY, and the 25th upon the EDUCATION OF CHILDREN.

These two chapters merit particular attention in a history of the science of teaching. Whether they exerted a direct influence upon systems of instruction in Montaigne's own day, I know not; it is certain, however, that they kindled the enthusiasm of two individuals, who became signally efficient in promoting the cause of education, namely Locke and Rousseau.

In such a history, we are naturally led to notice many writers, who are more or less strangers to the spirit of Christianity; but it is nevertheless possible to learn much from them.

I shall now make a few extracts from the 25th chapter of Montaigne, before alluded to, on the education of children. We must not expect to find any thing systematic, but simply aphorisms, or perchance fancies, which occurred to this strong-minded, sensible man, in the course of his life or his reading. The point of union for all these disconnected utterances, is the man himself in his character and culture.

"The indications of the natural bent of the mind, are so weak and so obscure in childhood, and what the child promises to become when a man is so uncertain and fallacious, that it is almost impossible upon such a foundation to predict his future course. Consider Cimon, Themistocles, and a thousand others, how unlike was their mature age to their boyhood. Pups, and bears' cubs shew their natural disposition as soon as they are born; but men, who are at a very early age indoctrinated with usages, opinions and laws, alter or disguise their real sentiments very readily. And yet it is difficult after all to force the natural propensities; hence it comes about, that when once we have entered upon a false course of training, we trouble ourselves and waste much time in the vain attempt to fit children for pursuits, for which they are not designed by nature. Meanwhile, in this difficulty, I am of the opinion, that they should ever be directed to the worthiest and most useful objects, and that we should not give too

much heed to those unmeaning indications and presages, which we imagine we observe in their earliest actions."

"I would advise that care be taken to select for the child a tutor, whose head is sound and clear, rather than full of learning: regard should be paid to both these points, to be sure, but far more to integrity and good sense, than to attainments. And he should not exercise his office after the old fashion; for the custom now is, to thunder knowledge into the pupil's ear, as if you were pouring into a funnel; whence it follows that he becomes fitted for nothing, except to repeat again what he has before heard. But I would prefer to have the tutor make an improvement in this custom, and at once, according to the capabilities of the mind which is committed to his charge, permit it to taste things for itself, and to choose and discriminate understandingly between them. At times he must assist his scholar in this exercise, and at times allow him to go through with it alone. He must not himself always strike the key-note, nor always assume the lead; he must hear the scholar likewise, and let him give his views of the subject of his lesson. Socrates, and after him Arcesilaus, allowed their disciples to speak first, and then they themselves discussed the topics thus introduced. 'The authority of teachers is very frequently an obstacle in the way of those who desire to learn. [*Cicero, Nat. Deor. Lib. 1.*] It is a good thing for him to let the pupil run before him, that he may become acquainted with his gait, and thereby may judge how much he himself must abate of his own speed, in order to accommodate himself to his pupil's powers. If we overlook this due proportion, we spoil every thing. To attain it, and to observe it carefully and closely, is the most urgent of all the duties, which I would enjoin upon the tutor; and it is, moreover, a proof of a lofty and a strong intellect to be able thus to descend to a level with childhood, and thereby to direct and guide it. But since it is the custom now-a-days for teachers of a certain stamp, to attempt the education of a multitude of children, all different in their dispositions and their talents, all at the same time and by the same method, we can not wonder, when among them all, scarce two or three ever shew any good fruits from such discipline. The tutor must require of his pupil an understanding, not merely of the words of his lesson, but also of their meaning and their appropriateness. He must judge of the effect of his teachings, not on the testimony of his pupil's memory, but on that of his conduct. He must exhibit whatever his pupil shall have learned in many different lights, and apply it to many different subjects, in order to see whether he comprehends it, and has mastered it thoroughly. It is a mark of indigestion, when the

stomach throws off the food which we take into it, unchanged. For it does not discharge its functions properly, unless it alters, either in nature or in form, that which we have given it to digest. We have been so long trammelled by leading-strings, that we can not walk alone; both our freedom and our strength is gone.

'They are always in wardship, and never become their own masters.' [*Seneca, Epist.* 33.] I was well acquainted with an honest man in Pisa, but who was so great an Aristotelian, that his most prominent tenet was this: 'The touchstone of all well-grounded opinions and of all truths, is their harmony with the doctrines of Aristotle; every thing else is mere shadow and emptiness; for Aristotle established every thing, and enunciated every thing.' The tutor must therefore lead his pupil to weigh every opinion, and to adopt nothing on mere authority. He should not suffer him to take on trust a principle from Aristotle, any more than a dogma from Epicurus or the Stoics. He should make known to him all the varieties of opinion upon any given subject, and if he chooses among them, so much the better; but if not, why, let him doubt. 'There are times when doubting is better than believing.' [*Dante Inf. c.* 11.]

As we shall see, this passage exerted a vast influence upon Rousseau, in whose *Emile* an ideal tutor is portrayed, who educates an ideal boy after an ideal and Utopian system. Rousseau, likewise, requires his pupil to form opinions for himself, and, with a mature insight, to choose, not only his philosophy, but even his religion, from amid the various systems and forms, of which the world is so full. "If he can not choose," says Rousseau, "let him doubt." This radically corrupt sentiment, which is in direct opposition to Augustin's profound as well as true saying, "faith goes before understanding," is widely diffused at the present day. I shall examine it more closely further on.

"The bees gather the sweets of every flower, but the honey they make is no longer that of thyme or marjoram, but purely their own. So should the pupil alter and transmute whatever he derives from others, in order to make it all his own."

This beautiful and apt comparison we frequently meet with, in Erasmus and Bacon. But nothing interferes with this instinctive process of intellectual assimilation in the minds of youth, so much as the practice of questioning and doubting, recommended by Montaigne. A blessing upon spiritual growth comes only through a believing, humble self-surrender, and through this alone is a genial quickening of the receptive faculties possible.

"Verily, we make our children timorous, and cowardly, by giving them no freedom to do any thing of themselves. Who of us ever

asks his scholar, what he thinks of rhetoric or grammar? of this or that passage in Cicero? These things are only driven into the memory, like oracles, whose whole essence consists in the letters and syllables of which they are composed. But external knowledge is no knowledge at all; it is nothing but the possession of that which has been intrusted to the memory. What, on the other hand we truly know, we can make available without an appeal to authority, and without first examining our book, to see whether it is thus or so."

Thus he renders prominent the formation of independent opinions by children, in contrast with the slavish method, as hitherto practiced, of depending on external knowledge; a method, which is an endless source of innumerable evils.

"I could only wish that those dancing masters, Paluel and Pompey, could have taught us their pirouettes, merely by looking at them, without our having had to bestir ourselves at all; even as those teachers of ours, would develop our understandings into action without stimulating them into any sort of activity; or, that we could be taught to manage a horse, to handle a pike, or to touch a lute, without the necessity of practicing, just as our tutors aim to make us good reasoners or good speakers, without exercising us in speaking or in reasoning."

An advocacy of self-activity, as an important element in mental culture, and produced by exercise, as opposed to entire passivity; that education, which leads to solid art, not merely to flimsy, theoretical science is thus set forth.

"The opinion is universally received, that it is not good for a child to be educated at home; for natural affection renders even the most judicious of parents too tender-hearted and yielding. They can not bear to punish their child, nor to see him hardened by frugal fare; and yet he must be brought up thus. Nor can they bear to see him return home from his exercises, covered with sweat and dust, and then be allowed nothing but cold water, with which to quench his thirst; nor can they suffer him to ride an unruly horse. And yet there is no help for all this; for whoever expects to educate a boy to be a brave man, most certainly should not render him effeminate in his youth, but must often, in his discipline, run counter to the precepts of physicians. 'Let him spend his days in the open air, and let him become familiar with danger.' [*Horace, Carm.* 1. 3. 2.] It is not enough to inspire him with fortitude; his muscles also must be hardened. For the mind, when not assisted by the body, has too much to do, and sinks under its superadded labors. I feel that my own is over-burdened by my weak and unstrung body, its companion, which

is always leaning upon it and looking to it for aid. I have often observed in my reading, that my masters, in their writings, in many cases, attribute to magnanimity and strength of intellect, those actions, which proceed rather from the thickness of the skin or the hardness of the bones. The pupil must be practiced in severe bodily exercises, in order that he may become insensible to all sorts of pain. The authority of the tutor likewise, which should be unlimited, is interrupted and checked by the presence of the parents. Moreover the homage rendered to the young master by the servants, and the opinion which he imperceptibly imbibes at home of the wealth and the position of his family,—these I think, are decidedly injurious to one of his years.”

This is in entire harmony with Rousseau,—a contempt of parental training, and an over-estimate placed upon the tutor's functions. Nothing but the deep moral corruption and the depraved manners of the French nobility can excuse such unnatural sentiments in these two men.

The noble prominence here given to the culture and the hardening of the body, is likewise in the spirit of Rousseau and his school, as well as in that of Fichte and Jahn.

“The pupil should be taught, never to engage in any conversation or controversy, unless he has an antagonist, who is able to cope with him; nor even then, to make use of all the arguments, which can serve his purpose. But let him be formed to a nice discrimination between different arguments, and to a desire to use those alone, which he absolutely needs; and by consequence, to brevity. Especially let it be enjoined upon him, to lay down his weapons before the truth, and to surrender himself unconditionally to it, as soon as he perceives it, whether on the side of his opponent, or in his own consciousness.”

“Let the conscience and the virtue of the pupil shine forth in his discourse, but let them be ever under the dominion of his reason. Make it distinctly understood by him, that to acknowledge and correct any mistakes which he may have made in whatever he has advanced, though they should have been perceived by no one but himself, is a mark of good judgment and candor, those admirable qualities, for which he is striving; and, on the contrary, that obstinacy and a spirit of wrangling are despicable traits, and to be found mostly in narrow minds; while, to reconsider or to alter one's opinions, and even in the heat of debate, to give up a bad cause, betokens an eminently independent and a philosophical character.”

Worldly wisdom and the spirit of Christianity thus coincide in the No. 11.—[VOL. IV., No. 2.]—30.

injunction to humble ourselves resolutely before the truth, and to avoid all contention for the mere sake of victory.

“Let him endeavor to become acquainted with men in all the different spheres of life; the cow-herd, the mason, the traveling merchant, every one,—he must see at their various avocations, and must get some information from each one of them; for he can turn every thing to account, and even from the stupidity or the weakness of others, can gather wisdom. For as he diligently considers so many different fashions and manners, he becomes ever more eager to appropriate the good and to reject the bad. He should also be inspired with a discreet curiosity to examine into every thing of interest; all that is rare or attractive in his immediate vicinity he should visit, be it a castle, a fountain, a remarkable man, or a memorable battle field:—

‘What lands are chained with frost, what ever green and fair,
The swift-winged barks to Rome what fav’ring breeze will bear.’

Prop. 1: 4.

He ought, moreover, to inform himself in respect to the manners, laws, and revenues of this or that Prince or Sovereign. These are things which are very pleasant to learn, and very useful to know. In recommending this acquaintance and intercourse with men, I refer also, and that chiefly, to those, whose memory has been handed down to us in books. By means of history the pupil will be enabled to converse with the great men of the most note-worthy ages. This is a study of inestimable value, and according to Plato, the only one to which the Lacedaemonians paid any attention. And what profit will he not derive, in this respect, from the perusal of Plutarch’s lives! But the tutor must never forget the appropriate functions of his office; for instance, he must not impress upon the memory of his pupil the date of the overthrow of Carthage, and omit all consideration of the characters of Scipio and Hannibal. He must not dwell upon the narrative, and neglect to impart a just estimate of the events narrated.”

This requirement that the boy should take a survey both of the present and the past, and should form independent opinions in respect to each period,—as well as the recommendation of Plutarch, we find repeated in Rousseau.

“In my opinion, the first principles implanted in the understanding should be those, by which we shall be taught how to govern both our minds and our hearts, and how to obtain self-knowledge; in a word, how to live well, and how to die well. Among the liberal arts, let us first acquire the art which alone will make us free. They all, to be

sure, in a certain measure, serve to fit us for life and its duties; and the same purpose is furthered, in some degree, too, by every thing that occurs in our experience. But we ought to apply ourselves to those which have a direct influence this way, in virtue of their very nature. If we understood how to confine our wants and necessities within their true and natural limits, we should find that most of the sciences would be altogether useless to us, and that, even among those which are indispensable, that there are many breadths and depths, which we would do well to leave untouched; and we should realize the truth of the saying of Socrates, 'that it is not worth our while to prosecute any studies but such as will directly promote our interests.'

Montaigne attaches the highest importance to instruction in self-knowledge, and in the art of living well and of dying well, the art which makes us free. But he has not a word to say about the only master of this art, that One, who can make us free indeed. And in dissuading us from speculative and unprofitable knowledge, he speaks more in the spirit of Rousseau than in that of Socrates.

"After the pupil has been taught all that is necessary to make him wiser and better, he may apply himself to logic, natural philosophy, geometry, and rhetoric; and whatever science he may now take up, he will speedily master;—because his judgment has been matured. He should be instructed sometimes by discourse, and sometimes by reading; at times the tutor should place the works of judicious authors in his hands, and on other occasions he should give him only their pith and marrow. Who can doubt whether this way of teaching is more easy and natural than that of the Greek grammarian, Gaza, whose system is composed of thorny, repulsive rules, and of empty, unmeaning words, containing nothing to inspire a thirst for knowledge? But in the system which we here advocate, the mind is directed to fresh, wholesome food; and its fruits are without comparison more abundant, and they also ripen much sooner."

A decided attack upon the old, austere method of teaching, in which time, place and grammar were all in all; here again he appears the prototype of Rousseau and Basedow.

"It is not a little remarkable, that in our day, and even among sensible people, philosophy, both in theory and practice, has come to be regarded as an unmeaning word, representing nothing of any value. I imagine that the 'Ergo's' and the wire-drawing subtleties of Logic, which guard every avenue by which philosophy can be approached, are chiefly to be censured for the neglect into which she has fallen. It is very wrong to represent her as inaccessible, or as having a sour, morose, forbidding aspect. Who has disguised

her in this pale, hideous mask? There is nothing more cheerful, sprightly, joyful, nay, I had almost said, more frolicsome than she. She preaches nothing but gaiety and good cheer. A crabbed and an austere countenance in a man, is a sure indication that she does not dwell with him. When Demetrius, the grammarian, saw a number of philosophers sitting together in the temple at Delphi, he addressed them thus: 'Either I misjudge, or your quiet, cheerful faces tell me that you are engaged in no very important conversation.' Whereupon one of them, Heracleon, the Megarean, replied: 'Let those who are undertaking to settle, whether the future of $\beta\acute{\alpha}\lambda\lambda\omega$ should have the λ doubled, or who are tracing out the root of the comparatives $\chi\epsilon\acute{\iota}\rho\iota\omicron\nu$ and $\beta\acute{\epsilon}\lambda\tau\iota\omicron\nu$, or of the superlatives $\chi\epsilon\acute{\iota}\rho\iota\sigma\tau\omicron\nu$ and $\beta\acute{\epsilon}\lambda\tau\iota\sigma\tau\omicron\nu$, let them knit their brows, when conversing together upon their hobbies; but as for philosophical inquiries, they commonly enliven and cheer those who enter upon them, and never make them sour and peevish.'

In this passage, Epicurus is commended, and still more in what follows.

"I would not have the youth imprisoned, as it were, and subjected to the passionate and gloomy caprices of a half-frantic pedagogue. I would not crush his spirit, by compelling him, after the customary method, to sweat and stagger, like a porter, under his daily round of fourteen or fifteen hours toil. Nor can I consent, when through an unsocial and melancholy temperament, he gives himself up to immoderate study, that he be encouraged in so doing. For he will thus be rendered unfit for social intercourse, and will be withheld from better employments. Truly how great is the number of those who have been brutified by too overpowering a thirst for knowledge. Carneades was so greedy after it, that he gave himself no time to shave his beard or pare his nails. Nor do I desire to see the noble manners of the pupil spoiled by the impertinence and the rudeness of others. In former times the French philosophy of life passed into a proverb, as that which showed itself in the children at quite an early age, but which did not hold out long. In fact, we observe at the present day, that young people in France are extremely clever; but they commonly disappoint the expectations which we had formed of them, and, when grown up, become in no wise eminent or distinguished. I have heard intelligent people say, that the institutions of learning, of which there are so many in France, render them thus stupid. But to our pupil, on the other hand, every place should be a place, and every time a time for study,—the garden, the table, the bed, solitude, society, forenoon, afternoon,—no matter where or when; for philosophy, which is the main object of his pursuit, as the guide of his understanding and his heart, is every where at home."

“ Thus our lessons, mingling with every occasion, and taken up at every opportunity, will insinuate themselves into our minds almost without our perceiving how. Even our recreations and our exercises; running, wrestling, music, dancing, riding, fencing, and the chase,—all will unite to assist us in our studies. It is also important that a graceful deportment and winning manners be cultivated, at the same time that we are taking so much pains with the mind. For it is neither a mind nor a body that we are educating, but a man; and we must not divide him into two parts. For, as Plato says, we should not train the one without the other, but they must both lead and draw alike, as a span of horses harnessed to the same carriage. As for what remains, this our method of education must be conducted with an even-handed mildness, and not after the fashion of our modern pedagogues, who instead of inspiring children with a love for learning, render it hateful and repulsive to them. Away with this coercion and violence! For, in my opinion, there is nothing which so humiliates and stultifies an otherwise excellent nature. If you have any desire that your pupil should dread shame and punishment, do not render him callous to them; but harden him rather to endure heat and cold, wind and sun, and all the disagreeable and dangerous accidents and adjuncts of life, which he ought to hold in contempt. Wean him from all effeminateness and delicacy in dress, eating, drinking and sleeping; accustom him to bear all things, so that he may not become a senseless, foppish gallant, but may rather grow to be a strong and sturdy lad. The training in most of our institutions of learning, I am utterly opposed to. It would be less mischievous, certainly, did its errors proceed from overmuch indulgence; but these places, on the other hand are veritable dungeons, where our youth are imprisoned. They are there made dissolute and corrupt, by being punished on the mere suspicion of being debauched already. Do but visit a class while engaged in recitation; you will hear nothing save the cries of children smarting under the rod, and the bellowings of the irritated and enraged masters. An admirable method, truly, to inspire the tender and shrinking minds of the young with a love for knowledge, is this being goaded to study by a wrathful visage and a merciless whip! Consider, moreover, as Quintilian has very justly remarked, ‘ that a domineering spirit always exerts an unhappy influence; ’ and how signally so must it be in our present most wretched style of training! How much more seemly were it to decorate the school-bench with garlands of flowers and leaves, than to make it dismal with the blood-stained birch. I would have the walls of the school-room hung with pictures of joy and gladness, of Flora and the Graces, after the manner of Speusippus, the philosopher, in his school.”

This is in close connection with previous passages. An attack upon the austere routine, the pedantic, joyless diligence of the recluse, and a renewed praise of manly exercises and of cheerfulness in disposition and conduct.

“ My pupil should not recite his lesson, so much as put it in practice, and repeat it in his actions. We must observe, whether he is prudent in his undertakings, whether he exhibits benevolence and justice in his conduct, whether intelligence and courtesy are manifest in his speech, whether he shows fortitude in sickness, modesty in his mirth, moderation in his pleasures, and order in every thing, and lastly, whether it is all alike to his palate, what he shall eat or drink, be it fish or flesh, wine or water. ‘ Let him value his learning not for the show which he can make of it, but for its influence on his life, and let him govern himself and be obedient to the laws.’—[*Cicero, Tusc. Quaest. v., Lib. 2.*] Our reason most faithfully mirrors itself in our daily life. Zeuxidamus replied to a certain one, who asked him why the Lacedæmonians did not reduce their science of military tactics to writing, and give it to their youth to study: ‘ It is because they accustom them to deeds, and not to words.’ With these Lacedæmonians compare now one of the Latinists from our schools, who has spent fourteen or fifteen years in merely learning how to speak correctly. The world is full of babble, and I have never yet seen the man, who did not say more than was necessary, rather than less. And yet the half of our life is spent in this manner.”

“ If our pupil is familiar with a wide range of subjects, words will come of themselves; and should they appear reluctant, he can force them to do his bidding. I hear some excuse themselves for not being able to express their ideas correctly; and then they will put on a consequential air, as though they have their heads full of the finest thoughts in the world, but are unable to bring them to the light, for lack of eloquence. But this is not the cause. Shall I tell you what I think it is? They have shadows in their minds of this and that crude and shapeless substance, which they are unable to represent clearly and distinctly to themselves, and which consequently they can not reduce to words. For my part, I hold it for a certainty, and Socrates maintained the same, that every one, who has a clear and sprightly thought in his head, can convey it to others, whether it be through the rudest provincial dialect, or, if he is dumb, by means of gestures. ‘ Is the subject well understood first, then words will not be slow to follow.’—[*Hor. in Art. Poet.*] And as Seneca has also in his prose thus poetically expressed himself: ‘ When the subject has taken possession of the mind, words will be eager to solicit for it.’—

[*Sen. Controv.* 1. 3.] And Cicero: 'The subject itself bears the words along with it.'—[*Cic. De. Fin.* 3. 5.] A plain, uneducated man knows nothing of rhetoric; he does not know how to arrange his preamble so as to secure the good will of the courteous reader, nor in fact, does he care to know this. Seriously, all this fine painting, this flaunting array of trope and metaphor, grows dim before the splendor of untinselled truth. These elaborate flourishes serve only to tickle the palates of the multitude, who are not in a condition to digest stronger and more solid food. The ambassadors of Samos came to Cleomenes, king of Sparta, prepared with a long and grandiloquent speech, framed for the purpose of persuading him to engage in a war with the tyrant Polycrates. After Cleomenes had patiently heard them through, he gave them his reply, as follows: 'The commencement and preamble of your speech I do not remember, nor can I recall the middle of it; but as far as regards the conclusion of it, I can not grant your request.' That, it appears to me, was a good answer, and the orators must have gone away, utterly confounded with shame and mortification. And how was it, too, in this other instance? The Athenians, wishing to build a large edifice, were obliged first to choose one of two architects to superintend the work. The first stood up, and in a haughty manner, but with a well-studied speech, discoursed upon the whole subject, and that so eloquently, that he carried the multitude completely away with him. But the other then arose, and made use only of these few words: 'Ye men of Athens, what my rival has thus said, that will I do.'

Against multiplying words, without the energy to direct them. Whoever has a treasure of clear, well-marked thoughts in his mind, will never be at a loss for clear and appropriate language, in which to express them.

"I am none of those who hold that good metre makes good poetry. Should our pupil use a long syllable for a short one, what matters it? If his invention displays genius, if wit and understanding have done their part, then I will say, 'he is a good poet, although a bad versifier.'"

Here we have the same principles applied to poetry,—sense and substance placed higher than mere elegance of language. So we may justly admire the physical build of a strong, healthy man, even though he is ill-favored in the extreme. In any case, an inartistic decision, that takes no account of beauty, is always to be preferred to an admiration of smooth but unmeaning rhyme.

"But what is our pupil to do when he is assailed with the subtleties of sophistical syllogisms? As, for example, 'eating bacon provokes

to drinking; drinking quenches thirst: *ergo*, eating bacon quenches thirst.' Let him laugh, for laughing at such platitude is much better than answering them. Chrysippus said to a certain fellow, who was endeavoring to banter Cleanthes with his logical fallacies: 'Mock children with your foolish tricks, but do not expect that a *man* will condescend to take any notice of them.'"

Montaigne here praises the self-confidence of the man of a strong, healthy understanding, who encounters, with his native, unperverted good sense, the professed pugilists of philosophy, and parries their attacks, or, on the other hand, considers it beneath his dignity to close weapons with them.

"There are some silly persons, who will go a half-mile out of their direct course to pick up an ingenious fancy. 'Or, those who do not suit their words to their subjects, but call in the aid of irrelevant subjects, in order to use words already chosen.'—[*Quintilian, Lib. 8.*] Seneca too, says: 'Who, for the sake of using some pleasing and graceful word, will introduce a subject, upon which he did not at first intend to speak?'—[*Sen. Ep. 59.*]

"I would have the hearer so carried away by the subject, and his imagination so filled with it, that he shall forget the words. I love a plain, natural style, written or spoken; a strong, expressive style, curt and compact, not so much nice and faultless, as animated and direct. 'Those words are after all the wisest, which reach the heart.'"

"That eloquence which attracts attention to itself, does this at the expense of the subject; and, as it is childish in our dress to seek notoriety by what is singular and uncommon, so is it also, in our speech. A desire to employ new phrases and unfamiliar words denotes a scholastic and puerile ambition. I would not use even a word or an expression, which could not be understood in the fish-markets of Paris. Aristophanes, the grammarian, knew nothing of the matter, when he censured Epicurus for his inartistic style, and overlooked the chief element in his oratory, which was simple, intelligible language. Forms of speech are so easy of imitation, that they soon spread over a whole nation; but it is not so with judgment and invention. Bone and sinew we do not borrow, as we do the stuff and the fashion of our coat and our cloak. Most of the persons, with whom I converse, speak like my book; whether they think after the same sort, I know not. 'The Athenians,' says Plato, 'look at the fullness and the beauty of your language; the Lacedæmonians, at its conciseness; but the Cretans, more at the sentiment, than the expression. And these latter please me the best.'"

Precepts, again, of that genuine eloquence, which aims not at

appearance, but at essence and substance; which does not seek, by means of a fine array of borrowed phrases, to startle and captivate, but which leaps from heart to heart, bearing the hearers along with it, even against their will. How different this from the rhetoric that idly and aimlessly expends itself in cold and glittering words.

“I would first become familiar with my mother tongue, and the language of my neighbors, with whom I am in constant contact. There is, truly, something fine and grand about the Greek and the Latin, but we buy their acquisition at too dear a price. I will here communicate a method, whereby we may compass this knowledge with far less pains-taking, than in the ordinary way. It is the same method that was pursued with me, and whoever will may avail himself of it. After my deceased father had made every possible inquiry of learned and experienced men as to the best mode of education, he became convinced of the disadvantages of the common method. They told him that the long time, which we spend in learning the language of the Greeks and that of the Romans, and which cost them hardly any time at all, was to be considered the sole reason that we did not attain to their mental elevation and their knowledge. I do not, however, think that this is the only cause of the difference. But the plan that my father adopted was the following. While I was yet in my nurse's arms, and even before I could talk, he committed me to the charge of a German, who has since died in France, having been a famous physician there. He understood not a word of French, but was so much the better a Latin scholar. My father had written for him, expressly to instruct me, and gave him a liberal salary therefor, and I was thus almost constantly in his arms. To lighten his labors, there were two others of less learning associated with him, as my attendants. These all spoke to me only in Latin; and, as for the rest of the family, it was an inflexible rule, that neither my father nor my mother, neither a man-servant nor a maid-servant, should ever address me but with a few crumbs of Latin, that each one had learned to prattle with me. It was astonishing what progress they all made by this means. My father and mother learned enough Latin to understand it, and even enough to express themselves in it in case of necessity. In short, we all Latinized to that degree, that our speech flowed out over the neighboring villages, where it became customary to give Latin names to various artificers and their tools, which remain even to the present day. To return to myself, then, I knew in my seventh year as little of the French or Perigord tongue, as of Arabic; and without art or book, without grammar or rule, without a rod or a tear, I had learned to speak as pure Latin as did my teacher;

and, in truth, how could it have been otherwise? If a theme was given me for practice, as is the custom in schools, it was not in French, but in bad Latin, to be turned into good. As for Greek, which I knew scarce anything of, my father contrived a new method of instruction to initiate me therein, namely, by games and exercises. For, among other things, he had been advised to leave my will so entirely without constraint, that I should, from my own natural impulse, acquire a fondness both for duty and for learning,—and moreover, to mould my faculties with gentleness and freedom, forbearing all compulsion and severity. He even carried this policy out with superstitious fidelity; for, as some are of opinion that it injures the delicate brains of children to wake them suddenly and with violence out of sleep in the morning, because they sleep more soundly than adults, he invariably caused me to be awaked by music.”

“When I was not far from six years old, my father sent me to the public school in Guyenne, then in a very flourishing state, and the best in France. But it was none the less a public school. From that hour, my Latin grew corrupt; and since then, I have lost all command over it, from discontinuing its practice. And my previous extraordinary education served only to place me at the outset in the highest classes. For when I left the school at thirteen, I had run through my curriculum, as they call it, and had yet derived nothing from it at all, which I can now turn to any account. I early conceived a taste for books, which began with the pleasure I derived from reading Ovid’s *Metamorphoses*. For in my seventh or eighth year, I stole from every other pursuit, to read Ovid; and, so much the more, since his language was my mother-tongue, as it were, and his book was both the easiest that I was acquainted with in that tongue, and also it treated of matters suited to my tender years. As for *Launcelot of the Lake*, *Amadis*, *Huon of Bordeaux*, and the like pleasant old romances, which youth in general devour so eagerly, I knew not even their titles, (and to this hour I know no more of their contents,) so strict was my training. But I was thus led to neglect the studies that were allotted to me. In this position of things, however, it happened very favorably for me, that my preceptor was a man of sense, and he accordingly closed his eyes to my occasional deviations of one sort and another from my prescribed course. And thus I was enabled to read through, without interruption, Virgil’s *Æneid*, *Lucretius*, *Plautus*, and the Italian Comedies, all of which allured me by the interesting nature of their subjects. Had he been so foolish as to have disturbed me in this course, I verily believe that I should have brought nothing away from the school with me, but an

aversion to books altogether, as is almost invariably the case with all our nobility. But he was quite discreet in his apparent self-deception, acting as though he was not aware of my habits; and he thus sharpened my appetite, by permitting me to peruse these books only in secret, while keeping me to my required tasks in the most indulgent manner possible."

Here we have the course which was pursued in the education of Montaigne himself, and which he sanctions throughout. He anticipates the new educational era in his wish; "to learn before every thing else his mother-tongue, and the language of those who immediately surround him;" in which it is apparent that he has regard more to the utilitarian aspect of philology, than to its influence upon mental culture. The spirit of the same era is expressed in the attempt to teach Latin in a new and an easier way, "without grammar or rule, without a blow or a tear." In the same spirit it was that Montaigne learned Greek, "in play," and that he was awakened from sleep, in play, as it were,—by strains of music. "We must excite," he says, "a strong desire and a hunger for study; otherwise, we shall educate with our books droves of luggage-laden asses; under the crack of the whip we shall fill their panniers with knowledge, and admonish them not to lose it. But we ought not merely to entertain knowledge in our dwellings, we should wed ourselves to her." With justice does Montaigne thus battle against the heartless, formal drill system, and against learning without enthusiasm. But he, like so many thousand others in the transition-period, while seeking to avoid this Charybdis, falls into a Scylla, into an enervating, over-weening neglect of all discipline, and into an unmethodical method of teaching and learning. Their ideal is an ideal amateurship from their youth up, untrammelled by that wholesome severity of the school, which moulds those strong, manly characters, who in their studies sedulously subordinate themselves to whatever subject is before them, and become obedient to it, in order to subdue it.

That Montaigne emerged from such a delicate training, wherein he was diligently guarded from all care and trouble, a thoroughly indoctrinated, pleasure-seeking Epicurean, we have already seen, and he is therefore himself to be regarded as the first fruits of the modern system of education.

In his 24th chapter "On Pedantry," Montaigne attacks not pedants merely, but the sciences in general, in so far as they unfit men for action; thus repeating here the strictures, which we have observed in passages already cited. Here too he is throughout the forerunner of Rousseau.

"Plutarch tells us," says Montaigne, "that among the Romans,

Greek and schoolmaster were correlative terms, and alike epithets of derision. I afterward," he continues, "found, as I advanced in life, that they had abundant reason for their opinion; and that 'the greatest scholars are not always the wisest men.' But how it happens, that a mind enriched with the knowledge of so many things, is not made thereby more active and lively, while the commonest native understanding is able without any cultivation to comprehend the thoughts and conclusions of the noblest intellects that the world has ever produced,—this, I confess, I can not explain. 'Whoever must needs incorporate the thoughts of so many strong and mighty brains with his own,' said a young lady to me once, in allusion to a certain acquaintance of ours, 'can not do it, without first compressing his own brain, and drawing it into a smaller compass.' I might perhaps conclude, that, as plants are choked by too much moisture, and lamps quenched by too much oil, so it is with the activity of the understanding through too much study, and too great a burden of knowledge; for, through the vast diversity of subjects among which its attention is divided, it is plunged into endless entanglements, and is crippled and clogged by the weight under which it staggers. But the fact is quite otherwise; for the mind expands in proportion as it is filled. In proof of this assertion, we can point to many examples of antiquity, where men, who have proved equal to the discharge of high public functions, men who have shown themselves great generals or able statesmen, have been at the same time very learned."

As we observe, Montaigne does not overlook the fact that in Julius Cæsar, Pericles, and others, great attainments in knowledge harmonized admirably with practical efficiency. Yet he is the panegyrist of the Lacedæmonian method of education, which he places in bold contrast with the Athenian, much to the disadvantage of the latter. And not satisfied even with this expression of his views, he adds, "We are taught by examples, that the study of the sciences renders the disposition weak and womanish, rather than unyielding and brave. The strongest government at present existing in the world, is the Turkish; for there the people are trained to prize arms, and to look with contempt upon learning. I find too, that Rome was greatest, when the people were ignorant. The most warlike nations in our day are those which are the most rude and uneducated. The Scythians, Parthians, Tamerlane and others, are examples of the truth of this remark."

Aside from this overestimate, this idolatry, we might almost term it, of barbarism and brute force, we find in this chapter many very excellent educational hints, which agree essentially with what has already been quoted. Take for instance the following:

“If we look at the customary method by which instruction is imparted to us, we shall not be at all astonished that neither scholars nor teachers are made either wiser or more learned thereby. The care and expense which our fathers bestow upon our education absolutely aims at nothing further than to fill our heads with knowledge; but to cultivate the understanding and the heart is not so much as thought of. If we exclaim, in the hearing of the people, concerning a certain person passing by,—‘O, the learned man!’ and concerning another,—‘O, the good man!’ you can not withhold them from fastening their glances and their regards upon the first; so that a third person would be justified in turning upon them, and crying out, ‘What a pack of blockheads are ye all!’ We are particular to ask concerning any one, ‘Does he understand Greek?’ ‘Does he read Latin?’ ‘Does he write poetry?’ or, ‘Does he write prose?’ but whether he has become better, or more judicious, (and these after all are the main points,) we do not so much as think of. We should inquire, who is the wisest, not who is the most learned. If the mind of my pupil has not received a better direction through study, and if his judgment has not been matured by it, it is my opinion, that his time would have been much better employed in playing ball; for then, at least his body would have grown stronger and more healthy. Look at him on his return home, after so many years spent at the university; who is less prepared than he to set about any thing practical? And the most noticeable thing in him is, that his Greek and Latin have rendered him more stupid and more arrogant than he was when he first left his home. He ought to have returned with a full-grown and well-conditioned intellect, but it has on the contrary become dwarfed and puffed up with vanity.”

This attack upon an over-regard paid to the intellect to the neglect of the moral nature, upon an anti-utilitarian spirit, and upon all mere exercises of the memory,—all this, is an exact fore-shadowing of Rousseau. So likewise are the following passages against dead learning, without the power or the skill to vitalize it.

“What avails it if we fill our stomachs with food, unless it is digested and changed into nutriment, unless it gives us strength and growth? We rest so entirely upon the shoulders of other men, that our own powers at last utterly fail us. Shall I arm myself against the fear of death, I am forced to do it by the aid of a passage from Cicero. Do I seek consolation for myself or for my friends, I obtain it from Seneca. But had I been educated aright, I would rather have drawn consolation from my own breast. I do not love this vicarious and mendicant serenity. We must be taught by means of

the knowledge of others, it is true, but we can never become wiser, save through our own wisdom."

"My unlearned countrymen call these highly accomplished gentlemen, in their droll way, 'overdone with study;' and truly it almost seems as if they had studied all their inborn understanding quite out of their heads. For, on the other hand, do but look at the hind or the shoemaker; they keep the even tenor of their way, and speak only of that which they know; but these fellows, while exalting themselves, and parading the knowledge that swims about on the surface of their brains, fall into perplexity, and stumble at every step. Galen they may chance to know; but they know nothing of the disease of their patient. Their heads may be full of law; but how to manage a cause in court, this they do not understand at all. Of each and every thing they shall have learned the theory; but some one else must be looked up, when it comes to the practice."

"But it is not enough that our education be not an injury to us; it ought to make us better. We have in France some Parliaments, that examine the officers, whom they are to admit, only upon their knowledge; others, on the contrary, test their understandings also, by presenting them with some law case, that they may give their opinion upon its merits. These latter appear to me to proceed in much the most appropriate and judicious manner. And though, in such an office, there is need of both, yet knowledge is of less value than a sound judgment. For as the Greek verse expresses it, 'learning is useless, unless the mind control and direct it;' and, would to God, that we were so fortunate in the matter of our administration of justice, as to have our courts gifted with as much understanding and conscience as they now possess of knowledge. 'But alas, we do not learn how to live, only how to talk.'"

We now take our leave of this eminently original, and judicious, yet light and sarcastic writer, who, by the aid of an unperverted common sense, looked upon the world with a far greater distinctness of vision, than the scholar, imprisoned, as it were, in the fetters of a dead classical formality, could by any means hope to do. In a bold and striking manner he uttered all his thoughts without any constraint, and without once asking himself what pedants might say of him. How much he effected by this course, and what universal favor he has met with, is attested by the many editions which have been demanded of his *Essays*, and by the influence, which he exerted not only on his contemporaries, but also on the most distinguished men of succeeding generations, and especially on Rousseau.

XII. PUBLIC INSTRUCTION IN SARDINIA.

BY VINCENZO BOTTA.

Late Professor of Philosophy in the Colleges of Sardinia.

(Continued from page 64, Vol. III.)

VI. SCIENTIFIC AND ARTISTIC ESTABLISHMENTS.

To complete our exposition, we add a short account of some of the principal scientific and artistic establishments, which though not dependent on the Department of Instruction, yet greatly conduce to the general culture of the people, to the advancement of science, and are the standard of the intellectual development of the country.

ROYAL ACADEMY OF SCIENCES.—This academy was founded by private individuals, such as the Counts of Saluzzo, Lagrange and Cigna, who were soon joined by other celebrated men, as Alioni, Foncenex and Morozzo. In 1783, this private association was transformed into a public institution by a special privilege bestowed upon it by the Duke of Savoy, Victor Amedeus III., and very soon was illustrated by the names of Dantoni, Robilante, Debutet, Napione, Prospero Balbo and many others of great scientific or literary reputation. In more recent times the greatest men of the country have belonged to this academy, as the great chemist Giobert, Bidone the mathematician, Diodata Saluzzo the poetess, Provana, Lasearis, Bessone, Boucheron, and Rosmini.

The Academy is divided into two classes, one of mathematical and physical sciences, the other of moral, historical and philological sciences. When complete it numbers forty resident members, twenty for each class; its officers are a President, Vice President, and a treasurer. Moreover, each class is presided over by a Director and a Secretary. Besides these forty members who must be residents of Turin, the classes are allowed to elect ten other national members, either within or without the State. There are also twenty foreign members, ten for each class, among whom we find the most celebrated men of Europe. The number of corresponding members is not determined by the by-laws, and can be increased at the will of the academy. Each class offers, every year, a reward of a certain sum to the best work on some specified subject: twenty-four annual pensions of six hundred francs each are secured to the eldest members of the academy.

In 1759 the first volume of the Academy was published under the title of *Miscellanea philosophico-mathematica societatis privatae Taurinensis*, which was received with great favor by all the scientific bodies of Europe. From 1759 to 1773 four other volumes were published, under

the title of *Melanges de philosophie et de mathématique de la Société Royale de Turin*. Since 1783 the transactions of the Academy are published under the title of MEMORIE DELLA R. ACADEMIA DELLE SCIENZE DI TORINO, the first series of which embraces forty volumes. The second series of the publications, which first made its appearance in 1839, now numbers fourteen volumes.

The hall of the meetings of the Academy is adorned with the busts of its three founders, of King Victor Amedeus III., Denina, Vernazza and Gerdil. The Academy possesses a very rich collection of medals and coins, Greek, Latin, and modern, of which a catalogue was published some years ago; this collection was presented to the academy by one of its members, M. Lavy, who gave also to the institution eighteen marble busts of ancient Romans, which adorn the great Hall of the public meetings of the academy. It possesses besides a choice and rich library, which contains the acts of all the principal scientific Associations of the world, and a hundred and thirty-five Mexican volumes, seven hundred and seventy-eight from the United States, seventy from the Phillipine Islands, a hundred from China, forty-eight from the East Indies, and thirty-two Arabic and Syriac. In the palace of the academy, which was built according to the design of Guarini, we find also a Hall containing specimens of industrial works, models, drawings and lithographies, which is called the *Hall of Arts and Mechanic Professions*.

ROYAL MILITARY ACADEMY.—This institution was designed for the children of the officers of the army, and is located in a large building, near the palace of the king. It was built by Charles Emmanuel II., after the design of Amedeus of Castellamonte, and was finished by Mary John Baptist, his widow, while Regent of the kingdom. During the minority of Victor Amedeus II., the original object of this academy was to receive the pages of the court and young men belonging to the nobility, and to instruct them in the use of all kinds of weapons, in horsemanship, dancing, mathematics, and belles-lettres. Though from the accounts of Alfieri, who was a pupil of that academy, we can not say that the instruction given at that time by the institution had any claim to high scientific excellence, still it had even then acquired great reputation for the accomplishments of the pupils, so that even at that time many Russian and English noblemen placed their children under its direction. In the course of time the academy passed through many successive improvements and reforms, and as it now stands, has for its object the instruction in the art of war of young men intending to become officers in the army. There are two courses in the academy, one of five years for the ordinary departments, and the other of six for the learned departments. The first graduates non-commissioned officers, and the second lieutenants; who, however, must remain two years more in the institution, for the school of application, serving at the same time in some regiment. The various branches of instruction are intrusted to twenty professors, viz.: of Analysis and Mechanics, of descriptive Geometry, of Mathematics, of physical Science,

Chemistry and Statics, of Fortification, of Topography and Geodesy, of military Art and History, of Design, of Italian Literature, of French Language, Dancing, Fencing, Gymnastics, and Swimming. There are besides two Directors of instruction, eight tutors, and a machinist, for keeping in order the philosophical apparatus, and aiding the professors of physical and chemical Sciences in their experiments. The pupils of the academy number about 200, part of whom receive free board, lodging and instruction, and part pay a moderate price for it.

FIRST GENERAL CORPS OF THE ARMY, (*Stato Maggiore Generale*).—This corps is composed of Officers of different ranks, of Engineers, Topographic Designers and Engravers. It was created in the middle of the last century; it has since been reformed and improved at different times. The subordinate officers are selected generally from the Royal Military Academy, who follow the “learned” course, in which they are taught the special theories in relation to the different corps. Though members of this corps, they are required to continue their instructions in the academy, in order to acquire the practice of theories previously learned. In field-works, both trigonometric and topographic, which are annually undertaken, in order to survey the country and to draw its maps, young officers are employed under the direction of the older, so as to give them practice, to accustom their eyes to the measure of distances, to the knowledge of the physical forms of ground, to the appreciation of its strategic value and to the use of drawings and maps.

The officers of this corps, in time of war, are obliged to reconnoitre the enemy, to observe their forces, their composition, dispositions and movements, to determine points to be fortified, and the nature and extent of the fortifications; to open roads, to build bridges and other communications, and to select quarters for the army. They also draw the maps for the use of the army, direct the administration of its provisions, preside over the discipline of the soldiers, the service of the guides, safeguards and explorers, the treatment of prisoners and of deserters. They keep the journal of all the operations of the army, and have the direction of the administrative department of war. In time of peace, they are destined especially to examine every part of the kingdom, and to draw the most remarkable places for military purposes, to gather the statistics and historical facts relative to the same subject, to compose the regulations of the army, to draw from all military works whatever can be useful to the improvement of the national forces, and to direct the different works of topography and engraving, which are undertaken by the corps.

The duties of the first general corps are relative to the service either of arms, or of the offices. The former is divided into three sections: 1st, of infantry and cavalry; 2d, of artillery and engineering; 3d, of general superior office. The latter embraces: 1st, the office of the general quarter-master, the archives and the library; 2d, the office of topography and of engraving; 3d, the general office.

Many valuable geodetic and topographic works have been executed by this corps, among which we may mention the measure of an arc of No. 11.—[VOL. IV., No. 2.]—31.

parallel of latitude, included between the tower of Cordouan near Bordeaux, in France, and that of Fiume, in Italy; which measure had been brought in France so far as the Roanne, and toward Italy so far as Ticino, but had been interrupted by the Alps. All the scientific operations made for this measure, as well as the operations instituted by the same corps, in order to verify the measure both geodetic and astronomical of the arc of the meridian, formerly determined by Beccaria, were published in Milan, in two volumes in 4to, with diagrams. The corps undertook also a general primary and secondary triangulation of all the continental kingdom so as to form a map, on a scale of a fifty-thousandth, divided into ninety-six sheets. This general atlas was afterward reduced to a scale of a two hundred and fifty-thousandth, which was published some years ago. Another work of great value has also been undertaken on the *ancient and modern, physical, political and military conditions of Northern Italy*, which is divided into five parts, two descriptive, two historical, and one graphic.

SCHOOL OF ARTILLERY IN THE ARSENAL.—Men, who are destined to work in the arsenal, receive here practical instruction in their art. The arsenal contains: 1st, a chemical and metallurgical Laboratory, in which analysis, &c., are performed; 2d, a mineralogical collection, containing 1100 specimens of minerals, and many models of crystalization, besides a complete collection of specimens from the territory of Genoa; 3d, a collection of Philosophical Apparatus, containing 600 different machines and instruments, partly from Puxy and Dumotier of Paris and partly from Zest and Brabante of Turin; 4th, a library containing the best books on Mathematics, Natural Philosophy, Astronomy, Geology, Geography, &c.; 5th, a foundry of cannon, which includes the foundry properly so called, the atelier of modelers, the Hall of models, the ateliers of trepans and of engravers; 6th, the lithographic establishment; 7th, the machine shop; 8th, a manufacture of all kinds of arms for the army and navy; 9th, the atelier of bombardiers; 10th, the manufacture of gunpowder, and refinery of saltpetre; 11th, a forge for gun-barrels.

ROYAL CORPS OF THE MILITARY ENGINEERS.—This is another scientific corps of the army, and has three divisions: 1st, the engineers and officers; 2d, the sappers and miners; 3d, the office of the archives,—all under the command of a Major-General. It is their duty to prepare the designs for new military buildings, and to keep in order the existing establishments.

ROYAL ARMORY, (*Armeria Reale*).—Among the establishments in relation with military instruction we mention the Royal Armory, which is an extensive collection of ancient and modern arms, and especially of those used in the middle ages. It is a treasure of history, of military science and of the mechanical fine arts, enriched with a great quantity of specimens remarkable both for their structure and ornaments, embellished with historical designs and sculptures, reliefs and bas-reliefs, carved and gilded. There are arms of all ages, shields, helmets, cuirasses, coats of mail, steel waistcoats, iron armlets and greaves, lances, daggers, clubs,

bows, swords, and guns of all kinds and ages, highly interesting to military students. There is a rich collection of Indian weapons, gathered by Vidua in his travels through Central Asia, which was increased by the Prince of Carignano, with many implements from the new world. The flags which are unfolded in the Armory are precious monuments, which recall the ancient and modern glories of the Sardinian army. Here also is a valuable collection of medals and coins, in which is written the history of Sardinian kings, of others which are historical monuments of the provinces of the kingdom, and finally of coins and medals of Italy, from the fall of the Empire to our own times.

KING'S LIBRARY, (*Biblioteca del Re*).—This contains thirty thousand volumes of the best editions of ancient and modern works on history, travels, arts, economy, etc. Among these some are printed on parchment and painted in miniature. The selections of military works is complete, and the collection of manuscripts rich. We may mention, among these, a collection of fifty-three volumes of Atlases containing designs for the history of artillery of Europe, by Col. Rouvroy; all the materials which Frederick the Great communicated to Algarotti for the history of the seven years' war, with many letters of that king to its author; the only complete copy of the history of the Arabs from their origin to the Caliph of Moawiyah, by Ebn-Kaldm; and finally, many *codices* both in parchment and papyrus, Arabic, Persian, &c. There are many letters of Emmanuel Philibert, of Prince Eugene of Savoy, of Redi, autographs of Napoleon, and of some of his generals. There we find a collection of two thousand ancient designs, among which twenty by Leonardo da Vinci, some by Raphael, Correggio, Titian, etc. The library possesses moreover a beautiful collection of Chinese insects, designed and painted in miniature on silk paper by Chinese artists, with the Chinese names of every insect; and a collection of many Chinese miniatures, birds, flowers, plants, dresses, &c.

ARCHIVES OF THE STATE, (*Archivi di Stato*).—They contain treasures relative to the history of the country. The great quantity of its papers are inclosed in beautifully carved cases, classified in fine order, and registered in excellent catalogues. To the Archives there is united a library for the use of the executive departments, which is enriched by many precious manuscripts, many of which on parchment, and especially three missals of a remote antiquity, which are considered of great value for the excellence of the designs and beauty of the coloring of their miniatures. They belong to the age of Raphael. There are in the library many books and editions of the fourteenth and fifteenth centuries.

THE ROYAL ACADEMY OF MEDICINE AND SURGERY was founded in Turin some years ago by the most prominent physicians of the country, for promoting the progress of medicine, surgery, and relative sciences. It is composed of ordinary, honorary, and corresponding members, the first of which are obliged to present a paper every year. The Academy meets, twice a month, to hear the reading of papers and to discuss theoretical and practical subjects. It offers annual prizes for the best works on medical

and surgical questions, and publishes a monthly paper and yearly volumes of its acts, which are highly esteemed by all medical societies of Europe. Connected with the Academy is an association of mutual aid of all the physicians of the country, who, by paying an annual moderate fee, have right to a pecuniary allowance in case of their sickness, or of other embarrassing circumstances. The Academy and the association are in a flourishing state, and in the way to more extensive operations.

THE ROYAL ALBERT ACADEMY OF FINE ARTS was founded in 1824 by Charles Felix, reformed and enriched by Charles Albert, who gave his name to the institution. Its object is to give free instruction to young men in the art of design, and especially in the arts of painting, sculpture, architecture and engraving. Its officers are a director and president, a secretary, the first painter to the king, ten honorary members, fourteen resident professors, foreign professors, and honorary fellows. The schools are preparatory and special: the preparatory embraces, 1st, the first and second class of drawing; 2d, the school of anatomy; 3d, of statuary; 4th, of nude figures; 5th, of drapery; 6th, of perspective; 7th, of history and poetry. The special school, in which the pupils enter when they have given satisfactory proofs of their sufficient progress in the preparatory school, and have chosen the branch of art to which they prefer to devote themselves, comprehends 1st, the school of painting; 2d, of architecture; 3d, of sculpture; 4th, of engraving; 5th, of ornament.

Examinations and rewards promote the love and the progress of the arts. The exhibitions for the rewards of the first class, which consist of golden medals and a sum of money, take place every three years, and the works of all artists are admitted. The rewards of the second class consist of silver medals, with a smaller sum, and are bestowed every six months on the pupil, who has exhibited the most meritorious work in that time. Besides, the government grants three pensions to the three best pupils of the Academy, to enable them to reside and to study in Rome. These pensions are granted to a pupil of each of the three arts of painting, sculpture and architecture. For the two former the examination is open every three years, for the latter every six years. The pupils so privileged are obliged to send a work of their own to the Academy, every year. THE ROYAL GALLERY OF PAINTINGS, containing many masterpieces of all the principal schools, affords to the pupils a continuous means of improvement. This gallery is remarkable especially for the excellent collection of paintings by Piedmontese artists of great fame, as Caravoglia, Macrino, Giovenone, Molineri, Caccia, Olivieri and Gaudenzio Ferrari, all of whom stand side by side with Raphael, Guido Reni, Guercino, Gentileschi, Carlo Dolce, Crespi and Cigagni. It possesses also originals by Titian, Palma, a Magdalene by Paul Veronese, and many works of Jacopo da Bassano and of Canaletto. The foreign schools are represented by Mignard and Poussin of France, by Holbein and Albert Durer of Germany, by Velasquez and Murillo of Spain, by Paul Potter and Teniers, Wouwermans and Van Dyke of Holland and Flanders. The Academy, besides an excellent collection of drawings and models,

possesses of its own a fine gallery of paintings, among which are twenty-four by Gaudenzio Ferrari.

PHILHARMONIC ACADEMY OF TURIN.—This conservatorium, or school of music, was founded in 1815 by a few young men with a modest beginning, but was soon after increased and enriched by some wealthy benefactors and by the generosity of the kings. Its object is to promote the study of music by every means, especially by concerts and evening parties, and by the free teaching of music. Its members are divided into two classes, *ordinary* and *aggregate* fellows. The ordinary can not be more than one hundred and fifty in number, and fill their vacancies by ballot. They pay an entrance and an annual fee. The *aggregate fellows* are either honorary or resident. The free school of singing is directed by the Academy by the medium of a director and professors. The course occupies six years, and is divided into as many classes. Monthly, quarterly and annual examinations afford the pupils frequent occasions of showing their improvement, and of gaining honorary medals. Over the school for girls presides a committee of ladies, who visit it daily, and educate those who are from the lower classes in the politeness and elegance of manners, which are so necessary to candidates for the stage. To diffuse a taste for music, the Academy not only gives free instruction, but often opens its splendid halls for concerts and evening parties.

PHILODRAMATIC ACADEMY.—It was founded in 1828, and proposes not only to prepare good actors for the stage, but more to educate the young of both sexes in the art of delivering public speeches, and of reading. Its ordinary members are thirty-five in number, while the number of honorary members is undetermined.

CACCIA'S COLLEGE.—A beneficent man, by the name of Caccia, created this college and endowed it with a large property. It was in Pavia until 1820, and was transferred in that year to Turin. It supports four pupils, who learn the principles of design at the Royal Academy of the Fine Arts. It also supports in Rome three pupils; two for sculpture, one for painting, and another in Milan, in engraving. It, moreover, gives free board and lodging to sixteen young men from the province of Novara, during the whole of their studies at the university.

ROYAL COMMITTEES FOR THE PROGRESS OF SCIENCES, LETTERS AND ARTS.—Charles Albert created in 1832 a committee of antiquities and fine arts, and intrusted to it the office of suggesting means of the discovery and preservation of all objects of antiquity and fine arts. Another committee, created in 1833, is called the *Royal Deputation* for researches into the history of the country. It is its duty to publish a collection of inedited or rare works in connection with the history of the country, and a diplomatic code of the kingdom. This committee has, since the time of its institution, published nine huge and most valuable volumes, *folio*, with the title of *Historiæ patriæ monumenta edita jussu Regis Caroli Alberti*. The work is to be continued.

A third committee of statistics, created in 1836, is intrusted with the collection and publication of all statistics of the kingdom, with the aid of

sub-committees instituted in every city. This committee has already published many volumes on the subject, and next year will undertake a general new census of the country.

THE ROYAL ACADEMY OF AGRICULTURE OF TURIN promotes the interests and the development of this important source of public welfare, discusses in its regular meetings subjects relating to it, and receives papers and specimens of agricultural productions and implements. It opens yearly two public exhibitions, one of flowers, fruits, and every kind of horticultural productions, the other of agricultural implements, and gives honorary prizes for the best specimens. The Academy publishes every year its transactions, which contain valuable papers, and really substantially form the contemporaneous history of Sardinian agriculture. The attention of the Academy is particularly directed to the cultivation of the vine and the mulberry tree, and to the best method of making wines and of raising silk-worms, which constitute two of the most important staples of the agricultural industry of the country.

THE AGRICULTURAL ASSOCIATION has for its object the promotion of agriculture and arts connected with it. The Association holds meetings, where appropriate subjects are publicly discussed, and publishes agricultural tracts in order to diffuse among the people a knowledge of the soundest principles, and the best systems and implements of cultivation, and gives prizes for the best specimens of agricultural productions and instruments. It possesses a good museum and an experimental garden, and publishes a monthly agricultural review and yearly volumes of its annals.

THE CHAMBER OF AGRICULTURE AND COMMERCE OF TURIN is composed of fifteen members, of whom four must be landed proprietors, two bankers, two silk manufacturers, two in other manufacturing business and five merchants. Its duty is to watch over the progress of agriculture, industry and commerce, to examine the obstacles which may prevent their development, and to suggest remedies. The Chamber supports free public courses of Commercial Jurisprudence and Political Economy, which are attended by merchants, clerks, &c. To the Chamber is attached the *Technical Institute*, of which we have elsewhere spoken. It presides over the national exhibitions of industry, which take place in Turin every three years. The constitution and objects of the CHAMBERS OF COMMERCE AND AGRICULTURE OF GENOA, CHAMBERY AND NICE are similar to those of the Chamber of Turin.

The following institutions have more or less relation to those, of which we have already given an account :

THE ROYAL ACADEMY OF SCIENCES OF SAVOY, in Chambery.

THE ACADEMY OF SCIENCES AND ARTS of Alexandria.

THE ECONOMICAL ASSOCIATION of Chiavari.

THE ACADEMY OF PHILOSOPHY of Genoa.

THE ASSOCIATION FOR THE PROGRESS OF EDUCATION, established in Turin, and ramified throughout the kingdom.

THE ACADEMY OF PAINTING, ARCHITECTURE, ORNAMENT AND ENGRAVING

of Genoa, to which courses of lectures on the fine arts are attached. It supports also two pupils in Rome and in Florence, for instruction in painting and sculpture.

THE PHILHARMONIC ASSOCIATION of Genoa.

THE PHILHARMONIC DRAMATIC LITERARY ACADEMY of Cuneo.

THE PHILHARMONIC POETIC LITERARY ACADEMY of Alba.

THE ROYAL ASSOCIATION OF AGRICULTURE AND ECONOMY of Cagliari.

THE ASSOCIATION OF WORKMEN AND MECHANICS FOR THEIR MUTUAL INSTRUCTION AND AID, which is to be found in almost every city.

THE ROYAL COUNCIL OF THE ADMINISTRATION OF MINES, AND THE ROYAL CORPS OF ENGINEERS CONNECTED WITH THAT COUNCIL.

THE ROYAL CORPS OF CIVIL ENGINEERS FOR THE SUPERINTENDENCE OF WATERS AND ROADS.

THE ASSOCIATION FOR THE PROMOTION OF THE FINE ARTS of Turin.

THE ASSOCIATION FOR THE PROMOTION OF GUNNERY AND SMALL-ARM PRACTICE of Turin, intended especially for the instruction of the National Guard.

VII. THE PRESS.—Though, before 1848, a civil and ecclesiastical censorship exerted a most severe and absurd control over all kinds of publications, and no political newspaper was allowed in the country, yet even at that time many valuable works were issued from the Piedmontese press, both scientific and literary, which have given to the typographical mechanics of Sardinia a high reputation through all Italy. The constitution of 1848, having insured to the country absolute freedom of the press, made it a powerful instrument of education, as well as of a general control over all acts of the administration. Indeed, the freedom of the press is one of the most important of the real benefits derived to the country from the constitution. All citizens have the right to publish whatever they may choose on whatever subject, and the government has no power of control over any publication; writers, as well as publishers, being only responsible before the courts of justice, which have to pronounce their sentences after the verdict of a jury, in the causes concerning their offenses against the laws of the country. Indeed, editors of political papers can even throw this responsibility on any person, whom they choose to appoint as a responsible trustee of their paper. The freedom of the press is so unlimited, that papers are to be found which not only stand in strong and systematic opposition to the administration, but which propose, as their object, the propagation of the most radical doctrines against the established government; some proposing to return to an absolute monarchy under the guardianship of the church, and others to supersede the present constitution by establishing republican institutions in the country. We must say, however, that these papers do not receive great encouragement from the people, who, being of a nature especially practical and positive, have no taste for political theories beyond all possibility of realization in the present condition of Europe, and much less for the anachronism of the middle ages, which ignorant or interested parties would substitute for the institutions born of present civilization. The following are the principal daily papers published in Turin:

THE *GAZZETTA PIEMONTESE* is the official paper of the government, valuable for its publication of all the documents relative to the administration, and of the full debates of the Parliament.

THE *OPINIONE*, a paper representing the majority of the House of Deputies, and supporting the politics of the administration. It supports also, with great skill and strength, the emancipation of Italy from the dominion of Austria, and its correspondences from Lombardy and Venice give the most reliable accounts of those provinces. Among its contributors we mention G. Dina, a learned and talented young man, who has the main direction of the paper.

THE *DIRITTO* is the exponent of the most advanced and liberal party of Sardinia; it expresses the liberal opposition of the Lower House, and while accepting and supporting the present monarchical representative government, struggles for a broader interpretation and more liberal construction of the political constitution. Independent of the government, to which it is in a certain sense opposed, it pleads with dignity and power the cause of freedom and nationality. The *Diritto* is directed by a few of the members of the liberal party of the House, among whom we may instance the most important and active, L. Valerio, whose life has been long since devoted to the moral progress of the country, and engaged by every means in promoting the independence of Italy. Few men in Sardinia have such claims, as M. Valerio, to the esteem and affection of his countrymen.

THE *UNIONE*, without being connected with any political party, is the organ of the general feeling of the country on the subject of the emancipation of Italy from Austria, as well as from Papal dominion. Bianchi Giovini, an able and learned politician, who may indeed be considered as the best qualified writer on ecclesiastical matters relative to civil power, edits the *Unione*; which holds a high standing among other papers for its sound and positive doctrines, and for its calm and scientific handling of its subjects. Substantially, freedom and independence are the principles of which the *Unione* is the faithful exponent.

THE *GAZZETTA DEL POPOLO*, the smallest and the cheapest of all the newspapers, exerts the greatest and most extensive influence on the less educated classes of people, for which it is particularly published. Its objects, which do not differ substantially from those of the *Diritto* and *Unione*, are pursued with remarkable shrewdness and power. *The Gazzetta*, enjoying a larger circulation than any other paper in the country, does good service to the cause of civilization, in its endeavors to excite in the masses the feeling of their dignity and the necessity of their emancipation from the grasp of superstition, as well as the necessity of insuring independence of their country. Govean, Borella and Bottero, the bold and able editors of the *Gazzetta*, may be called true missionaries of freedom in Sardinia, and of national independence throughout Italy.

Besides these, there are published in Turin many other daily papers, which are more or less conducted in the same spirit as the above; such

are the *INDIPENDENTE*, the *ESPERO*, the *STAFFETTA* and the *FISCHIETTO*, which very successfully maintains a humorous character, and for its wit as well as for its caricatures, may compare with *Punch* and *Charivari*. The *ARMONIA* supports the interests of the church, and it is natural enough, that it longs for the restoration of the influence of the clergy on the government, as the only ark for the safety of its party.

In Genoa there is published an official and daily paper, (*GAZZETTA DI GENOVA*,) and besides the *CORRIERE MERCANTILE*, which represents the political party of the government and the interests of that city and province, and the *ITALIA DEL POPOLO*, the organ of the Republican party, which in its way pleads the cause of freedom and independence. In all the other principal cities of the Kingdom, there is published at least one paper, more or less devoted to the same principles held by the great majority of the press of Turin. Such are the *GAZZETTE DE SAVOIE* of Chambéry, the *GAZZETTA POPOLARE* of Cagliari, the *GAZZETTA DELLE ALPI* of Cuneo, the *TEMPO* of Casale, the *VESSILLO DELLA LIBERTÀ* of Vercelli, the *PENSIERO* of Oneglia, the *CITTADINO* of Asti, &c.

Some branches of arts, industry and commerce, scientific and literary departments, are represented by papers and reviews; like the *GAZZETTA DEI TRIBUNALI*, the *GIORNALE DELLE ARTI E INDUSTRIE*, the *GAZZETTA MEDICA*, the *BOLLETTINO DELLE STRADE FERRATE*, the *PIRATA*, the *RIVISTA MILITARE*, the *SECOLO XIX*, and above all the *RIVISTA CONTEMPORANEA*, a monthly scientific and literary Review of the highest character not only in Sardinia, but in all Italy, and which is supported by contributions of the best writers of the country.

VIII. EDUCATIONAL PRESS AND SCHOLASTIC BOOKS.

The educational movement, which began in Sardinia about fifteen years ago, was produced and directed by some pedagogical works of great merit, published both in Piedmont, and in other parts of the Peninsula. Among the writers who have contributed most to this educational progress of Italy, we may mention Rosmini, Lambruschini, Mayer, Thouar, Sacchi, Parravicini, Cantu, Aporti, Fontana, Rosi, and Taverna, all of whom belonged to other States of Italy, except Rosmini, who lived in Sardinia. In Piedmont, however, as early as in 1840, Vincenzo Troja, under the direction of the *Magistrato della Riforma agli Studj*, prepared a manual for teachers, and a new programme for elementary schools, both of which were published under the title of *Istruzione ai maestri delle scuole elementari*. In this manual the principles of pedagogic art were laid down, the object of primary schools defined, a new system of reading introduced, and above all, instruction graduated according to different classes of pupils, and corporeal punishments abolished. Prof. Troja prepared afterward two Reading Books, which were approved by the *Magistrato*, and prescribed for all primary schools. Though imperfect works, these books changed entirely the method of teaching, aroused in the minds of teachers a feeling of the necessity of further and deeper investigation on didactic method, and brought into the schools the educational systems, which had already obtained favor in Germany and

Switzerland, through the works of Pestalozzi and Girard. It is just to add, that this educational movement was greatly aided by the labors of some high minded citizens, who, though entangled at every step by a petty censorship, and troubled in their efforts by a suspicious government, strenuously fought on behalf of human civilization, by promoting by every means the educational progress of the country. Among these we will mention C. BONCOMPAGNI, afterward minister of public instruction, and more particularly LORENZO VALERIO, above named, who well supported that liberal movement in his highly philanthropic paper, *Letture Popolari*. This journal, which was soon after abolished by the government, sprang up more powerful, under the name of *Letture di famiglia*, continuing most efficiently the noble work of its predecessor.

After the common efforts of the liberal party had been somewhat successful, after public opinion grew so strong in favor of educational reform, as to obtain from the government the establishment of schools for teachers, and the official acknowledgment of the necessity of that reform, works on methodic art, and other educational subjects, appeared from every quarter in such number, that it became quite difficult to select the few of real merit from the mass of the indifferent or paltry. In this condition of things, the government in order to prevent a general confusion which would have inevitably succeeded in the schools of the country, and to prevent useless expenditures by parents, renewed the former ordinance, by which no book should be introduced into the schools, before approved by the supreme council of instruction. The prescribed list of the text-books for primary and secondary studies is the following:

Elementary Course.—Sillabario graduato di V. Troja, Primo libro di lettura; Secondo libro di lettura; Catechismo della Diocesi; Schmid, Racconti della storia sacra; Grammatica elementare Italiana di A. P.; Compendio di aritmetica per un fratello delle Scuole Cristiane; Nozioni compendiose di geografia; Metodo e quaderni di Scrittura di Delpino e Trossi. *Course of Grammar—Classics*: Epitome Historiæ sacræ; Epitome historiæ Græcæ; Epitome historiæ Romanæ, seu de viribus illustribus urbis Romæ; Cornelii Nepotis opera; Phædri Fabulæ; Ciceronis Epistolæ ad familiares; Ciceronis Laelius sive de amicitia; Nova anthologia Latina, sect. prima; Nuova antologia Italiana, sez. prima; *Text-books*: Compendio del nuovo metodo, oppure della grammatica Latina; Corticelli regole ed osservazioni della lingua Toscana; Storia sacra dell' A. e N. Testamento del P. Secco; Compendio della Storia della R. Casa Savoia; Nozioni compendiose di geografia; *Course of Rhetoric—Classics*: Caesaris Commentarii &c.; Ciceronis Orationes Selectæ; Virgilio Georgicon and Aeneidos; Horatii carmina selecta and Ars poetica; Nova anthologia Latina sect. secunda; Anthologia Græca; Tasso Gerusalemme Liberata; Alfieri Saul; Casa Galateo ed orazioni; Nuova antologia Italiana, sez. seconda; *Text-books*: Grammatica Greca di Burnouf—Trattato dell' arte poetica—Cellarii Breviarium antiq. Rom. cum appendice Juvencii de Diis; Marta, trattat di Aritemtica. For the lectures on History and Belles-Lettres, the prescribed programmes are followed. *Course of Philosophy—Classics*: Ciceronis De Officiis, St. Augustini Soliloquia, Nova Anthologia Latina, (sect. tertia,) Nuova Antologia Italiana, (Sezione terza;) *Text-books*: Marta, Elementi di Algebra e Geometria; Botto, Elementi di Fisica Sperimentale. For the lectures on Logic, Metaphysics, Moral Philosophy, and Natural History, see the programmes.

We do not venture to say, that Sardinia possesses excellent books for its schools, nor that the selections of the Government could not be better. On the contrary, we admit that there is a decided lack in this branch of literature, especially for elementary schools. There are, however, some books which are of a superior character, as Feccia's elementary books, and the *Elementi di Logica e Metafisica*, by PIER ANTONIO CORTE, and the *Elementi di Etica*, by the same writer, which are rightly considered

as the best text-books of the philosophical course, and as such adopted by the best colleges. Philosophy is greatly indebted for its progress in Sardinia to Professor Corte, who, in connection with a few others, undertook many years ago to reform this study, and succeeded in delivering the university of Turin and its colleges from the influence of the sensualist doctrine, which for a long time had prevailed. Prof. Corte is also author of a valuable Latin philosophical Reader: *Anthologia ex M. T. Cicero, et L. Annaeo Seneca, cura et studio Petri Antonii Corte, in usum Philosophiæ Studiosorum concinnata.*

Political papers often treat ably the subject of educational reform, and thus many valuable ideas find their way into the public mind. As for special educational papers, the monthly *Journal of the Association for the advancement of Education*, which was for many years published in Turin, contained valuable writings in all branches of pedagogic and didactic science. But it having some years ago closed its publications, it was resumed, under the name of the *Institutoire*, a semi-monthly Review, edited for the benefit of teachers by Professor BERTI, to whose labors the cause of public education is much indebted. Prof. D. Berti is one of the youngest and ablest members of the Parliament, and many important improvements in the educational system, we doubt not, will be achieved by his talents and devotion to the country. With him is associated G. A. RAYNERI, professor of Methodology in the University of Turin, whose public lectures on pedagogy are of high standing and of great value to the students of this course. Prof. Rayneri is the author of an excellent book, *Principii della Metodica.*

XI. ANTONIO ROSMINI CONSIDERED AS THE PHILOSOPHER OF PEDAGOGY, AND AS AN EDUCATOR.—All the most important works or writings, all the most effectual lectures which have been published or delivered in Italy, and especially in Piedmont, during the last twelve years, whether on methodic science or on didactic art, either derived their foundations or their doctrines from the scientific principles, which were laid down in the immortal works of one of the greatest men of our age, ANTONIO ROSMINI. It may be allowed to the writer of this paper to introduce to the acquaintance of American readers the venerated name of this great philosopher, a name which recalls to his mind the sweetest recollections of his life, and excites in his heart the deepest grief for his untimely death, which deprived Italy of one of her noblest sons, and science of one of its most gifted devotees. Devoted as a priest, refined as a scholar, sound as a statesman, sublime as a thinker, humble as a Christian, and bold as a philosopher, Rosmini united in himself in a high degree many qualities, any of which would be sufficient to convey to posterity the name of its possessor. The acuteness and breadth of his mind were only equaled by the extent of his learning, and by the refinement of his taste. With the synthetic power of Dante and with the analytical faculties of Thomas Aquinas, his mind embraced all human knowledge in its unity and universality, with the view of erecting a philosophical Encyclopædia, which was to be derived from one principle and divided into different branches,

according to their logical order. Of this Encyclopædia he had published some twenty volumes, in which science is founded on a new and immovable basis, and developed with such a deep, broad, and original survey, that few philosophers, either in ancient or modern times, can be compared to him in this respect. In his religious feelings, though a sincere believer and enlightened apostle of the Catholic church, in which he was born and educated, yet he did not approve, nay openly condemned the excesses of the clergy, and whatever abuses he might have found in the church. Hence the severe trials to which he was submitted under the influence of extreme parties of both sides. But the strictness of Rosmini's life and the holy charity with which he was endowed secured him the blessedness, which arises from the contemplation of truth, and the practice of benevolence. Tolerant of all opinions, and respectful to all men, though dissenting from him, despising all honors which the world could bestow upon him, giving up to charitable objects the large fortune which he had inherited from his family, Rosmini showed himself a true follower of him, in the faith of whom he lived and died. He ended his life in 1855, at Stresa, on the Lago Maggiore, at the age of fifty-eight years.

Considering Rosmini in connection with the subject of education, we shall not enter into any account of his immortal works on Ideology, Logic, moral and political Sciences, Anthropology, Psychology, Philosophy of Jurisprudence, &c. We will only mention his book "on *Christian Education*," his essay "on *Unity of Education*," and his *Catechism arranged in accordance with the ideological order*, with a valuable preface on *general method of teaching*. He had commenced a great work on *Pedagogy*, of which there were to be three volumes, when death interrupted his labors. The first part of this work, which is almost finished, is, "*On the fundamental principle of Methodology, and on some of its applications to Human Education*." The philosopher establishes here a principle, which he expresses in the following formula: "Those objects must be first presented to human mind, which belong to the first order of intellectual acts: then the objects of the second order, then those of the third, and so on successively, so that you shall never lead the child to an act of the second order, before he is master of those of the first, and so on in regard to the acts of the third, and other superior degrees." This principle is derived from the doctrines of Rosmini on Ideology and Logic, and is founded on the very nature of the human mind, which develops itself gradually, so that a law of gradation constitutes the principle of methodic and didactic art. This gradation depends on the gradation of mental acts and objects, viz.: of ideas, which are presented to the mind, and which are naturally classified according to a necessary and unfailling order.

Then applying this principle to the education of children, Rosmini undertook to classify and to analyze their intellectual acts, showing the method of training them in each order of these acts, as well as of their faculties and objects. In this view he distinguished many ages of childhood, of which he follows the gradual development and examines the

different laws, which ought to preside over their education. We will not attempt any analysis of this work, which, though unfinished, will be a great addition to pedagogical science, whenever it shall be published. We may add, however, that Rosmini, though he could not perfect his greatest work on Pedagogy, yet he gave a decided impulse to educational researches by his psychologic and anthropologic discoveries, in which the human faculties were more sagaciously than ever before described in their nature and origin, their offices declared, their acts defined, their natural order pointed out, the laws of their development fixed, their stimuli classified, and the conditions of their working established. Thus Rosmini revealed to educators the organization and the structure of the subject, the faculties of which they are called to develop in their natural order and harmony, and, by his ideologic theories, cast a new light on the nature of truth, beauty and virtue, which constitute the objects at which all education must aim.

But Rosmini rendered great service to the cause of education, not only as the philosopher of pedagogy, but yet more as one of the most effectual educators of the country. With this object he founded and supported by his own means an institution of clergymen and laymen, (*The Charity Association*,) who are bound to devote themselves to all kinds of charitable works, and, above all, to the education of youth. Thus he was able to open many elementary schools, asylums, evening and Sunday schools, not only in Piedmont, but in Switzerland and in England, which were managed by teachers under his direction and control,—all of which he was able to see flourishing at the time of his death. To provide his schools with good teachers, he founded in his institution normal colleges, with the object of giving a thorough instruction in method to those, who intended to devote themselves to elementary schools. The students of these colleges are divided into two classes, in one of which teachers of common schools are prepared, in the other professors of method are trained. The elementary schools, within a certain limit, depend on a central college, and their teachers are obliged to repair to it during their vacations, in order to confer with their companions on the management and improvements relating to their schools. To each normal college is annexed a boarding establishment for the pupils of the elementary school, in which the students of the college learn the practice of didactic art.

He showed a similar interest in the education of girls, which he believed of no less importance than that of boys. With the object of promoting it, he founded also an institution of young ladies, whom he called *Sisters of Providence*, whom he educated in the art of teaching and appointed to elementary schools for girls, and to the many infant asylums intrusted to his care in Piedmont, in Switzerland and England.

No man indeed in Italy has done so much for the progress of education, as well as of philosophical sciences, as Rosmini. His doctrines may be discussed and disputed, but his life commands the admiration of all, who feel an interest in the cause of human civilization. He felt that the life of

thought, which was so active within him, was not a perfect life; thence he endeavored to unite in himself the highest contemplation to the most extensive action, and this he directed to the education of clergymen, whom he tried to bring to that spirituality of religion, which too often is lost in the formalities of their profession, and to the education of children, in whom he was able to read more simply and purely the history of human nature.

To enable our readers to avail themselves of the philosophical researches of Rosmini, we add a catalogue of his principal works, which contain treasures of philosophical truth and analytical observations, and present one of the best expositions of the principles of pedagogic and didactic sciences.

LIST OF THE WORKS OF ANTONIO ROSMINI.

1. INTRODUCTION TO PHILOSOPHY, 1 vol.
2. A NEW ESSAY ON THE ORIGIN OF IDEAS, 3 vols.
3. THE RESTORATION OF PHILOSOPHY IN ITALY, 1 vol.
4. LOGIC, 1 vol.
5. THEODICY, 1 vol.
6. PSYCHOLOGY, 2 vols.
7. PRINCIPLES OF MORAL SCIENCE. A COMPARATIVE HISTORY OF MORAL SYSTEMS, 1 vol.
8. ANTHROPOLOGY IN RELATION TO MORAL SCIENCE, 1 vol.
9. A TREATISE ON MORAL CONSCIENCE, 1 vol.
10. PHILOSOPHY OF NATURAL RIGHT, 2 vols.
11. PHILOSOPHY OF POLITICS, 1 vol. *Containing, 1st. A work on the principal causes of the preservation and ruin of Human Societies. 2d. A work on Society and its Objects.*
12. MISCELLANEA, 6 vols.

INEDITED WORKS.

1. THEOSOPHY. *Containing Ontology, Cosmology and Theology*, 3 vols.
2. PEDAGOGY, 1 vol.
3. METHODOLOGY, 2 vols.
4. PHILOSOPHY OF LITERATURE, 1 vol
5. PHILOSOPHY OF POLITICS, 2 vols.
6. SUPERNATURAL ANTHROPOLOGY, 4 vols.
7. A PHILOSOPHICAL COMMENTARY ON THE GOSPEL OF ST. JOHN.

AN ACT ORGANIZING THE ADMINISTRATION OF PUBLIC INSTRUCTION AND ITS AUTHORITIES, PASSED IN FEBRUARY, 1857.

CHAPTER I.—*General Provisions.*

1. Instruction is either public or private. The minister of public instruction directs the former, and promotes its progress; while he watches over the latter in its relations to morals, hygiene, political institutions, and public order.

2. Public instruction is divided into three branches; elementary, secondary, and superior.

3. The existing laws, determining the characteristics of public and private schools, shall be still enforced. (1.)

4. The public institutions and schools of learning and education, (with the exception of military, as well as nautical institutions and schools, which depend on the minister of war,) and all the authorities, to whom is intrusted the direction and inspection of the same, according to the enactments of the present bill, shall depend on the ministry of public instruction.

5. In public schools intrusted to religious corporations, legally admitted into the state, the appointments of directors, professors, and teachers, either male or female, shall be made by the authorities of the state, on the nomination of the same corporations. But the candidates must prove themselves competent to occupy the places for which they will be proposed; therefore they shall pass the examinations, and conform themselves to the other rules and duties prescribed by the by-laws.

6. It shall belong exclusively to the authorities of public instruction to enforce the discipline of public schools, to collate the academic degrees, to install collegiate doctors of the faculties, and directors, professors and teachers in the schools, which depend upon the minister of public instruction. (2.)

7. The special acts relative to superior, secondary and elementary instruction, shall determine the public regulations for private schools, and the rules according to which the government shall supervise them. The same law shall contain provisions, according to which, provincial and municipal corporations shall have an effective share in the direction of their own schools and institutions. Meanwhile, citizens, who shall have fulfilled all conditions enacted by law, in order to be eligible to the office of professors or teachers in the public institutions of secondary and elementary instruction, shall be allowed henceforth to open and conduct private institutions of the branch and degree for which they have obtained their certificate.

8. Till said special acts shall be enacted, all private schools and institutions of learning and education, either for boys or girls, directed either by laymen or clergymen, shall conform themselves to existing laws. The minister of public instruction shall continue to supervise them by means of his officers; and, should the directors of those institutions refuse to conform, or, in fact, should not conform themselves to said laws, the minister shall have the power of closing them by a special decree, after having obtained the consent of the Supreme Council, and heard the defendant director. In urgent cases, after having heard the Council, he shall have the power of suspending, by his own authority, the director from his office, and also of closing the school or institution, till a definite provision shall be made as above.

9. The courses followed in seminaries, or in ecclesiastical or religious colleges, of whatever denomination, not exclusively for ecclesiastical education, shall be considered invalid for admission to courses, examinations, and academic degrees of public schools, unless they conform themselves to the by-laws enacted for public schools. In every case, these establishments shall always be submitted to the supervision of the government. (3.)

10. Religious instruction and education in public institutions and schools shall be founded on the Catholic religion. Special acts and by-laws shall determine the rules to be followed in the religious training of Catholic pupils. The religious training and instruction of dissenting pupils shall be left to their parents. (4.)

CHAPTER II.—A. *Authorities, which preside over Public Instruction.*

11. Under the presidency of the minister, a Supreme Council of public instruction is instituted; a legal counselor, a general inspector of secondary schools, a general inspector of elementary and normal schools, and two more inspectors of secondary schools, of whom one for scientific, the other for literary branches, are attached to the ministry. The minister shall provide the technical schools with a special inspection. In the principal provincial cities, there shall reside a provincial scholastic deputation, a royal scholastic superintendent, (*Regio Provveditore agli studi*), and a provincial inspector of elementary schools. Every district of the province, (*mandamento*), or several districts together, shall have a district superintendent, (*Provveditore mandamentale*). (5.)

B. *Supreme Council of Public Instruction.*

12. The Supreme Council is composed of fifteen members, ten ordinary and five extraordinary. The former shall be appointed by the King, and two of these, at least, shall be elected from among persons not belonging to public instruction. The last shall also

be appointed by the King, and selected from five lists of three candidates, which shall be presented by each of the five faculties of the university of Turin. The ordinary members only shall receive a salary. (6.)

13. A fifth of the members shall be renewed every year, so that two of the ordinaries and one of the extraordinaries shall leave annually. In the first four years after the first election, it shall be decided by lot which members shall vacate the office; afterward, the three members who have been longest in the office shall annually leave their place. These may be appointed again.

14. The vice-president is annually elected by the King from among the members; for the validity of decisions a *quorum* of eight members is required.

15. Whenever the minister or the Council shall order it, the counselor and the general inspectors shall join its meetings, but shall have no power of voting; the presidents of the faculties may also be called to the meetings, and they shall have the power of voting on questions relative to the courses and programmes of their own faculty.

16. Both the minister and the Council have power to call to the meetings whomever they may think convenient to hear in any particular discussion. These persons, however, shall have no power of voting.

17. The Council, on the request of the minister, shall compose and examine the bills, decrees and by-laws concerning instruction, and shall give its opinion on every other subject relative to teaching and scholastic administration.

18. It shall examine and propose to the minister for his approbation text-books, treatises, and programmes.

19. It shall examine the applications, and their merits for the vacant chairs of all the universities of the kingdom.

20. It shall give its opinion, *a*, on doubts as to the right interpretation and application of laws relative to public instruction; *b*, on contests between the different scholastic authorities; *c*, on by-laws relative to examinations, the establishment of new colleges and boarding scholastic establishments, and on whatever relates to general scholastic administration, and to distribution of the subjects among the different chairs and branches of instruction.

21. It shall give its opinion on neglects and offenses, of which Directors and Professors of secondary and normal schools, after three years of their service, may be accused, whenever such offenses may deserve a degradation or suspension for more than three months. The defendants have always right to be heard, either orally or in writing, as they may choose. (7.)

22. The Council has always power to propose to the minister those provisions which it may believe useful to the progress of instruction.

23. The Council shall judge those Professors of the universities, and Collegiate Doctors, who may be accused of neglect or offense, whenever this offense can be followed by degradation or suspension; the defendant shall always be heard, as above. A special act shall determine neglects and offenses, which shall be followed by those punishments, and also their effects.

24. In urgent cases, the minister shall have the power of suspending, by his own authority, Professors of the universities, till the definite judgment shall be given by the Council.

25. The Council shall judge, in causes of appeal, relative to expulsion or temporary exclusion from the courses, inflicted by subordinate authorities on students of the universities, and of secondary and normal schools.

26. Every five years the Council shall present to the minister a general report on the condition of all branches of instruction, which shall be published, with the observations and propositions of the Council. In view of this object, the annual reports of the Inspectors, of the authorities which preside over the universities, of the Provincial Deputations, of the Superintendents and Directors, shall be communicated to the Council.

C. *Counselor.*

27. The Counselor receives his appointment from the King.

28. He shall give his legal advice on applications made by students for exceptional admission to courses and examinations, for exemptions from examinations, and from the payment of their fees, and generally on all questions about interpretation and application of laws and rules.

29. Whenever especially charged by the minister, he shall report to the Council the neglects and offenses, for which Professors of the universities, or Collegiate Doctors, may be suspended or degraded. He shall join the meetings of the Council, whenever defendants may plead before it.

30. He shall be heard by the Council in the causes brought before it by students condemned to expulsion or temporary exclusion from schools.

31. He shall refer to the minister the offenses committed against the laws and discipline of the universities.

D. *General Inspectors.*

32. The General Inspectors receive their appointment from the King.

33. They shall watch over the proceedings of public instruction, each in connection with the branch intrusted to him, in the name and under the orders of the minister. They shall give to the Royal Superintendents such directions, as they may believe useful, according to law.

34. They shall propose to the minister the committees of examination, advancement and appointments of teachers, honors to be bestowed upon them, and punishments which they may deserve.

35. Whenever especially charged by the minister, they shall bring before the Council the accusations against directors and professors of secondary and normal schools, when they are of such a nature as to render defendants liable to degradation or suspension for more than two months.

36. Each of them, personally or by means of their subordinate inspectors, shall provide for the department in charge of each of them, and to the inspection of all schools and institutions, either public or private.

37. The General Inspectors, availing themselves of the annual reports of their subordinate officers shall annually report on the conditions of the branch of instruction placed under their care. They also shall collect materials for annual statistical tables of instruction, which shall be published within the first six months following the year to which they refer.

E. *Provincial Scholastic Deputations.*

38. The Provincial Scholastic Deputation consists of the Royal Civil Superintendent of the Province, who presides over it; of the Royal Scholastic Superintendent, who is Vice-President; of three Deputies from the Council of the Provincial Civil Administration, elected by the Council itself, either from among its members or from persons of scientific and literary culture; a Deputy from the Municipal Council of the city; the Provincial Inspector of Elementary Schools; the Director of Secondary Instruction in the Provincial College; the Professor of Religion; and a Professor of the Normal School, (8,) or a teacher of Elementary Schools, who shall be annually appointed by the minister. The members of the Deputation shall not receive any salary.

39. The Scholastic Deputation shall meet every month, on the day determined by its President or Vice-President; and whenever these officers shall require.

40. It shall enforce the laws and rules relative to the secondary, elementary and normal schools of the Province.

41. It shall order extraordinary inspections on the institutions of the Province, for which it shall delegate one or more of its members, whenever occasion shall require. It shall decide on necessary provisions which are not beyond its power, and it shall refer to the minister, whenever questions arise beyond its jurisdiction. In urgent cases, it shall have the power of taking necessary measures, even of ordering the closing of institutions; but it shall refer immediately to the minister.

42. It shall approve the appointments of elementary teachers made by Municipal Councils of the Province. It shall suggest to the same Councils increase of salaries, the opening of new schools, the purchase of apparatus, and whatever can improve the condition of schools and of their teachers. It shall also suggest to the Provincial Civil Superintendent the expenses which should be imposed upon the Municipal Corporations, whenever it shall deem it necessary.

43. It shall decide disputes between municipal authorities and teachers, relative to the fulfillment of scholastic duties.

44. It shall decide on admission to the courses and examinations of secondary, elementary and normal schools, should any doubt arise on the interpretation of by-laws.

45. Parties alluded to in the preceding two paragraphs shall always have an appeal to the minister.

46. The Deputation shall institute the necessary proceedings upon offenses of which elementary teachers may be accused; and, after having heard the defendants, it shall refer to the minister, suggesting suitable action.

47. It shall decide on the application of teachers and professors for furlough; it shall propose to the minister such advancements, pecuniary allowances, and honors which they may deserve.

48. It shall refer to the minister accusations against Provincial Inspectors, and professors of secondary and normal schools, whenever they may be liable to suspension or degradation.

49. It shall examine materials for statistics of private and public instruction in the Province, and shall annually send them, with its comments, to the minister.

F. *Royal Scholastic Superintendents of Provinces.*

50. These are appointed by the King.

51. They shall have supervision of the official conduct of those who preside over the instruction or direction of scholastic establishments in their provinces. They shall execute the orders and decisions of the Provincial Deputation. They shall correspond

directly with the minister, shall watch over all the public and private schools, enforce the laws and rules, and suggest, both to the Deputation and to the minister, the necessary provisions.

52. At least once a year, they shall visit all the secondary schools of their province, and shall provide, personally or by some members of the Deputation, that all other institutions be visited.

53. It shall be their duty to enforce on the Provincial Inspectors of elementary schools their obligations relative to their inspections, and shall give to them and to the local superintendents the necessary orders.

54. They shall grant to public teachers, regularly appointed, their certificate of license.

55. They shall watch over the correct disposition of legacies bequeathed to scholastic institutions of the Province; and, in case of any transgression, they shall refer to the minister.

G. Local Scholastic Superintendents.

56. These are appointed by the minister, on the nomination of the Royal Scholastic Superintendent of the Province. They receive no salary.

57. They shall watch over the exact enforcement of laws and rules in the schools of their district. They shall visit them at least once a year, and whenever it is ordered by the Royal Superintendent, to whom they shall report. They shall correspond with the Royal Superintendent of the Province, and execute all his orders and directions. They shall aid the Provincial Inspector in forming statistical tables of the schools and institutions of the district.

H. Provincial Inspectors of Elementary Schools.

58. In every Province there shall be an Inspector of Elementary Schools. He shall be appointed by the minister, who may appoint only one for two provinces, whenever it shall be required by their Provincial Councils.

59. No one can be appointed Inspector, who has not taught at least five years.

60. Provincial Inspectors shall inspect all the public and private institutions of elementary instruction. Their annual visitation shall last not less than seven months in the year.

61. They shall, besides, attend to all extraordinary inspections ordered either by the minister, by the Royal Superintendent, or by the Provincial Deputation.

62. They shall make an annual report of their inspections, which, through the Royal Superintendent, shall be presented to the Provincial Deputation for its observations, with which it shall be sent to the minister. They shall also present a report of all extraordinary inspections to the authority by whose order they were made.

63. They shall prepare every year tables on the conditions of all the elementary schools of the Province, whether for boys or girls, and of all the Infant Asylums, which shall be presented to the Provincial Deputation.

64. The Inspectors may be allowed to fill other offices relative to education. But every other employ or profession is strictly forbidden to them.

CHAPTER III.—Special Provisions.

65. The salaries of the ordinary members of the Supreme Council, of the Counselor, of the two General Inspectors, of the two Inspectors of Secondary Schools, and of the Royal Scholastic Superintendents, are paid by the State. The salaries are as following:

Vice-President of the Supreme Council,.....	2500 francs.
Each of the ordinary members of the Council,.....	2000 "
Counselor,.....	4000 "
General Inspector of Secondary Schools,.....	4000 "
General Inspector of Elementary and Teachers' Schools,.....	4000 "
Each of the two Inspectors of Secondary Schools,.....	2200 "
Each of the Royal Scholastic Superintendents,.....	600 "
Rector of the University of Turin,.....	4000 "
Vice-Rector,.....	1000 "
Rector of the University of Genoa,.....	3000 "
Vice-Rector,.....	600 "
Each of the Rectors of the two Universities of the Island of Sardinia,.....	2000 "
Each of the two Vice-Rectors,.....	300 "

66. The salary, including the travelling expenses, of the Provincial Inspector shall be paid by each Province. It shall be 2400 francs.

CHAPTER IV.—Transitory Dispositions.

By which it provides a temporary administration, till the new organization shall be installed; in which interval the greatest part of the old administration shall continue to preside over the public instruction of the country.

REMARKS ON THE LAW OF 1857.

(1.) According to the existing laws of Sardinia, *public schools* are those, which are established or supported by the state, by the provinces, townships, religious institutions or associations, or by private legacies intrusted to public administrators. Those, which are established or supported by private individuals, under a license granted by the Government, are called *private schools*. For the laws respecting private schools, *see ante* pages 14 and 15. Though the Infant Asylums might be in some respects classified under the head of private schools, yet they are more properly considered as public institutions, on account of the official intervention, both of the government and of the municipalities, in their management and control. These institutions are founded, generally speaking, by private subscriptions and controlled by a central board of eight or nine members, among whom we find always the mayor, the judge, and the pastor of the town or township. The immediate direction of the Asylums is however intrusted to a permanent committee of ladies, some of whom visit the school every day, aiding the teachers in their duties, directing the institution according to its object, and promoting, by an assiduous care, its general progress and welfare. Thus the Asylums have essentially a domestic character, founded on maternal feeling, which directs the movement of the central board. This maternal character attached to the Infant Asylums has proved the most effectual characteristic of the direction, to which these institutions are intrusted.

(2.) This clause establishes the exclusive authority of the State in the direction of public instruction, denying any right or authority of the church in the control or management of the scholastic institutions of the country. Before 1848, the church had the control of all the public instruction, and even the academic degrees were bestowed by its authority, the archbishops being always the chancellors of the universities of the State. Since that time, that authority has been entirely restored to the state, and confirmed by this clause of the new bill.

(3.) For the understanding of the provisions enacted in clauses 7, 8, and 9 of the chapter respecting private instruction, we submit an account of the question on "Freedom of Instruction," which was brought before the Parliament at the opening of the general discussion of this bill. American readers, who live in a country where the widest and most unbounded freedom in opening all kind of schools is an undisputed right of the people, and where no governmental education is established by the State, may find it no easy matter to form an idea of the system enforced for centuries in a country, where the government is not only the teacher, but the only lawful teacher of the people. The laws enacted in Sardinia on this subject before the Constitution of 1848 were of the most stringent character, forbidding any individual, association or municipality to open a school of any kind whatever, except by special license from the government, which, if it granted such license, prescribed with it the rules on which private establishments should be directed, and managed, and reserved to itself an absolute right of inspecting and examining licensed institutions, and closing them at pleasure. It is evident that, in this condition, private education could not prosper, and the entire people was obliged to depend on the State for its educational and scientific training.

The constitution granted by Charles Albert, while it insured to the country free institutions, freedom of the press and of association, did not recall formally the previous legislation relating to this subject; on the contrary, the former

provisions were confirmed by a law of 1848, enacted soon after the granting of the constitution. But the question soon arose, whether this state of things was in accordance with free government; whether citizens had not acquired from the very nature of the constitution itself full power of establishing schools as they might desire, and parents an absolute right of educating their children as they might choose, independently of any interference of the government, without losing the privileges or rather the rights attached to official instruction. There was no question, whether a free instruction, supported on their own responsibility by individuals or associations, should take the place of the existing system, neither of abolishing any of the official schools, or preventing the government from establishing new ones, under their own direction and control. It was only the question of planting side by side the two systems, so as to recognize the right of every citizen to teach, independently of the government, and to erect schools and educational establishments on their own responsibility; to extend the privileges bestowed on the students of the official establishments to the pupils of private schools. Thus presented, the question had in itself its solution. Free instruction, as well as a free press and free association, is a logical consequence of a free government, and indeed the principle itself was not met by any opposition in Sardinia.

Yet particular conditions of the country suggested a prudent course in this matter, and did not allow an immediate acknowledgment of so universal and absolute a right of teaching. It is known, that Sardinia, until 1848, was under the sway of an absolute monarchical government, controlled and directed by the Catholic clergy, which was its main supporter and adviser. Education especially, though supported by the state, was entirely managed by the Catholic party, which availed themselves of all means in their hands in order to strengthen their own position, and extend their dominion over the whole of public and private life. But, as soon as a new era of freedom appeared in Sardinia, it was natural that its government should cut short the former encroachments of the clergy, abolish their privileges and usurpations, and free itself forever from their influence. Hence the opposition of the ecclesiastical body to the political institutions of the state; hence the danger of allowing this party to open schools, and to constitute themselves the teachers of the country. In America, where no state religion is to be found, where no religious denomination can exert any great influence on political subjects, where freedom has no enemies, where absolute separation of church and state is a fundamental principle of the constitution of the states, no danger can arise from this boundless freedom of teaching. It is not so with the old countries, and it is not so with Sardinia. There, the Catholic church is the church of the state; there, the clergy is a powerful association, not counterbalanced by any other, with branches scattered all over the country, with representatives in every township and village, all acting in one spirit, directed by one mind, and exerting a strong influence on the great mass of people. The church, moreover, possesses large means of action,—about fifteen millions of francs a year,—of which a great part could be used in supporting schools all over the country, in accordance with its objects. Now, whether it is a necessary consequence of the religious principles of that sect, or a mistake of its clergy, we will not decide, but it is a fact that the clergy in Sardinia have ever shown a deep and open hatred of civil reforms and of all aspirations of nationality, to the cause of which so many noble hearts in the country are devoted. Add to this, that the clergy openly acknowledge their

unfailing duty to abide by the Pope, an open enemy himself of free institutions in Italy, and a friend of the oppressors of his nation. The danger is evident, that the State would encounter, should it recognize in this party an unmodified right of teaching, and of opening educational establishments; the exercise of this right would not fail to act powerfully against the free institutions, and the dearest aspirations of the country. This, we believe, is the only danger which would arise from a system of boundless freedom of instruction, and the strongest reason for delaying a reform, which otherwise all parties would unite to enact.

The Parliament, in closing the general discussion of the bill, passed a resolution, by which the Minister, in presenting to the House bills organizing the three branches of education, will be obliged to endorse in some way the principle of freedom. We believe, however, that should this principle be enforced in future provisions, it will be surrounded with so many restrictions as to destroy it in its substance. The fact is, that while the government does not enact the principle of an absolute separation of the state from the church, while it does not carry it through all its legislation and administration, no freedom of instruction is possible, for the only reason that it will be monopolized by the clergy.

But, let the government disclaim any connection with the church, let it consider this as a private association subject to the laws of the state, let it open the gates of the kingdom to all religious denominations, and put these on an equality with the Catholic clergy, let it discontinue all acts which should include an acknowledgment of any civil power in the church, let it render stronger, more extensive and more liberal the official system, then, and not till then, "free instruction" will mean a practicable and useful reform. Before that time, we firmly believe, that any provision on this subject will either be so restricted as not to deserve the name of reform, or so wide as to be monopolized by a party, which openly professes to depend on a foreign sovereign, which claims for itself the exclusive possession of truth, so as to deny to any other denominations the right of teaching and public worship, which considers the State as a subject of the Church, and without any power of reforming those parts of legislation, which the Church defines to be beyond the power of the State itself.

Ardently devoted to freedom, we wish to our beloved country an entire system of civil reforms, which, if united, will be of mutual aid and support; but separated, will be of short duration, and of little advantage, if not of danger, to the country. We wish an entire freedom of the church, as well as of other religious and civil associations; we wish the great bodies, together with their doctrines, which may enter into the educational contest, placed on an equal footing, and, above all, we wish to establish the absolute supremacy of the civil power over all the associations existing in the state; and when these rights shall have been conquered, when the State shall have acquired such an independence as to not be prevented from carrying its reforms by the opposition of a foreign party, cheerfully we will join those of our friends, who are engaged in promoting in Sardinia freedom of instruction, and tender to them, if not the feeble support of our words, at least the best wishes of our heart.

(4.) Religious instruction is the necessary complement of a thorough system of education. As to this necessity no doubt has been manifested by any party of the Parliament, in all the discussion to which this clause has given occasion. The liberal party, however, opposed strongly this provision, not because they denied in any way the necessity of such an instruction, but because they considered it to be contrary both to the rights and duties of the state. Can a state,

like Sardinia, which acknowledges the catholic religion as its own, preside over the religious training of its people? Does not the catholic church claim for herself, as a fundamental tenet of her doctrine, the desire and exclusive right of teaching religion? Moreover, can a state, like Sardinia, in which all citizens, of whatever denomination, enjoy equal rights, provide a portion of its population with a free religious instruction, leaving the other portion without any, or to provide it from its own resources? The fundamental principle of political economy which prevails in the United States, and which has proved so beneficial to this country, *the absolute separation of the state from the church*, alone affords a satisfactory solution of this problem. There is no country, in which religious instruction is more extensive and more efficient, than in the United States, though such instruction is not given in the schools supported by the community at large. The absolute freedom of conscience and teaching, which this country enjoys, has proved not only a source of social progress and of public welfare, but also the only true means of assuring to the people a sound and efficient religious training. The institution of *Sunday Schools*, supported so liberally both by the different protestant denominations and the catholics, has far more promoted the religious education of this country, than it could be by any interference of the state. Indeed, after the trial given to this system in this country, the freedom of worship and proselytism secured to all denominations, should meet the favor not only of those in Sardinia who contend for the triumph of human rights, but also of all, who feel an interest in the cause of religion. Let the different forms of religious feeling have their full development in the country, let all sects meet together in a noble rivalry for the propagation of their doctrines; religious instruction will thus flow from its natural source, and soon produce that public sentiment, which is so admirable in the United States. By the sanction of this system only will the state be able to free itself from the embarrassments and difficulties, to which it is too often exposed by its unnatural union with the ecclesiastical body. Sardinia will also thus take the lead of moral and civil reform in Italy, on which, we sincerely believe, the great cause of Italian nationality depends.

(5.) For the understanding of this organization of the scholastic authorities of Sardinia, we submit a few remarks on the political administration of the country. The kingdom of Sardinia, which extends over more than seventy-five thousand square kilometres, embraces under its civil and political government, that group of different provinces and territories, which were either confirmed or assigned to it by the treaty of Vienna in 1815. The kingdom is divided into fourteen departments, (*Divisioni*), each of which is subdivided into different provinces, which again are divided into many districts, which are called *mandamenti*, each of these containing a determined number of townships, (*comuni*.) The provinces are fifty in number, eleven of which belong to the Island of Sardinia. A royal civil superintendent, (*Intendente*), presides over the administration of each province, as the representative of the central government, while the interests of its population are represented by a provincial council elected by the people at large. The affairs of the cities and townships are administered by a municipal council elected by the people, and presided over by a syndic. Since 1848 the form of government is of a constitutional monarchy, in many respects similar to the government of England. The legislative power is exerted by a Senate and a House of Deputies, the former consisting of members elected for life by the King, and chosen from determined classes of high

(6.) The Supreme Council is so organized by this act as to consist both of members appointed by the government, and of others elected by the faculties of the University of Turin. It must be considered that such a council from its very nature could not properly be the result of the popular vote, which would place it under the influence and movements of political parties. Neither education nor science can be properly directed by a Board, which floats on the uncertain and stormy waves of politics. The results in some of the United States amply confirm the necessity of applying to some other source than popular election for the constitution of Boards of Education. This necessity appears more evident, if, to this Board, not only popular education but the direction of all the branches of scientific teaching should be intrusted. We believe, however, that the system adopted by the Sardinian Parliament could be improved by extending the privilege of election granted to the faculties of Turin to all the teachers of the State. No better source could be assigned to the Supreme Council, than to place its constitution in the hands of the teachers at large, so as to divide them into three different electoral colleges, according to the three different departments of instruction. Should "free teaching" become a right of the country, the teachers belonging to this class of instruction should also have right to elect their own representatives in the Supreme Council. In this system the action of the Government should confine itself to choose the members of the Board from the lists so proposed by the electors. It would seem that this system better than any other else would secure to the Council the elements of stability and progress, together with the ability and the independence of the members from the executive and political influence, without which an efficient direction of public education can not be conceived.

(7.) By this clause the legislation of 1848 is changed, according to which Directors and Professors of secondary and normal schools, after three years of public service could not be removed from their chairs, without a previous formal judgment of the Supreme Council. It appears that henceforth these functionaries will be at the mercy of the executive, the minister not being bound to follow the opinion of the Council in respect to their offenses and neglects. It is just, however, to add that the dangers which could result from this arbitrary power granted to the minister of public instruction would be checked by the weight of public opinion, which in fact has the supreme sway in a free country. Yet, we confess that the present provision will not prove the most apt to bestow dignity, or improve, in any way, the condition either of these teachers or of the secondary and normal schools.

(8.) The normal schools are also called Teachers' Schools, (*Scuole Magistrali*), and they correspond, in some respects, to the *Teachers' Institutes* of America. They were established with the special object of improving the teachers of elementary schools, who had previously obtained the certificate of qualification. Afterward, it was ordered that no candidate should receive this certificate, who had not frequented the normal schools, and passed a successful examination on the matters of their course. For the organization of these schools see *ante* page 13. Though the Teachers' Schools of Sardinia have not as yet reached that degree of perfection which might be desired, yet, even in their imperfect state, they must be considered of great value for the progress of the popular education of the country. Public opinion is greatly in favor of promoting the extension of these schools, and of rendering them more and more efficient by raising them to the highest possible standard.

XIII. CATECHISM ON METHODS OF TEACHING.

TRANSLATED FROM DIESTERWEG'S "ALMANAC," (*Jahrbuch*.) FOR 1855 AND 1856.

BY DR. HERMANN WIMMER.

(Continued from page 268, No. 10.)

VIII. GEOGRAPHY. BY ABBENRODE.

1. *What are the principles on which the present methods of teaching geography are based?*

They are intimately connected with the general principles of education. Some consider it necessary to proceed from a general view of the globe, in order to gain at first a general outline,—a scaffold, by means of which the building may be gradually constructed in all its details,—and this in such a way that the pupil shall remain always conscious of the relation of the several parts to the whole, and that the latter itself shall gradually be made more and more perspicuous in all respects.

Others think that the beginner should first be led into a sphere commensurate with his faculties, near to him and capable of being surveyed by his bodily eye; and that he ought to be made familiar with it, in order to sharpen his sight and tongue for the later geographical perceptions, and the intellect for the relations more and more complicated. Then, and not before, the boundaries of this field should be gradually extended, to give his growing powers more extended exercise, until, at last, in the highest grade of his studies, the whole earth is considered in all its various relations.

Others again are of opinion, that the mere observing, hearing and speaking of geographical matter, does not give thorough knowledge; that it is requisite to appeal to the spontaneous activity of the pupils themselves, and to cause them gradually to complete drawn or pictured representations of the localities studied. This method they say is not only in harmony with the juvenile inclination to such work, but gives an indelible knowledge of what is pictured, particularly of its relations of form and surface; which will serve as a solid basis for all further instruction.

On these three foundations rest the ideas of the geographical methods now in use,—the analytical, synthetical and constructive, (drawing,) method, each of which, in practice, admits of various modifications.

2. *What are the peculiar advantages and disadvantages of the analytical method?*

One advantage that should not be undervalued is, that it designedly keeps in view the connection of the several parts of the earth to the whole, so that, from the beginning, all discontinuance of the perceptions is avoided. It most carefully regards especially the topical and physical elements, as well as the necessity of graphic representation. It, however, has this peculiar disadvantage, that it

forces upon the pupil the perception of the whole, at a time when he is not yet able to comprehend it fully; and, in particular, not to understand the general relations of climate, soil, produce, etc. It is impossible to carry the beginner along at once in all the collateral studies, *e. g.*, in natural knowledge, so as to thoroughly acquaint him with all these elements. Many things consequently remain an undigested mass, gathered and retained merely in the hope of future understanding.

3. *By whom has the analytical method been particularly recommended?*

The "philanthropist," Guts-Muths, has, in his "Essay on methodical instruction in geography," (*Versuch einer Methodik des geographischen Unterrichts*, 1845,) exclusively advocated the analytical method, which is also used almost exclusively in scientific works. (See Berghaus, Roon, Kalkstein, Rode, Barth, Viehoff, etc.) Some have attempted to lessen the inconvenience of analysis, by dividing the material into appropriate courses.

4. *In what respect has the synthetical method of teaching geography unquestionable value.*

In that, according to correct principles of pedagogy, a small and easily comprehensible space is treated at the outset; that the most "concrete" things, easily understood by the children, form the ground-work of further instruction: that these small districts or parts are by this method made vividly distinct wholes, the gradual extension of which, and its increasing variety, are well accommodated to the gradual development of the pupil's mind. The subjects and relations thus learned are at the same time the elements of all geographical instruction. Moreover, by this method the pupil gains, within a reasonable time, and in an orderly way, a desirable familiarity with his native place and country; and in case the extent of his studies has to be curtailed, the more remote parts of the globe would be omitted, rather than those with which the scholar and his life are closely connected, and which, therefore, must be most important to him. This method, likewise, admits of laying out definite courses. However, the strict and complete carrying out of it, would lead to an improper extension of the field to be gone through, and might, by tiresome repetition, cause other disadvantages.

5. *Who advocate the synthetical method?*

Charles Ritter, (see Guts-Muths, *Bibliothek*;) Henning, "Guide to methodical instruction in geography;" (*Leitfaden zu einem methodischen unterricht in der geographie*, 1812;) Harnisch, "Geography," (*Weltkunde*;) Diesterweg, "Introduction to methodical instruction in geography," (*Anleitung zu einem methodischen unterricht in der geographie*;) and Ziemann, "Geographical instruction in the burger schools," (*Geographische unterricht in Bürgerschulen*, 1833.)

6. *What is to be thought of a combination of these two methods?*

Strict consistency in either of them leads inevitably to many inconveniences. Therefore, we must either follow one in the main and make all kinds of exceptional uses of the other, or contrive to combine them judiciously. It is a great concession made to the synthetical method by the analytical, that the latter should permit, as introductory to the proper geographical course, a preliminary one, to include observation of the neighborhood and its objects; drawing easy sketches of the school-room, house, garden, etc.; instruction in measures of length and breadth, (if possible in the open air;) experiments in sketching the neighborhood from an elevated point, with estimates of area by eye, on a small scale, (for children of 7-8 years;) and geographical instruction on the native

country, (province or state,) with an occasional exposition of the elementary geographical conceptions. Bormann, who tries to combine the best parts of the two methods, makes the first described preliminary course, (somewhat modified, and with the addition of observations of the most simple phenomena of the sky,) his *first* course; giving in the *second* a view of the globe, with instruction upon its principal imaginary lines, and the drawing of them, with a general view of Europe, and a particular one of Germany; advancing in the *third* course, to a more accurate description of Germany, followed by a view of the other European and extra-European countries. Such a combination may be considered as appropriate and practical; still it is not the only one possible.

7. *What are the advantages of the constructive, (drawing,) method?*

The drawing method proposes, by construction of maps, instruction in the elements of such construction, before all regular teaching, to furnish the basis and means of all geographical knowledge. It places especial value on the creative activity of the pupils; and upon such an impression of the pictures drawn, that this may be indelible and vivid in the pupil's mind, and form the foundation on which future geographical teaching shall rest. The accuracy and strictness which this method gives in fixing and enlarging the forms is unquestionably very valuable, for very much depends on a thorough acquaintance with these forms. A designedly and gradual advance from the most general ground-forms to the more correct contours, and filling them out afterward with details of surface, is quite correspondent with pedagogical principles. This method, however, requires far too much in the way of accurate memory of numerous localities laid down. Geography contains still many other things of essential value, for which there would scarcely remain sufficient time and interest.

8. *How is this constructive method usually carried out in detail?*

Agren, general text-book, Part 1, Physical Geography, (*Allgemeines Lehrbuch: physische Erdbeschreibung*,) Berlin, 1832, would first have the maps of the two hemispheres drawn, on a planispherical projection. Some characteristic points, (capcs, mouths of rivers, etc.) are then to be fixed and joined by straight lines, to gain a sort of ground-plan of the area. The formation of the coast comes next, and afterward the parts of the surface are put in,—all by fixed and defined rules. This method, therefore, distinguishes between description of the coast and of the surface.

Kapp, "Course of Geographical Drawing," (*Lehrgang der Zeichnenden Erdkunde*,) Minden, 1837, takes the square form as a basis, and likewise assumes some characteristic points in the same, which he joins at first by straight lines, until successive corrections give the right representation.

Klößen rejects the gradual elaboration of the right map. According to him it must be drawn accurately from the very beginning by aid of some determining lines.

Canstein takes neither the whole geographical net of lines nor the form of a square; but any convenient geometrical figures, as triangles, rectangles, circles, etc., and uses but few meridians and parallel circles. He admits no copying, nor does he aim at strict accuracy in all determinations of boundaries and directions.

Lohse keeps to the normal directions of the rivers; has copies made from a given model-drawing, and requires a memory of what has been drawn.

Oppermann, "Guide to Geographical Instruction," (*Leitfaden zum geographischen unterricht*), gives the pupils the right maps, ready made, in accurate contours, has these contours painted over in the succession in which the countries occur in the lessons, and then the details of the surface put in.

Klöden's method, (see above,) seems to be the best. On the plan of Bormann and Vogel, the pupils have skeleton maps, with the chief positions already marked, (see the maps of Vogel, Freihold, Holle, etc.,) and gradually draw the correct maps.

9. *To what limitations is the constructive method subject in the common schools?*

The drawing of maps, (by which must not be understood mechanical copying,) can not of course begin until the scholars have skill in drawing generally sufficient to construct a relatively correct map with some success. But geographical instruction itself can not be put off until that time; therefore, drawing maps can not be placed at the beginning, but must take its place in a higher grade. Again, unless geography is to occupy all the study and leisure time of the pupils with making neat maps, not entire atlases, but only a few maps, can be drawn, (that of the native province and country, of one or another country of Europe, of Palestine, etc.; but scarcely, with advantage, the two planispheres.) At school, there is not time to draw every thing, and if there were, it would be better used in other things, since map-drawing, an excellent aid to geographical instruction, is not that instruction itself.

10. *What is the proper introduction to teaching geography?*

It must be preceded by an acquaintance with the relations of space in the immediate neighborhood, and with the geographical objects there, as well as by an elementary knowledge of maps, and thus of elementary conceptions, for the sake of conversing on the same; else the pupil can not understand clearly nor advance successfully.

11. *What is the value of a preliminary course, (Vorcurus,) intended exclusively for explaining the fundamental conceptions?*

Those conceptions are indispensable; but to bring them all together in an especial course and to premise them to further instruction, is a pedagogical mistake, more inexcusable, in proportion as the course is more extended and abstract. In the same measure as instruction proceeds, the detail and quantity of accurate geographical notions may increase. But the beginning is sufficiently taken up by the first and most general of them, which are to be immediately applied. Excessive and premature expansion is injurious instead of useful. Much more is to be gained by actual observation of the elements of the neighboring landscape, with a view of frequent application afterward.

12. *What are the practical details requisite in geography?*

There is much to be observed, compared, understood, deduced, combined, impressed, represented. These, therefore, must be cared for, in teaching. The means of observation ought to be used in manifold ways, in order to gain the most correct image of the nature and life of the countries, and to illustrate and fix the same by all sorts of proper comparisons of the portions treated.

The teacher's statements should be clear, careful, stimulating, graphic, and definite; ought to leave the map only exceptionally; and should be adapted to fix the image in the pupil's mind. He must show how to draw conclusions from given natural conditions, to infer elements from given relations, to transfer the relations of the neighborhood to distant countries, and to combine partial

notions into a whole. So far, the teacher's work is substantially that of communication. Mere reading, or uninterrupted talking, does not in the least accomplish the right work of geographical instruction.

The next important object is drilling, by a repeated review in the same order, or by an appropriate course over similar fields, by exhibiting sufficient representations of objects which can be impressed only mechanically, by imaginary travels with or without the map, by drawing maps from memory, by written answers to principal questions, etc. Hence, it follows that teaching geography requires manifold efforts, and that the teacher must be a good geographer and an able teacher, to be very successful.

13. *What position in geographical instruction is due to reading from the map?*

At present it is no longer sufficient, with text-book in hand, to merely point on the map, what is spoken of in the book,—situation and boundaries of countries, beds of rivers, chains of mountains, places of cities, etc. The teacher must know how to read maps, and to teach them; *i. e.*, not only to describe what figures and in what order and connection they stand on the map, but to translate the map, line by line, into the real world, in order that this be faithfully impressed in the mind, to be at any time reconstructed from it. He must understand the contents and meaning of the hieroglyphics of the map, and know how to exhibit them in an orderly and appropriate way, as we read a book. In reading a book, it does not suffice to find out the letters, to comprehend the single words and their conceptions, but the whole idea must be clearly understood and reproduced. The study of the map ought to render a great deal of the usual contents of the geographical text-books quite superfluous, that the pupil may not cling slavishly to the dead letters of the text-book, but may depend on the lively picture of a good map. (See Bormann and Sydow on reading maps.)

14. *What is the value of the "comparative method" of teaching geography?*

If the material were such that all parts of it should be learnt quite separately from each other, it would not be worth while to use this method; for the gain in mental cultivation would be small. But since numerous conditions are the same or similar in many countries, it is natural, even for externally facilitating the understanding, to try, by comparing them with those of other countries, to know the nature of both countries and the effect of those conditions on nature. Situation, boundary, size, elevation, watering, climate, produce, population, means of commerce and travel, etc., and many other subjects, are suitable for comparisons. The comparison itself is an excellent introduction to the object, induces more acute observations, memory, reflection, a sagacious detection of differences, and becomes thus an efficient means of cultivating the mind. It is this which makes geography a refreshing as well as scientific exercise of the mind; since the mastering of a more or less extended scientific apparatus is both a means and an end. However, even in a small sphere and at the first beginning, these comparisons may be used, and then, as the student's horizon gradually expands, they will become more various, attractive and instructive, and will preserve the mind from that fragmentary and mechanical learning, by which the end can not be attained.

15. *What success may be expected from geographical pictures?*

Maps are but symbols of real nature: they represent by a hieroglyphic type a number of natural elements for large territories, without being able to represent correctly the real objects of small areas. But, a well-designed and sufficiently copious collection of vivid and correct pictures, on an appropriate scale, well

colored, containing mountains, valleys, plains, rivers, woods, prairies, fields, houses, bridges, ships, men, animals, etc.; or a choice collection representing the coöperating elements of nature in the most various places, in all zones, would be in a high degree instructive for the more advanced scholars. Then the eye might survey the whole landscape of natural and human life in its mutuality and connection, and would bring near the characteristics of the most distant countries; nearer than is possible by the most vivid description in words with the map only. For beginners, such pictures would be distracting; but, at an advanced period of instruction, nothing could be more useful. They would enliven the oral descriptions, and their impression would endure for life. With this conviction, some editors of maps, (see Vogel's Atlas,) have renewed the illustrations of maps, common in the middle of the past century, by no means merely for mere ornament, and have added marginal designs from the natural history of the world. Even in mathematico and physico-geographical maps, (see Berghaus' Physical Atlas,) this idea is made use of.

16. *What is the value of the so-called characteristic pictures, (CHARACTERBILDER?)*

It may be said, briefly, that the geographical *Characterbilder*, i. e., characteristic representations or descriptions of certain districts, afford a sensible view of the real life of nature, by developing, as upon a single characteristic locality of the globe, by the use of elements found elsewhere, with some modifications, the totality of this life in its various respects and relations. By a well-selected succession of such representations, the sections, as it were, of a picture of the whole earth, are given, and may afterward be joined into a whole. If they are written ably and sensibly, they have, besides their geographical importance, a great influence on æsthetic and linguistic education. It might be questioned whether near or distant countries are to be chosen, since the latter contain the greater number of unknown things; but practical teachers will prefer to begin with what lies nearest, and must, therefore, be most important for every one; as moreover this material contains enough to be learned by a beginner. (See Vogel's and Grube's "*Characterbilder*.")

17. *What position should be allowed to the geography of civilization, (culturgeographie?)*

It is not the earth, with its life, but man upon it, with his life, which is most interesting to man. The former interests us only on account of its intimate connection with the latter. To explain this connection is the difficult problem of "culture-geography;" which, for working out all the most different influences of life and nature into a transparent and ingenious whole, requires the highest degree of mental power, and has its place, if anywhere, only at the end of geographical instruction. Several movements of the human race must be discussed previously, and a satisfactory understanding of them is probably in all cases very doubtful with scholars who are not sufficiently prepared for it.

1. Guts-Muths, (*Versuch, &c.*) Weimar, 1845. See above, No. 3, analytical method.

18. *What works on methodic instruction in geography are particularly worth considering?*

2. Lüdde, "Methods in Geography," (*Die methodik der Erdkunde*), Magdeburg, 1842. This is not confined to the wants of common schools, but gives academic instruction.

3. Zeune, "The three steps in Geography," (*Die drei stufen der erdkunde*,

Berlin, 1844, aims at laying the foundation of a strictly scientific instruction on the basis of a natural view of the earth, (in opposition to the historical;) which character also predominates in Zeune's *Gœa*.

4. Henning, "Guide to methodical instruction in geography," (*Leitfaden beim methodischen Unterricht in der geographie*,) Iferten, 1812. See *Pioneers of the synthetical method*, No. 5.

5. Ziemann. See above, No. 5.

6. Görbrich, "Introduction to geographical instruction in common schools," (*Anleitung zum erdkundlichen Unterricht in der Volksschule*,) Wien, (Vienna,) 1853. A synthetical method; plain and clear.

7. Otto, "Universal method of geographical instruction," (*Allgemeine methodik des geographischen Unterrichts*,) Erfurt, 1839. Adheres to Guts-Muths, but uses the advantages of the synthetical method.

8. Agren. See above, No. 8; constructive method.

9. Kapp. See No. 8.

10. Canstein, "Attempt at a free delineation of the physical surface of the earth, by a simple method of construction," (*Anleitung, die physischen Erdräume mittelst einfacher Construction aus freier Hand zu entwerfen*,) Berlin, 1835. See No. 8.

See also, the introductions to Harnisch's "*Weltkunde*," and Diesterweg's "*Rheinprovinzen*;" the essays in Mager's pedagogical "*Revue*," 1840 and 1841; in the "*Schulblatt der provinz Brandenburg*," 1847 and 1850; in Löw's pedagogical "*Monatschrift*," 1847; in the programme of Bender's Institute, in Weinheim, 1850; in the General School Gazette of Darmstadt, 1845; (see *Finger*, "Instruction in the knowledge of the native country," (*Unterricht in der Heimathkunde*,) Leipzig, 1844;) in the pedagogical "*Jahresbericht*," of Nacke I., III., V., VIII., 1846-53. A historical exposition of geographical methodology is found in Zeune's "Views of the Earth," (*Erdansichten*,) and a compilation of the "Latest views upon geography and their application to school instruction," (*Neuesten Ansichten von der Erdkunde und ihrer Anwendung auf den Schulunterricht*,) in Lichtenstern's book with that title.

19. *What books on mathematical geography are the best?*

1. Diesterweg, "Astronomical geography and popular knowledge of the Heavens," (*Astronomische geographie und populäre Himmelskunde*,) Berlin, 1855. 5 editions. The best of all.

2. Wiegand, "Principles of mathematical geography," (*Grundriss der mathematischen geographie*,) Halle, 1853. Practical and good.

3. Brettner, "Mathematical Geography," (*Mathematische geographie*,) Breslau, 1850. Quite practical and popular.

The chapters concerning mathematical geography are excellent in Raumer's "Manual of Universal Geography," (*Lehrbuch der allgemeinen geographie*,) Leipzig, 1848; in Roon's greater geographical work, "The earth, its races and states," (*Erd, Völker, und Staaten-kunde*;) and in Berghaus' "Rudiments of Geography, in five books," (*Grundriss der geographie in fünf Büchern*,) Breslau, 1840.

Of books on popular astronomy, very good ones are Kaiser's "Starry Heavens," (*Sternenhimmel*,) very clear; Littrow's "Wonders of the Heavens," (*Wunder des Himmels*;) Stern's "Knowledge of the Heavens," (*Himmelskunde*;) Schulze's Astronomy; Mädler's Popular Astronomy; Hartmann's Urania; and Airy's and Brande's Lectures on Astronomy.

20. *What books on physical geography may be recommended?*

Berghaus, Roon, Raumer, Rougemont, Kalkstein, Guyot, Guts-Muths, Ewald, Somerville, Reuschle, K. V. Hoffmann, W. Hoffmann, Schouw; besides, the "*Characterbilder*" of Grube and Vogel, and shorter works by Viehoff, Cörnelius, Ball, Buff, Atzerodt, Gambihler, Gude, etc.

21. *What text-books on political geography are the most popular?*

The number of political-statistical geographies is enormous. As most prominent, we may name those of Völter, Roon, Schacht; as very common, those of Bornmann, Daniel, Selten, Voigt, Volger, Seydlitz, K. A. Hoffmann, Zachariæ, Stein-Hörschelmann; as shorter ones, those of Lüben, Stahlberg, Möbus, Ohlert, Petersen; as very good, those of Rhode and Barth; as larger ones, those of Ungewitter, Blanc, Wappaens, W. Hoffmann, etc.

The new discoveries are found in Froriep's "*Almanac*," (*Jahrbuch*;) in Berghaus' *Jahrbuch*; in Lüdde's "*Gazette of Geography*," (*Zeitschrift für Erdkunde*;) in Gumprecht's *Zeitschrift*; in Petermann's "*Contributions*," "*Mittheilungen*."

22. *What works are there upon Geography of the native country?*

Not so many as might be expected. For the geography of Prussia, Schneider, Schmidt, Uvermann, Vossnack, Natzmer; for that of Germany, Guts-Muths, Hoffmann, Winderlich, Billig, Curtmann, Vogel, Duller, etc.

23. *Which maps are the best?*

The wall-maps, (*wandkarten*), of Sydow, Roost, K. V. Hoffmann, Stülpnagel, Grimm, Holle, Winkelmann, etc.; the hand and school-maps of Sydow, Berghaus, R. and Th. Lichtenstern, Völter, Stieler, Bauerkeller, Grimm, Kiepert, Kutscheit, Winkelmann, Roost, Glaser, Wagner, Platt, Holle, Voigt, Gross, Vogel, Schubert. For physical geography, Berghaus' *Physical Hand Atlas*, and his *Schulatlas*, are classical; and Bromme's Atlas, to Humboldt's *Kosmos*, very good.*

IX. HISTORY. BY ABBENRODE.

1. *What are the material conditions requisite to make history an important means of mental cultivation?*

The material ought to be selected with reference to the intellectual standing and wants of the pupil, to be formed into a well-systematized whole, and to be so used in teaching that, by its vividness and truth, as well as by its attractiveness for the juvenile mind, it may arouse and strengthen, improve morally, prepare the pupil worthily for practical life, and nourish in him a Christian spirit. Of course, the character of the nation to which the pupil belongs, is prominently to be considered.

2. *What personal conditions influence the cultivating power of the study of history?*

As the totality of the pupil's individuality requires, in historical construction, great regard, and as very much depends on the tact with which his mental powers are nourished, so the effect of history on his mind depends even more on the ability and character of the teacher. Unless he possesses, together with the requisite external skill, a sufficient knowledge of history, true piety, and a

NOTE. Especial reviews of a long number of books and maps are in Nacke's "*Educational Annual*," (*Pedagog. Jahresbericht*.) I., III., V., VII., and in Klöden's review of modern maps in the "*School Gazette of Brandenburg*," (*Schulblatt des provinzz Brandenburg*.) 1845 and 1846.

noble heart; and unless, besides being a man of veracity, he has acquired conscientious impartiality and the circumspect calmness of a clear judgment, he can not hope that his pupils will experience the cultivating power of history.

3. *What are the leading characteristics of the proper material?*

The most essential of these materials are, a, the political, under certain modifications, particularly that of the native country; b, history of civilization, under some limitations; particularly, that of the Christian church. Though the material chosen under either of these heads may be throughout kept asunder, and, in fact, has been so very often in historical works, yet an appropriate combination of the two for construction must be recommended, since they supplement one another usefully, and, in practice, admit quite well of this mutual compensation. Our German youth need, above all, the history of Germany, and where there is occasion, the attention should be fixed on the ecclesiastical, scientific, and artistical development, as well as on the formation of the character and manners of the nations. Which of the two sides, and in what proportion, is to predominate, depends on the particular wants of the pupils: still the history of the church is of especial value.

4. *What are the principles of teaching history in school?*

Historical instruction requires in all cases a narrative form. In proportion to age and ability, the narrative will have the character either of biography and monography, or will represent, in chronological order, definite groups of historical facts in their interior connection; without any exaltation of the authors of the events very high above the common level of life. In either case the teacher may choose an ethnographical, or a synchronistical order. The pragmatistical method, right and important in itself, has in most cases at school, an unsatisfactory result, even in higher schools; since even the well-prepared students of the gymnasia, (colleges,) want the maturity of life which must aid the pragmatistical understanding. Finally, the method of universal history is quite unsuitable to schools.

5. *How have those principles been practically used and expressed hitherto?*

History has been, from the most ancient times, written and taught in all forms. It has been a monumental narrative of the exploits of whole nations and privileged individuals. Each ancient people has, out of a certain necessity, written and taught its own history,—some classically,—for all time. Besides, modern nations have taken hold of the history of other countries, particularly of old Greece and Rome, and reflected them in the mirror of their own perception; they have created the representation of a history of the world,—general history. This has led to teaching general history, either connected with that of the church or separate from it. The almost exclusively “scientific” method of treating the same in writing and teaching made it suitable only for such as wanted a “scientific,” (collegiate, etc.,) education. Others neither could nor should learn it. But, since a common inclination to acquire historical knowledge has sprung up, in consequence of a more general education in better schools, it suffices no longer to confine this instruction to the disciples of science, nor to satisfy with general notices from history. The people, even in the lowest classes, will—and should—partake of it. This has led to manifold and successful attempts to find a suitable way of treating history, and to give the common school a share in its profits.

Several popular and practical methods of teaching history have arisen, which, though differing in many respects, agree very much in their fundamental ideas.

These methods may be distinguished first, as being chiefly restricted, the one to *biographical* and monographical narrations, the other to the *natural* and *temporal connection* of historical events. In the former case the chief persons and events to be spoken of are at first arranged by beginning from modern times and proceeding in a *retrograde order* to certain primary epochs, in order to review the whole afterward, from these points, more thoroughly, by descending in the natural order of time. Or, the most important phases of the development of national and political life are made the centres of an arrangement, by groups, which treats the facts and persons that are the types of that development, through all time, in definite periods, and only occasional side-looks are cast on cotemporaneous events.

In the other case, either the historical material is arranged in chronological order, and divided, according to its nature in the different ages, amongst single nations, (ethnographically,) from their rise till their fall; or, all nations are treated side by side at the same time, in periods, (synchronistically,) in order, on arriving at each new epoch, to gain a general view of the development of the whole human race.

In both cases it is either the history of the native country or the general history of civilization, or that of the Christian church, by which the point of view is regulated, and on which the chief stress is laid.

6. *What are the advantages of the biographical method?*

As long as it is of consequence to arouse the historical sense of beginners, and while these are not so far advanced as to understand the general state of a nation, since their interest for individuals preponderates, so long it is quite natural and profitable to join all history substantially with the biography of the representative chief men, at the same time with which the outlines of the chief events may be surveyed. Even at a later stage, the biographical element has a high value, since it may give, along with narratives of individual experience, especial relations of the general development of events, such as facilitate their understanding and enlarge knowledge at the same time. Even the hidden motives of facts are not laid open to the historian, until he has looked sharply into the particular life of the leading and coöperating individuals, who either receive or help to give the character of their time. We may add the general human interest excited by personal experiences of life, and the moral influence exerted on susceptible minds. Dry generalities and outlines can of course never excite such a lively interest as good biographical narrations.

7. *What are the objections to the exclusive use of the biographical method?*

A mere succession of separate biographies will never show the real course of the general development of history; they are, even the best, mere fragments and portions, but not history itself in its inner moral connection. Moreover, the description of the outward life of historical persons, as sufficient for beginners, is indeed generally not difficult; yet it is so, in a high degree, to enter into their inner life and character, whence all their actions originate. It presupposes so much knowledge of the human mind, so much self-denial and impartiality, requires such an expanded and detailed knowledge of the material for understanding motives, that it is as rare to find good biographies, as it is rare to find those conditions combined in one man. The usual biographies swarm with generalities and partial judgments.

8. *What is the value of the regressive method?*

Strictly speaking, the regressive method is the preferable one for historical

research. Facing the events, it inquires into their immediate causes, and goes back to the remoter ones, in order to reconstruct philosophically the history which has been developed according to a higher and divine plan. So far as the method of research is to be represented by the method of teaching,—as it sometimes has been required,—the regressive proceeding is correct; besides, it is formally practicable without difficulty. But it is contrary to the process of historical narration, and begins almost necessarily from characters and epochs of modern times, by far too complicated for beginners, and such as to prevent usually the combination of truth with popularity. Besides, this method could be applied only at the beginning, and would soon necessarily pass over into the chronological one.

9. *How far is the chronological method valuable?*

The historical events develop themselves in time; the natural course of the latter is, therefore, both back-ground and frame of the former, since it constitutes the thread of the narration. Time facilitates comprehension, remembrance, and comparison of historical movements; it marks best the sections and epochs of development, favors thus the rudiments of historical instruction, and, in general, is indispensable. History may be treated in the one or the other way, with beginners, or with advanced scholars; but the succession of time must be necessarily cared for.

10. *Under what circumstances is the ethnographical method suitable?*

After the primary course, which lays the foundation, (biographical and monographical,) has been finished, and a second one has led nearer the more general connection of the chief movements in history, then it may be useful to pursue the history of the prominent modern nations, ethnographically, from their first rise until their present state. In ancient history it is a matter of course to proceed chiefly in the ethnographical way, because those nations have led for a long time a separate life, and after a victorious conflict with neighboring nations have merged them in their own life.

11. *What are the difficulties of the grouping method?*

The idea of pursuing material similar, by interior connection, through all centuries, and of joining it into a whole, is in itself well enough. But, on the part of the teacher it requires an unusual knowledge of particulars in the development of nations; and, on the other hand, the problem is too hard for the juvenile mind. It may be, that many things can be omitted, or at least treated separately as a matter of secondary interest; but, it is questionable whether they would be advantageous with reference to the whole. Besides, the hard problem must be solved of connecting finally the single parts of development into a totality.

This method, even for the especial history of a nation, the German for instance, is attended with great difficulties, but these would increase, if it should be applied to all other civilized nations. For, by its nature, it lays the chief stress on the development of civilization, and displays but on such points the characteristic picture more fully, when it is desirable, from a national and patriotic point of view. The entire plan, so far as I know, has not yet been practically carried through.

12. *When has the synchronistical method its right place?*

Synchronism is not suitable for beginners. It requires an advanced standing, to view the contents of entire periods of the development of nations, and understandingly to pursue the gradual progress in it. To whoever is not able

to survey that progress in its degrees, and, when arrived at a remarkably high point, to bring afterward the different conditions of other nations to view, interweaving them with the former picture, and thus to compose a totality of those intermixed developments, to him a synchronistical treatment of history remains sterile. Therefore, scarcely even the pupils of the first class, in our higher seminaries of learning, can be considered as sufficiently prepared for it.

13. *Who has recommended the biographical method?*

It may be said the entire modern school has unanimously recognized it as the best and most suitable for beginners. For this grade, nearly all modern methodic histories contain only such material as is fit for biographical instruction. In higher schools, a biographical course has been arranged in the lowest classes, and approved everywhere by the authorities.

14. *Who has recommended the regressive method?*

Dr. Kapp, in his general work, "Scientific school instruction as a whole," (*der wissenschaftliche Schulunterricht als ein Ganzes*), Hamm, 1834, is one of the first. Dr. Jacobi has recommended it, especially for the history of the native country, "Outlines of a new method, &c.," (*Grundzüge einer neuen methode, etc.*), Nürnberg, 1839.

15. *What is the origin of the chronological method?*

From time immemorial scarcely any other method has been used in Germany than this; now joining synchronism, now following the ethnographical principle. Until this hour it prevails in the majority of schools, of classical histories, and of text-books on history. It has been modified by many competent historians and teachers, for the various purposes of elementary, burgher, and real schools, and gymnasia. Some introduce it by mythology, others by a biographical course. Some give the first place to ancient history, others to national history; others, again, attempt to suit the various wants, by a particular partition of the material, by all sorts of principles of treatment, by accommodation to the different stages of life, or by raising certain historical pictures, (*characterbilder*,) above the general course of history.

16. *Who has tried to introduce the grouping method?*

Stiehl, (now privy-counselor,) has proposed, in a little book, "Instruction in the history of our country in the elementary schools," (*Der vaterländische Geschichtsunterricht in unsern Elementarschulen*), Coblenz, 1842, to promote instruction in the history of the fatherland by a vivid transfer into the midst of national life, by historical facts grouped around a national calendar, with the exclusion of systematic chronology, and by presenting the coherent material well-wrought together in one mould; besides, making the whole more fruitful by communicating important patriotic documents and like best patriotic songs.

In a different way, Dr. Haupt, in the preface to his "History of the World, on Pestalozzi's principles," (*Weltgeschichte nach Pestalozzi's grundsätzen, etc.*), Hildburghausen, 1841, recommends a grouping of the entire history after certain categories of the material, (home, society, state, nation, religion, science, and art,) in each of which the suitable material of all time is comparatively placed beside each other.

17. *What are the most recent tendencies concerning historical instruction?*

On the one hand, it is recommended to interweave classical sentences and good historical poems, in order to vivify historical instruction by dramatizing it, and so impress better the chief epochs, especially of natural history, by story and song. On the other hand, for the sake of concentration, various combinations

with geography, natural knowledge and religion, and even with the hymn book, are recommended. An endeavor has also been made, to simplify the material for common wants, by cutting off the less fertile portions, particularly of national history, and to compensate for this by entering deeper into some chief characters and events. This has fixed attention more and more on historical *characterbilder*, which are now in various works, at the teacher's command, to be used chiefly for a good Christian and national education. Particularly, it is endeavored to view more closely the civilization of nations, especially of one's own; to give more Christian and dogmatic matter; to introduce the youth rather more into the historical development of the social orders and classes than into the history of the world; and to find one's own account in the execution. For each of these tendencies, respectable voices have been heard.

18. *What is to be thought of these tendencies?*

It is a pedagogical mistake to do too many things at once. The teacher of history must abstain from teaching at the same time catechism and natural sciences; they do not belong to history. Further, the hymn book can not be considered as a suitable guide for instruction in national history, to say nothing of the obscure origin of many songs in it. To interweave many sayings of a celebrated man, even to make it sometimes the centre of the narration, may be quite suitable. It may be very effective to celebrate a great hero or event of history, besides elevating and improving description by a good song also. But, more important is it to simplify, and to enter deeply into the chief points, and therewith to nourish earnestly a patriotic and religious sense,—which may, no doubt, be much aided by good national "*characterbilder*." A prominent regard for the orders of society is not only difficult but even not without danger. To save better care than hitherto of the progress of civilization, and to avoid subjective tendencies, particularly in modern history, will be approved by all sensible persons.

19. *How far is geography to be cared for in teaching history?*

Up to the present time, all attempts to combine, after a definite plan, all historical with all geographical instruction, have nearly failed. The common way in which it is done now, is either to premise to the history of the various nations and states the related geographical matter, or occasionally to insert it in fragments. In this way, of course, geography has not its degree; because for many geographical objects there are no points of reference and connection. Further, it would be necessary to explain at every time only the corresponding geography of that period, so that a comparison with the geography of the present time would be needed,—a necessity that has always great difficulties for young people. The plan by which certain geographical sections alternate with historical ones, (the former analytically, the latter chronologically,) no one would consider as a praiseworthy combination. In whatever way it is done, it is indispensable to make the geographical field of history as clear as possible. Instruction in history can neither be tied to a specific plan of teaching geography, nor can it aim at an appropriate and complete finishing of the latter. The same is true vice versa.

20. *What is the value of historical poetry in teaching history?*

So far as historical poetry keeps within the sanctuary of truth, its artistical glorification of characters and deeds is unquestionably of high value, and the appropriate use of it can not be too much recommended. But, as soon as it leaves truth, and idealizes, poetically, the historical persons and their exploits, it

is no longer of importance for instruction, even if the poems be of great poetical value.

21. *Why are the historical dates so valuable?*

It may be asserted, without hesitation, that, without fixing the dates, instruction and a ready knowledge of history is impossible. As long as the pupil is not yet conscious of the distinction of time in its practical worth, the general outlines of the historical event may be sufficient; but, as soon as that consciousness is awake, the event and person must be connected with the date, in order that the former may be better remembered, better understood in its position of time, and better distinguished from related phenomena. The dates are the most simple monitors of memory, and can never be entirely omitted, though they ought to be limited for children, and sometimes to be made round numbers, for the sake of memory. They help to regulate the material in the easiest way, and join the natural development of events; nay, a sensible arrangement of them often aids the understanding of related events better than long expositions could do.

22. *What is the didactic value of good historical pictures, maps and tables?*

In teaching, very much depends on making history intuitive and lively. It is, therefore, desirable to aid the oral address by appropriate means. Such are historical pictures and tableaux, since they represent often the historical action more clearly in one moment than the most copious description by words. Of course, they must be true and of artistical worth. Historical maps aid best the perception of the geographical extent of a historical transaction, and often afford the most natural representation of its results upon the position of nations and states to one another on the globe. Tables facilitate both a short review of the chief events in chronological and synchronistical order, and a firmer impression on the memory, by bringing to view the rise, fusion, separation, and falling of nations, etc. Also they can best represent, in side columns, the different movements of development at the same time in state, church, science, and art.

23. *In what respects does private reading further historical knowledge?*

Since it is impossible to treat in school every thing desirable for youth, it is very important that appropriate reading in private should assist to complete the historical knowledge. It is indispensable for a more detailed familiarity with the chief characters and events of the world or the country. Fortunately, the desire to read history is as natural as it is common among youth; and, even to a more advanced age, there is no better occupation, in leisure time, than historical reading.

24. *What books treat upon the methods of teaching history?*

a. Peter, "Historical Instruction in the Gymnasia," (*Der Geschichtsunterricht auf Gymnasien*,) Halle, 1849.

b. Loebell, "Outlines of a method for teaching History in the Gymnasia," (*Grundzüge einer Methodik des Geschichtsunterrichts auf den Gymnasien*,) Leipzig, 1847. This work suggests a careful partition of the material.

c. Miguel, "Contributions to the study of Biography in the Gymnasia," (*Beiträge zur Lehre vom Biographische Unterricht auf Gymnasien*,) Aurich, 1847.

d. C. A. Müller, "Historical Instruction in the Schools," (*Über den Geschichtsunterricht auf Schulen*,) Dresden, 1835. A very thorough treatise, recommending, among other things, the biographical method.

e. Arnold, "On the Idea, Actuality, &c., of History," (*Über die Idee, das Wesen, etc., der Geschichte*,) Koenigsberg, i. n., 1847. (See the history of the world.)

f. Assmann, "The Study of History," (*Das Studium der Geschichte*,) Brunswick, 1849, recommends beginning with myths and chronological reviews.

g. G. Weber, "Historical Instruction in the Schools," (*Der Geschichtsunterricht auf Schulen*,) Heidelberg, 1850, contains very good hints for gymnasia, real and common schools, etc., etc. Besides the prefaces to many text-books, etc., we may mention Diesterweg's "Rhine Gazette," (*Rheinische Blätter*,) of 1835, 1840, 1842; General School Gazette of Darmstadt, of 1834, 1841, 1843, 1848; Mager's Pedagogical Review, of 1841, 1845, 1851, 1853, and 1854; the *Schulblatt des provinz Brandenburg*, 1851, 1852; Löw's Pedagogical Monthly Review, 1848, 1853, etc. Also, Diesterweg's, "Directory," (*Wegweiser*,) II; and Nacke, *Pedagogisches Jahresbericht*, I, III., V., VII., etc.

25—40. Books and Maps. (On methods, see No. 24.) Text-book on Prussian History, Lösche, (the best.)

For private reading: Zimmermann, "History of Hohenzollern," (*Geschichte der Hohenzollern*;) Reiche, "The former times of Prussia," (*Preussen's Vorzeit*;) Kloss, etc.

Collection of patriotic poems: Müller & Kletke, Berg, etc.

Short text-books on German History: Asmus, Kohlrausch, Eder, Böttiger, Grobe, and Dittmar. (The last is the best.)

Larger Histories of Germany: Pfister, K. A. Menzel, W. Menzel, Luder, Ranke, Raumer, Bülow, Lochner, Wietersheim, etc., etc.

For private reading on German History: Ramshorn, Niemeyer, (*Deutscher Plutarch*,) Henning, Wolff, (*Germania*,) Vogel, (*Germania*,) etc.

Collection of historical poems on German History: Wagner, A. Müller, H. Kletke, A. W. Grube, Zimmermann, A. Böttger, etc.

Text-books on General History: a. short, Dittmar, (the best;) b. larger, Leo, Wachler, Arndt, Ellendt, Dittmar, Wachsmuth, Schlosser, Dietsch, etc. (All of them used only in gymnasia and real schools.)

Popular histories, with much material for biographical instruction: Böttger, Schwartz, A. W. Grube, (*Characterbilder*,) Vogel, (*Geschichtsbilder*,) Becker, etc.

Classical Histories, partly on single periods: Schlosser, (the 18th century,) Raumer, (Hohenstaufen,) Eichhorn, Luden, Heeren & Ukert, Leo, Rehm, Wilken, (Crusades,) Bredow, Niebuhr, (Rome,) Ranke, (Popes and Reformation,) Dunker, Peter, O. Müller, (Greece,) Poelitz, W. Menzel, Arndt, Dahlmann, Wachsmuth, etc.

For private reading on General History: Schwab, "Ancient History," (*Sagen des Alterthums*;) Lange, "Histories from Herodotus," (*Geschichten aus Herodot*;) Niebuhr, "Heroic History of Greece," (*Griechische Heroengeschichte*;) Homberg, "Biographies of celebrated Greeks," (*Biographien berühmter Griechen*,) etc.

For well educated readers: Kletke, "Antiquity in its chief movements," (*Das Alterthum in seinen Hauptmomenten*.) (Excellent.)

Historical Tables, very simple: Wander, Bredow, Schäfer, Dielitz, Püty, K. Th. Wagner, Peter; larger, Kohlrausch, Pischon, Lochner.

Historical Maps: a. small, Schaarschmidt, Muhlert, Rodowicz, König, etc. b. Larger, Wedell, Spuner; (Best and classical.) c. For the wall, (*Wandkarten*,) Vogel, (Europe;) Bretschneider, (Europe;) Iloffmann, (ancient world;) Holle, Kiepert, (ancient times.)

Historical Pictures: Dethier, *Historisch-chronologische Gallerie*; a collection of 1500 medallions. Gross, "History of the World in Pictures," (*Weltgeschichte in bildern*.) The very best on German history is K. H. Hermann's *Geschichte des Deutschen Volks*, (History of the German Nation,) in 15 pictures.

XIV. WOODWARD HIGH SCHOOL IN CINCINNATI.

THE System of Common Schools in Cincinnati was established in 1828-29 under a special act of the Legislature, by which a tax of \$7,000 was annually imposed for the building of school-houses, and a like amount, in addition to the state appropriation, for the support of the schools. Under this act, school-houses were erected, in point of location, size and internal convenience, greatly in advance of the generally received notions of school architecture.

In 1834 the system was greatly extended, and, in 1845, the trustees were authorized to establish schools of different grades, and in 1850 to appoint a superintendent.

In 1847 a central high school was organized, under the charge of Prof. H. H. Barney, and in 1852 the Woodward* Fund and the Hughes* Fund, amounting to \$300,000, and yielding over \$5,000, (the Woodward estate in 1856 yielded \$4,510,) were united for the purpose of sustaining two schools of this grade.

In 1853 a building was erected for the accommodation of the Hughes High School, at an expense, including lot, of about 40,000, and in 1856, in an opposite section of the city, another building, at a cost of \$50,000, for the Woodward High School. Before giving the plan of this last structure, we will give the course of study, text-books, &c., from the *“Twenty-Eighth Annual Report of the Board of Trustees and Visitors of Common Schools,”* for the school year ending July 7, 1857.

The system of public instruction in Cincinnati in 1856-57 embraced—

I. 9 district night schools, and 1 night high school, with 23 teachers and 1,143 pupils.

II. 20 district, sub-district and special district schools, with 201 teachers, and an average daily attendance of 9,983 pupils, distributed in each school into four sections or grades.

III. 4 intermediate schools, with 22 teachers and 943 pupils.

IV. 2 high schools, with 12 teachers and 295 pupils.

V. 1 normal school, with 1 teacher and 31 pupils.

VI. A central school library, with an aggregate of 12,000 volumes.

The current expense of the public schools, for 1856-7, apart from buildings, was \$143,088.11, or about \$12.75 per pupil.

* We have been unsuccessful in obtaining a biographical sketch of either William Woodward or John Hughes, whose names are now indissolubly associated with the system of public instruction in the city of Cincinnati. Mr. Woodward was born in the town of Columbia, in the state of Connecticut, and took with him, at the age of nineteen, to the banks of the Ohio, such training and instruction as a plain Connecticut farmer's home and a Connecticut district school could give, eighty years ago. We hope the accomplished President of the Board of Trustees, Hon. Rufus King, or the indefatigable Superintendent, A. J. Rickoff, Esq., or the Secretary, or Librarian of the Board, will give to the American public a biography of these two benefactors of public education.

The following is the COURSE OF STUDY, TEXT-BOOKS, &c., prescribed for the Public High Schools of Cincinnati, January, 1856.

FIRST YEAR.

FIRST SESSION.

English Grammar, *Brown or Pinneo*, completed.
 English History, *Goodrich or Markham*, completed.
 Algebra, *Ray's*, to Section 172.
Five lessons in each of the above weekly.

SECOND SESSION.

Latin Lessons, *Weld's*, to Part Second.
 Physical Geography, *Fitch*, completed.
 Latin Grammar, *Andrews' and Stoddard's*.
 Algebra, *Ray's*, to Section 305.
 Five lessons each week in Latin and Algebra.
 Three lessons in Physical Geography; and two in Reading.
Once a week during the year—
 Lectures by the Principal, on Morals, Manners, &c.
 Aids to Composition, completed.
 Composition and Declamation, by Sections, once in three weeks.
 Reading and Vocal Music. Penmanship, if needed.

SECOND YEAR.

FIRST SESSION.

Latin Lessons, *Weld's*, to History.
 Latin Grammar, *Andrews' and Stoddard's*.
 Geometry, *Davies' Legendre*, to Book V.
 Natural Philosophy, *Gray's*, to Pneumatics.
Five lessons per week during the year.

SECOND SESSION.

Latin Lessons, *Weld's*, completed.
 Latin Grammar, *Andrews' and Stoddard's*.
 Geometry, *Davies' Legendre*, to Book IX.
 Natural Philosophy, *Gray's*, completed.
Five Lessons a week, in each of the above.
One exercise per week—
 Reading, Elemental Sounds.
 Rhetoric and Vocal Music.
 Composition and Declamation, by Sections, once in three weeks.

THIRD YEAR.

FIRST SESSION.

Chemistry, *Silliman's*, to Section 252, five lessons a week.
 Caesar or Sallust, *Andrew's*, fifty Sections, three lessons a week.
 German or French, three lessons a week.
 Algebra and Spherics, *Ray's and Davies' Legendre*, completed, five lessons a week.

SECOND SESSION.

Virgil's *Æneid*, *Cooper's*, three books, three lessons.
 German or French, three lessons.
 Chemistry, *Silliman's*, to *Vegetable Chemistry*, five lessons.
 Trigonometry, *Davies'*, completed, five lessons.
Once a week—
 Constitution of the United States, completed.
 Logic, *Hedge's*, completed.
 Reading, Rhetoric and Vocal Music.
 Composition and Declamation, by Sections once in three weeks.

FOURTH YEAR.

FIRST SESSION.

Physiology and Hygiene, *Cutter*, completed, five lessons.
 Cicero, *Folsom's*, three Orations, three lessons.
 German or French, three lessons.
 Astronomy, *McIntire's*, completed, five lessons.
 Geology, *Gray and Adams'*, completed, five lessons.
 Moral Philosophy, once a week.

SECOND SESSION.

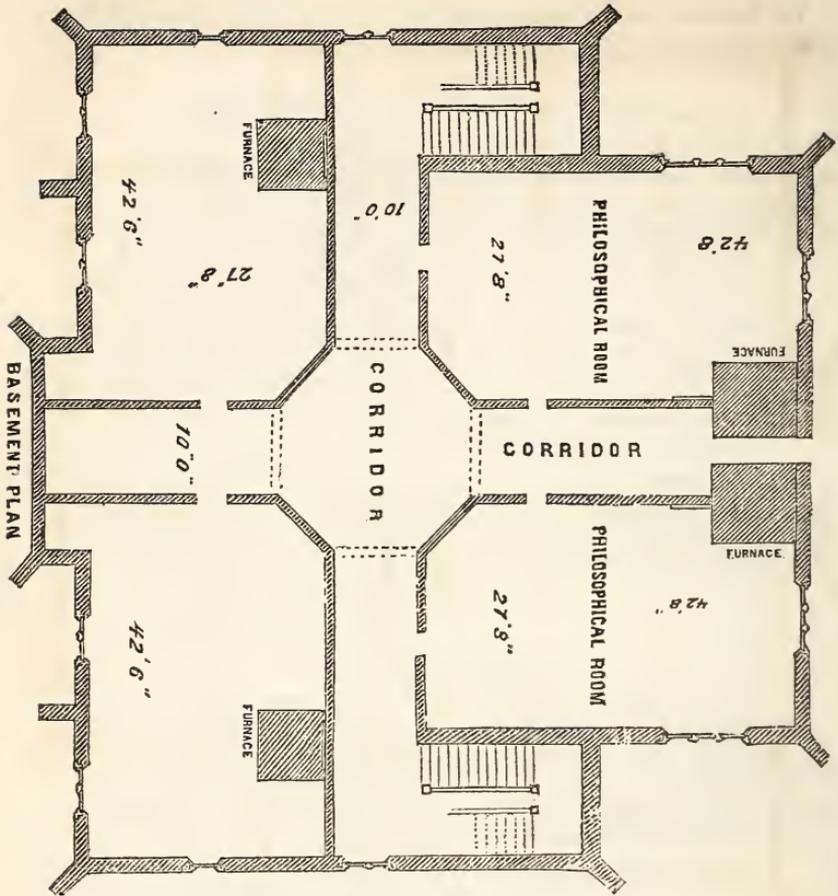
German or French, three lessons.
 Mental Philosophy, *Wayland's*, completed, five lessons.
 General History, *Weber's*, completed, five lessons.
 Navigation and Surveying, *Davies'*, completed.
 Evidences of Christianity, once a week.
Once a week during the year—
 Critical Readings. Vocal Music once a week.
 Compositions, by Sections, once in three weeks.
 Original Addresses, once in three weeks.

COLLEGE CLASS.

In view of preparation to enter college, this class is permitted to substitute the following studies for the regular ones, in the fourth year:—

Crosby's Greek Grammar, completed.
 Felton's Greek Reader, completed.
 Cicero's Orations, six in number.

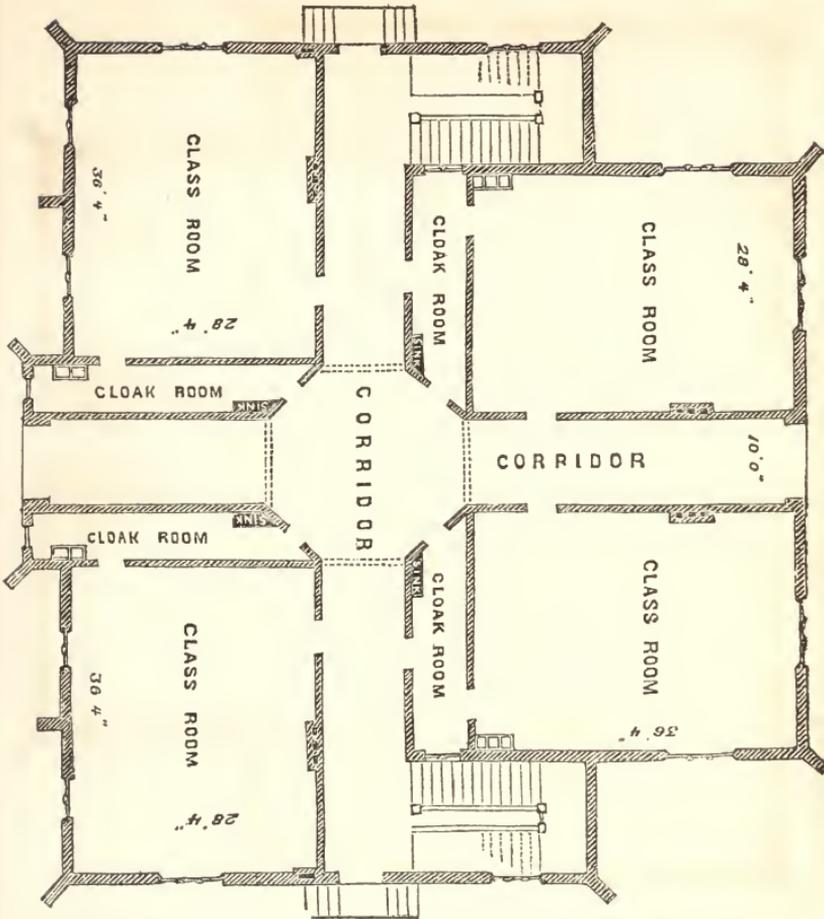
Virgil's *Æneid*, six books.
 Cæsar or Sallust, completed.



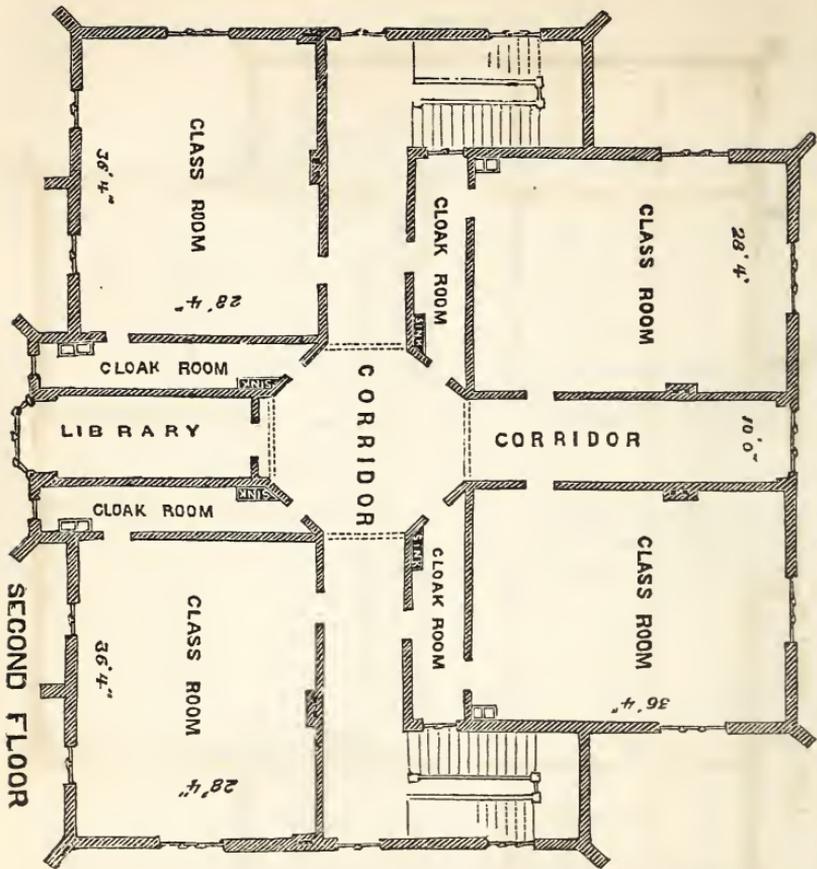
PLANS OF WOODWARD HIGH SCHOOL.

This beautiful building, in the Tudor style of architecture, is located on a lot bounded on the north by Franklin street, on the south by Woodward street, between Broadway and Sycamore streets. It is constructed of brick, with solid buttresses running the height of the building and terminating with ornamental pinnacles. The windows are of rich tracery, but sufficiently massive to give an idea of strength,—and quite unlike the cobweb effect usually produced by cast iron imitations of stone. The external decorations are very rich, and possess those bold and artistic outlines so peculiar to the style. The roof is of singular but pleasing construction, steep and lofty, covered entirely with cut slates, which give a rich appearance, and fringed with ornamental ridge work. In conception, and execution, it is unquestionably the most correct architectural specimen of this class of collegiate buildings which has yet been produced in our Western States.

The basement, which is lofty and well-lighted, comprises philosophical and apparatus rooms, large and well-regulated chambers for the heating apparatus, fuel, &c.; and the approach to it is by a continuance of the grand staircases, rendering this portion of the building as accessible and well-ventilated and lighted as any other.



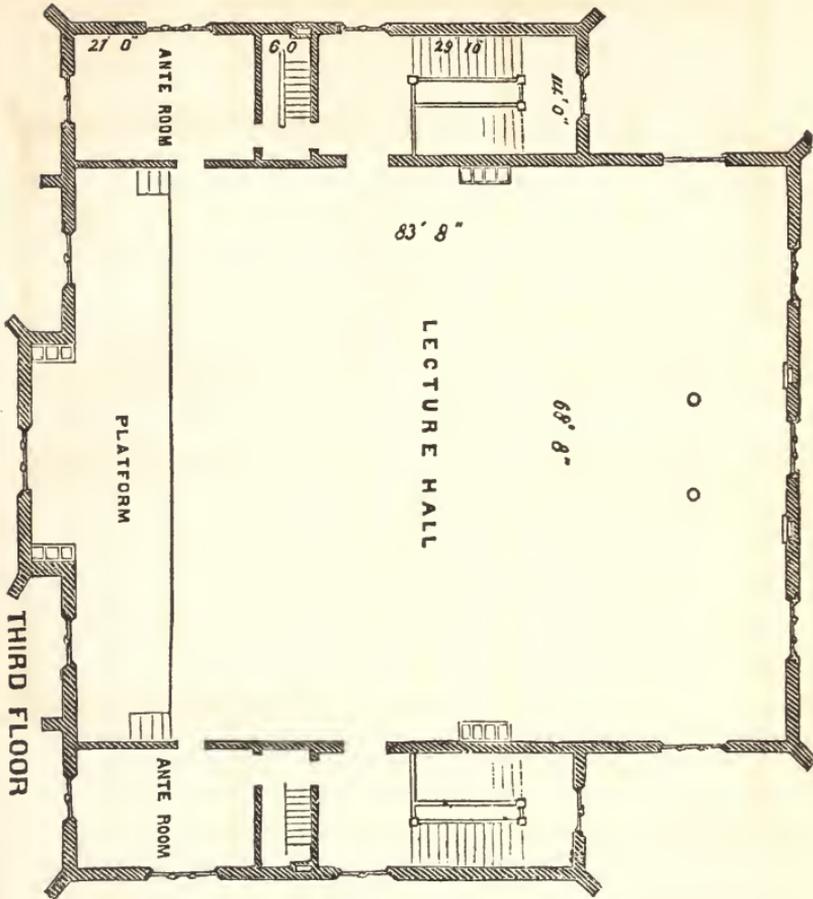
The ground floor has entrances on each of the four sides, leading to spacious corridors, which cross at right angles in the centre of the building,—the intersection being arranged in the form of an octagon, with arches on each side, producing an imposing effect. On this floor are four large class rooms, each 36 feet by 28 feet, well arranged with reference to the position of teacher, and the doors so located that the scholars face any one who enters. Contiguous to each class room is a commodious cloak room, accessible both to the corridors and class rooms. One of the most noticeable and admirably disposed features of the building is the staircases. There are two of these, forming a flank to each side of the building. They extend from the basement to the lecture hall, on third floor, and terminate in two beautiful towers, which add materially to the external effect of the building. These staircases are wide, of very easy ascent, and, in their form of construction, with the arching overhead, present a really noble appearance. But this is their least merit; located as they are, they afford an entrance on each side to the grand lecture hall, and, although contiguous to the latter, do not mar its beauty or comfort by breaking up any portion of its space. Another invaluable result from this treatment, is security in case of fire. Two large staircases so situated, widely apart from each other, and, although attached to, practically isolated from the main body of the



building, present the best safeguard, and render impossible the terrible calamities which have more than once resulted in our schools from the neglect of this precaution.

The second floor is identical in its arrangement with the first.

The third floor is exclusively devoted to the lecture hall, the staircases which flank and give access to it, and two ante-rooms, one on each side, accessible both from stairs and lecture hall. This lecture hall is, without exception, the grandest room of the kind which has yet been seen in this part of the world. Its entire dimensions are 83 feet by 68 feet, irrespective of the galleries, which are ingeniously arranged over the ante-rooms, and in the space gained between the ceiling of the ante-rooms and that of the lecture hall, the height of the latter being 25 feet. The effect of these arched galleries at the end of the room is very fine. At one end of the room is a raised platform, occupying in length the entire width of the room, and in the centre of this end of the hall is a wide and lofty arched recess. The appearance of the hall, with its windows of rich Gothic tracery, the arched galleries, the ceiling formed of oak leaves crossing each other with handsome rosettes at their intersection, and deep-sunk panels of a dark blue color, the



rich wainscotting of the walls, and handsomely devised doorways, present altogether an appearance of unusual beauty. The artistic peculiarities of the Tudor style of Gothic have been faithfully carried into the minutest features of this structure, both internally and externally; and the total absence of any admixture of other styles produces that charming effect of harmony and unity which is the prevailing characteristic of this building.

The enclosure of the area, on the Franklin street or main front, is formed of a rich iron railing, of Gothic design, resting upon a bold plinth of Dayton stone. The piers which flank the enclosure at each end, and the central gate piers, are also of Dayton stone, of beautiful design, and richly carved and ornamented.

The cost of the building was very near \$44,000, including four furnaces for warming, gas fixtures, &c.

The entire cost of the structure, including fence, walls, railing, grading, &c., was \$53,000. It was designed and superintended by J. R. HAMILTON, architect, and erected by DANIEL LAVERY, contractor, under the foremanship of JOHN TAYLOR,—all of Cincinnati.

XV. THE PETER COOPER UNION.

THE following is the Act of the Legislature of New York, giving corporate powers to the Trustees of Peter Cooper's Munificent Gift to Science and Art.

SEC. 1. Peter Cooper, of the city of New York, is hereby authorized to convey or devise to the body corporate hereinafter created, that certain block of land in the said city, with the edifice thereon erected, with its appurtenances, bounded north by Astor place, east by Third avenue, south by Seventh street, and west by Fourth avenue, upon such trusts and conditions as would be held valid if made by testamentary devise, for the purpose of founding and establishing a public institution in said city, for the advancement of science, art, philosophy and letters, together with such scientific and historical collections, chemical and philosophical apparatus, mechanical and artistic models, books, drawings, pictures, statues, and other means of instruction, as may be useful for that purpose.

SEC. 2. Peter Cooper and his assigns shall be, and are hereby constituted, a body corporate, by the name and title of "The Peter Cooper Union for the advancement of Science and Art," and its corporate existence shall commence when the said Peter Cooper shall convey or devise to it the block of land and edifice above mentioned.

SEC. 3. The said institution shall possess all the powers and privileges of a body corporate, and shall be subject to all the liabilities and restrictions contained in title third, of chapter eighteen, of part first of the Revised Statutes, except that it shall be lawful for said institution to organize and commence the transaction of its business at any time within three months after such conveyance or devise shall take effect.

SEC. 4. Its affairs shall be conducted by a Board of Control, which shall consist of not less than thirteen members, and it shall be lawful for the said Peter Cooper in the written act by which he may convey or devise the land and edifice, as aforesaid, to prescribe the terms and conditions of membership of said institution, to designate and appoint the first members of the Board of Control, to prescribe the terms of office of themselves, respectively, and of their successors, and to provide for filling any vacancy or vacancies that may at any time occur in the said Board by the expiration of the terms of office, or the resignation, death or disability of any member or members thereof, by the selection and appointment of one person to fill each vacancy by the members of said institution, or by such societies incorporated by the laws of this State, as the said Peter Cooper may designate for that purpose, in the said act of conveyance or devise. And it shall be lawful for the said Peter Cooper to prescribe the conditions upon which the selection and appointment shall be made, and to designate, respectively, the vacancies that shall be filled by appointment by each of the several societies that may be designated as aforesaid for that purpose; and the said Peter Cooper, if he shall so elect in and by said act of conveyance or devise, shall also be a member of said Board during his natural life.

In case the said Peter Cooper shall fail to provide for the selection and appointment of persons to fill the vacancies that may occur in said Board, then the said Board shall be composed as follows:

Of the oldest male descendant of lawful age, for the time being, of the said Peter Cooper.

Of the Mayor of the city of New York, and the President of the Board of Education of the city of New York, for the time being, by virtue of their respective offices.

Of the other individuals that may be designated as Trustees by the said Peter Cooper, in the written act by which he may convey or devise the land and edifice as aforesaid. If the said Peter Cooper shall have so elected, in and by said act, he shall also be a Trustee of said Board during his natural life.

Of the Trustees so to be designated by the said Peter Cooper, the two first named by him, and designated by the numbers one and two, shall hold their offices until the first day of January of the first political year succeeding that in which such conveyance or devise shall take effect: the two next, named and designated by the numbers three and four, until the first day of January, in the second political year; the two next, named and designated by the numbers five and six, until the first day of January, in the third political year; the two next, named and designated by the numbers seven and eight, until the first day of January, in the fourth political year; the two next, named and designated by the numbers nine and ten, and all others hereinafter named, until the first day of January, in the fifth political year, succeeding that in which such conveyance or devise shall take effect.

At the expiration of said respective terms of office, or in case of any vacancy in either, by resignation, death or otherwise, during the term, such office shall be thereafter respectively filled in the following manner:

The vacancy in the office of the Trustee number one, by such person as the Governor of this State may appoint:

The vacancy in the office of the Trustee number two, by such person as the General Society of Mechanics and Tradesmen in the city of New York may appoint, and in such mode as their by-laws may prescribe:

The vacancy in the office of the Trustee number three, by such person as the Judge of the District Court of the United States for the Southern District of New York may appoint:

The vacancy in the office of the Trustee number four, by such person as a majority of the Governors of the Society of the "New York Hospital" may appoint:

The vacancy in the office of the Trustee number five, by such person as a majority of the Judges of the Superior Court of the city of New York may appoint:

The vacancy in the office of the Trustee number six, by such person as the Corporation of the Chamber of Commerce in said city may appoint, and in such mode as their by-laws may prescribe:

The vacancy in the office of the Trustee number seven, by such person as a majority of the Trustees of the Astor Library may appoint:

The vacancy in the office of the Trustee number eight, by such person as a majority of the Directors of the Mercantile Library may appoint:

The vacancy in the office of the Trustee number nine, by such person as a majority of the New York Society Library may appoint:

The vacancy in the office of the Trustee number ten, by such person as a majority of the Trustees of the New York Historical Society may appoint:

Every Trustee, to be appointed in the manner specified in this section, shall hold his office for the five years next succeeding the appointment, ending with 31st day of December, in the fifth year; and all vacancies occurring subsequently to the first appointment, shall thereafter be filled respectively by the authorities indicated in this section:

Every such act of appointment of a Trustee shall be in writing, and shall be duly filed in the office of the Clerk of the County of New York, and a duplicate thereof shall be delivered to the Board before the Trustee takes his seat.

In case any of the courts, corporations, or public officers specified in the preceding section shall cease to exist, or shall omit to exercise the authority therein committed to them, the said Board of Control shall apply to the Legislature to substitute such other court, corporation or public officer as the Legislature may deem expedient.

The seat of any member of the Board of Control, who may absent himself without its permission, unless prevented by sickness, for five regular monthly meetings in a single year, may be vacated by a majority of the remaining members.

SEC. 5. The body corporate, hereby created, may take and hold the property above mentioned, and may lease such portions of the building as they may deem most conducive to the interests of the institution, and may receive its

rents and revenues, and any other donations or endowments which may be made in aid of the objects herein above expressed, and apply the same, or the income thereof, to the enlargement or improvement of their means of instruction; and they may confer such degrees and diplomas for proficiency in science, art, philosophy or letters as may be appropriate, subject to the conditions contained in the act of conveyance or devises aforesaid.

SEC. 6. The Board of Control shall appoint all professors, teachers, and other officers necessary for the conduct of the institution, and regulate their salaries, emoluments and tenure of office; and shall apply all the rents and revenues of said property, as well before as after the conveyance thereof, to the body corporate, hereby created, to the necessary expenses of the institution, including the preservation, renovation, and repair of the edifice, and the proper maintenance and increase of the apparatus and collections; and, while so used, neither the land, nor the building, nor its contents, nor any funds or donations in aid of its legitimate objects, shall be subject to taxation. It shall not be lawful for said Board to sell or mortgage the said land or edifice, or any parts thereof, nor to contract any pecuniary engagement exceeding the revenues of the current year. No member of said Board shall receive any pecuniary compensation for his services.

SEC. 7. The Supreme Court shall possess and exercise a supervisory power over said institution, and may, at any time, on the written application either of three members of said Board of Control, or of twenty graduates of the institution, of at least five years' standing, require from its Trustees, collectively or individually, a full account of the execution of their trust. Every Trustee may freely publish, at any time in his discretion, any matter within his knowledge relating to such institution, or its management in any respect, including any discussions in the Board of Control in relation to any matter whatever; and shall be bound fully to disclose the same, whenever required, either by said Superior Court, or a committee of either branch of the Legislature. Full minutes shall be kept by the said Board of all their proceedings, and the yeas and nays shall be recorded on any vote on the request of any member. Neither the said Board of Control, nor any member thereof, shall, in any way, take into account any religious tenet or opinion of any professor or teacher, or of any candidate for any office in said institution, on any appointment to or removal from such office; nor of any student applying for admission into said institution, or competing for any of its honors or advantages: nor shall they permit any professor or teacher in said institution, to make any discrimination among its students on account of their religious tenets or opinions. If any Trustee of said institution, after due inquiry by the Supreme Court, and sufficient notice, shall be found unfaithful or culpably negligent in the discharge of his duty, the said Court shall remove him from office.

SEC. 8. The Board of Control shall annually, in the month of January, present to the Common Council of said city a full report of all their receipts and disbursements during the year, and of the progress and condition of the institution, and shall also transmit a duplicate copy of the said report to the Legislature, and shall, at all times, furnish any further information in respect to their funds, revenues, and course of instruction, which the Legislature or Regents of the University may require.

SEC. 9. The Legislature, at any time, may alter, amend, or repeal this act.

SEC. 10. This act shall take effect immediately.

XVI. EDUCATIONAL MISCELLANY.

ON THE MOTION OF THE GYROSCOPE AS MODIFIED BY THE RETARDING FORCES OF FRICTION, AND THE RESISTANCE OF THE AIR :
WITH A BRIEF ANALYSIS OF THE TOP.

BY MAJOR J. G. BARNARD, A. M.

Corps of Engineers U. S. A.

IN a previous paper (see article in this Journal for June, 1857, to which this paper is intended to be supplementary,) I have investigated the "Self-sustaining power of the Gyroscope" in the light of analysis. From the general equations of "Rotary motion" I have deduced the laws of motion for the particular case of a *solid of revolution* moving about a fixed point in its axis of figure, (or the prolongation thereof). I have shown that such a body, having its axis placed in any degree of inclination to the vertical, and having a high rotary motion about *that axis*, will not, under the influence of gravity, *sensibly fall*; but that any point in the axis will describe "an undulating curve whose superior culminations are *cusps* lying in the same horizontal plane;" that this curve approaches more and more nearly to the cycloid, as the velocity of axial rotation is greater; that when this velocity is very great the undulations become very minute and "the axis of figure performing undulations too rapid and too minute to be perceived, moves slowly about its point of support." I have shown how the direction and velocity of this *gyration* are determined by the direction and velocity of axial rotation and the distance of the center of gravity of the figure from the point of support, and that the remarkable phenomenon exhibited by the gyroscope is but a *particular case* due to a *very high velocity* of axial rotation, of the general laws of motion of such a body as described, which embrace the motion of the pendulum in one extreme and that of the gyroscope in the other, and that intermediate between these two extreme cases (for moderate rotary velocities) the undulations of the axis, will be large and sensible.

I have likewise shown that whenever, to the axis of a rotating solid, an angular velocity is imparted, a force which I have called "*the deflecting force*" acting perpendicular to the plane of motion of that axis, is developed, whose intensity is proportional to this angular velocity, and likewise to the rotary velocity of the body; and that it is this *deflecting force* which is the immediate *sustaining agent*, in the gyroscope.

In the above deductions of analysis is found the full and complete solution of the "self-sustaining power of the gyroscope."

To make the character of the motion indicated by analysis,
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sensible to the eye, it is only necessary to attach to the ordinary gyroscope, in the prolongation of the axis, an arm of five or six inches in length, and having an universal joint at its extremity, and to swing the instrument as a pendulum; or, the extremity of an arm of such a length may be rested in the usual way, upon the point of the standard, when, with the centre of gyration removed at so great a distance from the point of support, the undulatory motion becomes very evident.

But it cannot fail to be observed that the motion preserves this peculiar feature but for a very short period. The undulations speedily disappear; instead of periodical moments of *rest* (which the theory requires at each *cusps*) the gyratory velocity becomes *continuous*, and nearly uniform and horizontal; and it increases as the axis (owing to the retarding influences of friction and the resistance of the air) slowly falls. In short, the axis soon seems to move upon a descending spiral described about a vertical through the point of support.

The experimental gyroscope, in its simplest form consists of two distinct masses, the rotating disk, and the *mounting* (or ring in which the disk turns). The point of support in the latter, though it gives free motion about a vertical axis, constrains more or less, the motion of the combined mass about any other. The rotating disk turns at the extremities of its axle, upon points or surfaces in the mass of the mounting, *with friction*; it is rare, too, that the point of support, of the mounting, is adjusted in the exact prolongation of the axis of the disk.

Without attempting to subject to analysis causes so difficult to grasp as these, I shall first attempt to show, by general considerations, what would be the *immediate* influence of the retarding forces of friction and the resistance of the air upon our theoretical solid; and then point out the further effect due to the discrepancies of figure, above indicated. Leaving out of consideration the minute effect of friction at the point of support, these forces exert their influence, mainly in retarding the *rotary velocity of the disk*. Friction—at the extremities of the axle of the disk, and the resistance of the air, at its surface, are powerful enough to destroy entirely in a very few minutes, the high velocity originally given to it. It is in this way, mainly, that they modify the motion indicated by analysis.

If the rotary velocity remained *constant* while the axis made *one* of the little cycloidal curves aba' , (fig. 1) the deflecting force would be just sufficient, as I have shown (p. 556 of the article cited) to lift the axis back to its original elevation a' , and to destroy, *entirely*, the velocity it had acquired through its fall cb . If, at a' , the rotary velocity n underwent an *instantaneous* diminution, and remained constant through another undulation, a curve, of larger amplitude and sagitta $a'b'a''$ would be described, and the axis would *again* rise to its original elevation a'' , and *again* be brought to rest. We might then, on casual considera-

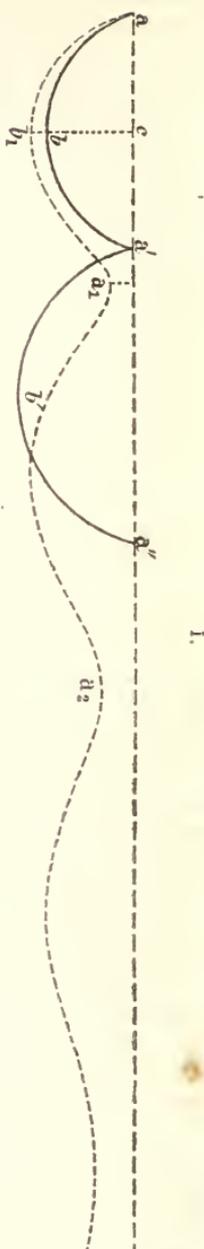
tion of the subject, expect to see the undulations become more and more sensible as the rotary velocity decreased. The reverse, however, is the case, as I have already stated. In fact, the above supposition would require the rotary velocity n to be a *discontinuous* decreasing function of the time; whereas it is, really a *continuous* decreasing function. It is undergoing a gradual diminution between a and a' . The *deflecting force*, which is constantly proportional to it, is *therefore* insufficient to keep the axis up to the theoretical curve aba' , but a lower curve ab_1a_1 is described; and when the culmination a_1 is reached, it is *below* the original elevation a' .

But the 2d of our general equations for the gyroscope (4), [afterwards put under the simple form (eq. (f)) $v_s^2 = \frac{2g}{\gamma} h$] which is *independent* of n , shows that the angular velocity of the axis will always be that due to its *actual fall* h below the initial elevation. On reaching the culmination a_1 , therefore, the axis will not come to rest, but will have a horizontal velocity due to the fall $a'a_1$, and the curve will not form a *cusp* but an *inflexion* at a_1 .

The axis will commence its second descent, therefore, with an *initial horizontal velocity*. It will not descend as much as it would have done had it started *from rest* with its diminished value of n ; and, for the same reason as before, will not be able as again to rise high as its starting point a_1 , but to a somewhat lower point a_2 , and with an increased horizontal velocity. These increments of horizontal velocity will constantly ensue as the culminations become lower and lower, while on the other hand, the undulations become less and less marked, as indicated by the figure.

I have stated in my former paper (p. 559) that a certain *initial* horizontal angular velocity such as would "make its corresponding deflecting force equal to the component of gravity, $g \sin \theta$, would cause a horizontal motion without undulation." This horizontal velocity is rapidly attained through the agencies just described: or, at least, nearly approximated to, and the axis, as observation shows, soon acquires a continuous and uniform horizontal motion.

On the other hand, this sustaining power being directly pro-



portional to the rotary velocity of the disk, as well as to the angular velocity of the axis, diminishes with the former, and as it diminishes, the axis must descend, acquiring angular velocity due to the height of fall: hence the rapid gyration and the descending spiral motion which accompanies the loss of rotary velocity.

A more curious and puzzling effect of the friction of the axle is presented, when we come to take into consideration, instead of our theoretical solid, the discrepancies of figure presented by the actual gyroscope. If, with a high initial rotation, the common gyroscope be placed on its point of support with its axis somewhat inclined *above* a horizontal position, it will soon be observed to *rise*. In my analytical examination (p. 543) I have stated as a deduction from the second equation (4), that "the axis of figure can never rise *above* its initial angle of elevation." That equation supposes that the rotary velocity *n* remains *unimpaired*, and is the expression of a fundamental principle of dynamics—that of "living forces" (so-called), which requires that the living force generated by gravity be directly proportional to the height of *fall*, and involves as a corollary that through the agency of its own gravity alone, the centre of gravity of a body can never rise above its initial height.* The anomaly observed, therefore, either requires the action of some *foreign force*; or, that the living force lost by the rotating disk, shall, through some hidden agency, be expended in performing this work of *lifting* the mass.

The discrepancy here exhibited between the motion proper to our theoretical solid of revolution and the experimental gyroscope is due to the division of the latter into two distinct masses, one of which rotates, *with friction*, upon points or surfaces in the other; and to the fact that at the point of support (in the latter) there is not *perfectly free motion* in all directions.

The friction at the extremities of the axle of the disk, tends to impress on the mass which constitutes the "mounting," a rotation in the same direction. Were the motion of the latter upon its fixed point of support *perfectly free*, the mounting and disk would soon acquire a *common rotatory velocity* about the axis of the disk. But the mounting is perfectly free to turn about the *vertical* axis through the point of support, though *not about any other*. If we decompose, therefore, the rotation which would be impressed upon the mounting into two components, one about this vertical, and the other about a horizontal axis—the first takes *full effect*, and the latter is destroyed at the point of support. If the axis of the instrument is *above* the horizontal, this component of rotation is in the same direction as the *gyration* due to gravity, and *adds to it*; if the axis is *below* the horizontal, the component is the reverse of the natural gyration, and *diminishes it*.

* The first of these equations (as I have remarked in a note to p. 547) is the expression of another fundamental principle—more usually called the "principle of areas."

But I have shown that the axis soon acquires, independent of this cause, a gyration whose deflecting or sustaining force is just equivalent to the downward component of gravity. The *addition* to this gyratory velocity caused by friction when the axis is inclined *upwards* puts the deflecting force in *excess*, and the axis is raised; it is raised, as in all other cases in which *work* is done through acquired velocity—viz., by an expenditure of *living force*; but in this instance, through a most curious and complicated series of agencies.

The phenomenon may be best illustrated in the following manner. Let the outer extremity of the common gyroscope, having its axis inclined *above* the horizontal, be supported by a thread attached to some fixed point vertically above the point of support, so that gyration shall be free. Here gravity is eliminated, and the axis of our theoretical solid of revolution would remain perfectly motionless; but the gyroscope starts off, of itself, to gyrate in *the same direction* that it would were its extremity *free*. This gyration increases (if the rotary velocity is great) until the deflecting force due to it, lifts the outer extremity from its support on the thread, and it continues indefinitely to rise. Try the same experiment with the axis *below* the horizontal. The gyration will commence spontaneously as before, but in the *reverse* direction: it will increase until the *inner extremity is lifted from the point of support*, (the action of the deflecting force being here reversed,) the instrument supporting itself on the thread alone. If the experiment is tried with the axis perfectly horizontal, no gyration takes place, for the component of rotation, due to friction, is, in this position, zero.

The foregoing reasoning accounts, I believe, for all the observed phenomena of the experimental gyroscope, and shows how, from the theory of our imaginary solid of revolution, a consideration of the effects of the discrepancies of form, and of the actual disturbing forces, leads to their satisfactory explanation.

The great similarity between the phenomena of the top and gyroscope, renders it not uninteresting to compare the laws of motion of the two. If we conceive a solid of revolution terminated at its lower extremity by a *point* (the ordinary form of the top), resting upon a horizontal plane without friction, *and having a rotary motion about its axis of figure*, such a body will be subject to the action of two forces; *its weight*, acting at the centre of gravity, and the *resistance of the plane*, acting at the point vertically upwards.

According to the fundamental principles of dynamics, the centre of gravity will move as if the mass and forces were concentrated at that point, while the mass will turn about this centre as if it were fixed. Calling R the resistance of the plane, M the mass, and Mg the weight of the top, and z the height of

the centre of gravity above the plane, we shall have for the equation of motion of the centre of gravity*

$$M \frac{d^2 z}{dt^2} = R - Mg \quad (1.)$$

As the angular motion of the body is the same as if the centre of gravity was fixed, and as R is the only force which operates to produce rotation about that centre, if we call C the moment of inertia of the top about its axis of figure, and A its moment with reference to a perpendicular axis through the centre of gravity, and γ the distance, GK (fig. 2) of the point of support from that centre; the equations of rotary motion will become identical with equations (3) (p. 541), substituting R for Mg

$$\left. \begin{aligned} Cd v_z &= 0 \\ A d v_y - (C - A) v_z v_x dt &= \gamma a R dt \\ A d v_x + (C - A) v_y v_z dt &= -\gamma b R dt \end{aligned} \right\} (2.)$$

The first of equations (2) gives us v_z as for the gyroscope, equal a constant n .

Multiplying the 2d and 3d of equations (2) by v_y and v_x respectively, and adding and making the same reduction as on p. 53, we shall get

$$A(v_y d v_y + v_x d v_x) = R \gamma d. \cos \theta.$$

But z (the height of the centre of gravity above the fixed plane) $= -\gamma \cos \theta$; hence $\gamma d. \cos \theta = -dz$; and equation (1) gives

$R = M \left(\frac{d^2 z}{dt^2} + g \right)$. Substituting these values of R and $\gamma d. \cos \theta$ in the preceding equation, and integrating, we have

$$A(v_y^2 + v_x^2) + M \left(\frac{dz^2}{dt^2} + 2gz \right) = h \quad (3.)$$

From the 2d and 3d of equations (2) the equation (c) (of the gyroscope, p. 542) is deduced by an identical process.

$$A(b v_y + a v_x) + C n \cos \theta = l,$$

and a substitution in the two foregoing equations of the values of the cosines a and b , and of the angular velocities v_x and v_y , in terms of the angles φ , θ and ψ (see pp. 540, 541), and for z and $\frac{dz}{dt}$ their values, $-\gamma \cos \theta$, and $\gamma \sin \theta \frac{d\theta}{dt}$, and a determination of the constants, on the supposition of an initial inclination of the axis α , and of initial velocity of axial rotation n , will give us for the equations of motion of the top:

$$\left. \begin{aligned} \sin^2 \theta \frac{d\psi}{dt} &= \frac{Cn}{A} (\cos \theta - \cos \alpha) \\ A \left(\sin^2 \theta \frac{d\psi^2}{dt^2} + \frac{d\theta^2}{dt^2} \right) + M \gamma^2 \sin^2 \theta \frac{d\theta^2}{dt^2} &= 2Mg\gamma (\cos \theta - \cos \alpha) \end{aligned} \right\} (4.)$$

* As there are no horizontal forces in action, there can be no horizontal motion of the centre of gravity except from initial impulse, which I here exclude

from which the angular motions of the top can be determined. The first is identical with the first equation (4) for the gyroscope. The second differs from the second gyroscopic equation only in containing in its first member the term $M\gamma^2 \sin^2 \theta \frac{d\theta^2}{dt^2}$, or its equivalent $M \frac{dz^2}{dt^2}$, expressing the living force of vertical translation of the whole mass.

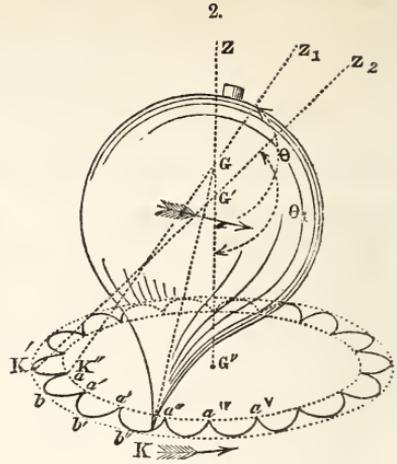
The second member (as in the corresponding equation for the gyroscope) expresses the *work of gravity*, and the first term of the first member expresses the living force due to the angular motion of the axis. Instead therefore of the work of gravity being expended (as in the gyroscope) *wholly* in producing angular motion, part of it is expended in vertical translation of the centre of gravity. The angular motion takes place not (as in the gyroscope) about the point of support (which in this case is not *fixed*), but about the centre of gravity (to which the moments of inertia A and B refer); and that centre, motionless horizontally, moves vertically up and down, coincident with the small angular undulations of the axis through a space which will be more and more minute as the rotary velocity n is greater.

An elimination of $\frac{d\psi}{dt}$ between the two equations (4) and a study of the resulting equation, would lead us to the same general results, as the similar process, p. 544, for the gyroscope.

The vertical angular motion, expressed by the variation which the angle θ undergoes, becomes exceedingly minute (the maximum and minimum values of θ approximating each other) when n is great, and the axis gyrates with slow undulatory motion about a vertical through the centre of gravity. It would be easy, likewise, to show by substituting for θ another variable, $u = \alpha - \theta$, always (in case of high values of n) extremely small, and whose higher powers may therefore be neglected, that the co-ordinates of angular motion, u and ψ , approximate more and more nearly to the relation expressed by the equation of the cycloid as n increases; though the approximation is not so rapid as in the gyroscope. All the results and conclusions flowing from the similar process for the gyroscope (see pp. 545, 546, 547, 548) would be deduced. As, however, the centre of gravity, to which these angular motions are referred, is not a *fixed point*, but is itself constantly rising and falling as θ increases or diminishes, the actual motion of the axis is of a more complicated character.

If GK'' (see fig. 2) is the initial position of the axis of the top, the motion of the centre of gravity will consist in a vertical falling and rising through the distance $GG' = GK''(\cos z_2 - \cos z_1) = G'G'' - \cos z_1 \cdot G'G'' = \gamma(\cos \theta_1 - \cos \alpha)$ (in which θ_1 is the *minimum* value of θ)

while the extremity of the axis or *point*, K , describes on the supporting surface and about the projection G'' of the centre of gravity, an undulating curve $a, b, a', b', a'', \&c.$, having *cusps* $a, a', \&c.$, in the circle described about G'' with the radius $G''K' = \gamma \sin \alpha$, and tangent, externally, to the circle described with a radius $G''K' = \gamma \sin \theta_1$. But, as in the case of the gyroscope, these little undulations speedily disappear through the retarding influence of friction and resistance of the air, and the point of the top describes a circle, more or less perfect, about G'' .



The *rationale* of the self-sustaining power of the top is identical with that of the gyroscope; the *deflecting* force due to the angular motion of the axis plays the same part as the sustaining agent, and has the same analytical expression. Owing to *friction*, the top likewise rises, and soon attains a vertical position; but the agency by which this effect is produced is not exactly the same as for the gyroscope.

If the extremity of the top is rounded, or is not a perfect mathematical point, it will *roll*, by friction, on the supporting surface along the circular track just described. This rolling speedily imparts an angular motion to the axis greater than the horizontal gyration due to gravity, and the deflecting force becomes in excess, (as explained in the case of the gyroscope,) and the axis rises until the top assumes a vertical position. Even though the extremity of the top is a very perfect *point*, yet if it happens to be slightly *out* of the axis of figure (and rotation) the same result will, in a less degree, ensue: for the point, instead of resting *permanently* on the surface, will *strike it*, at each revolution, and in so doing, propel the extremity along. The conditions of a *perfect point*, perfectly centered in the axis of figure, are rarely combined, or rather are *practically impossible*; but it is easy to ascertain by experiment that the more nearly they are fulfilled, and the harder and more highly polished the supporting surface, the less tendency to rise is exhibited; while the great *stiffness* (or tendency to assume a vertical position) of tops with rounded points, is a fact well known and made use of in the construction of these toys.

☞ The references throughout this paper are to my paper on the gyroscope in the June number of the Am. Journal of Education.

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Circular.

WITH the publication of the Number for December, (Number 11,) the editor and publisher of the AMERICAN JOURNAL OF EDUCATION have done all they could to meet their engagements with subscribers for the year 1857. During the year, thirteen hundred and fifty-two pages of Educational matter, and ten portraits of eminent teachers and benefactors of Education, from steel plates, engraved, in most instances, expressly for the Journal, (350 pages and six portraits more than was promised,) have been forwarded by mail, or by local agents, to all subscribers who have paid their subscriptions, for 1857.

The publication of the Journal will be continued through the year 1858, substantially on the plan of the previous volume, and on the terms set forth in the prospectus of the publisher, for 1858.

Number 12 will be issued on the 15th of March, and will be paged from the close of Number 11, so to constitute, when bound up with Numbers 10 and 11, Volume IV, with about the same number of pages as the previous volumes.

Numbers 13, 14, and 15, will together constitute Volume V; and the five volumes will be known as the FIRST SERIES of this periodical, and the first installment of the editor's Encyclopædia of Education.

Those of our friends who propose to continue their subscription, will confer an obligation by signifying their intention as early as they can.

If all of our present subscribers will renew their subscriptions, and each one will send us the name of a new subscriber, the editor, in addition to devoting his whole time to the interests of the Journal, will no longer be burdened with a large pecuniary loss by the publication.

If the friends of American Education, in any of its departments, will help to fill a subscription list for one thousand copies of the *First Series* of the American Journal of Education—[Volumes I, II, III, IV, and V,] substantially bound—they can in that way relieve the editor of the pecuniary loss he has already sustained.

For the convenience of subscribers, who may discontinue their subscription with Number 11, an Index to Numbers 10 and 11 is herewith sent.

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I. THOMAS ARNOLD AS A TEACHER.

BY SAMUEL ELIOT,

Brownell Professor of History and Literature, Trinity College, Hartford, Ct.

"IF he is elected to the head-mastership of Rugby," wrote one of Arnold's friends in the year 1827, "he will change the face of education all through the public schools of England." High-sounding prediction, and yet fulfilled to the letter. "A most singular and striking change," wrote another friend of Arnold, after his death in 1842, "has come upon our public schools;"—the writer being the head-master of Winchester school,—“I am sure that to Dr. Arnold's personal earnest simplicity of purpose, strength of character, power of influence, and piety, which none who ever came near him could mistake or question, the carrying of this improvement into our schools is mainly attributable.”

Such a reformer can not be too frequently or too widely studied. Often as he may have been portrayed, there still remain fresh lineaments, untried attitudes, in which he may be represented by a new limner. Nor will the effect of his reforms be found confined within the limits of his own land or nation. The English schools are not American, nor are the American schools English in points of constitution, operation, or varying detail; but the reformer of one order of schools will be found closely allied to the reformer of the other order; while it is even truer that the great teacher in England is as much a study to every teacher in America as if he had labored on this side of the Atlantic.

Our purpose shapes itself accordingly. We shall not attempt a biography of Arnold, but rather essay to describe him as the teacher. Nor shall we do this without steady reference to the influence of his example amongst ourselves,—to the lesson which his career as an instructor conveys to every one of us engaged or interested in the great cause of education.

THOMAS ARNOLD was born at West Cowes, Isle of Wight, in the year 1795. The loss of his father, before he was six years old, left him dependent upon his mother and his aunt, the latter taking charge of his early education. Placed at school, first in Warminster and then in Winchester, he laid the foundations, as a school-boy, of the

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Cannot this be off. 12. etc. to Thomas's School

knowledge and the system which he afterward carried out as a master. He was a stiff and a formal lad, "unlike those of his own age," said his family and school-fellows, "and with peculiar pursuits of his own," in which play-writing and ballad poetry, geography and history, were particularly remarked. It was not till he entered Corpus Christi College, at Oxford, that his manners became more genial and his occupations more harmonious; he was at once distinguished amongst his brother collegians for courage, candor, and affection,—still more for the spirit with which he ranged himself against the "Tories in church and state, great respecters of things as they were," to use the language of one of them, "and not very tolerant of the disposition which he brought with him to question their wisdom." Arnold won little distinction as a scholar: fonder of philosophy and history than of the regular routine of study; quick to take up geology as soon as there was a professor to assist him; ready for a walk, or what he called a skirmish, across the country at any time; he grew up a young man of large tastes and of aspiring principles, but without preciseness or fullness of development. Future development, however, was so clearly promised in his case, that he obtained a fellowship in Oriel College over several competitors of actual superiority. He remained at Oxford four years more,—a period of evident progress,—occupied in private instruction and in extensive reading, in the course of which many of his later principles in education, literature, and religion, were unquestionably grasped if not positively matured. At length, in his twenty-sixth year, he removed to Laleham as a private teacher, and began (1819) the great career which we are to follow.

26
The year before, he was ordained a deacon in the English church. There had been inquiries and misgivings in relation to his faith; intellectual doubts had risen up to shake his religious trust; but they were driven down, to rise no more for him. It would be out of place to describe him as a believer, or as a clergyman; but this much is necessary to the comprehension of him as a teacher, that his whole theory of education, as of life, rested upon Christianity. We shall see it hereafter.

Another point of view is equally necessary. Arnold took to Laleham his mother, his sister, and his aunt; the next year he brought his wife thither, and children soon crowned the new home with completeness and with joy. It would never do to study such a teacher as Arnold was, without appreciating the domestic influences which contributed so largely to his cheerfulness, his tenderness, and his devotedness. We regret that we can not linger over them.

His Laleham life, upon which he entered at the age of twenty-four,

lasted nine years, a period of incalculable importance to him. Steadily working his way out of narrow inlets into broader and deeper waters, he was at once fulfilling the promises of his youth and preparing for the achievements of maturer years. We shall not attempt to set forth his expanding energies in their completeness. He was the theologian and the historian, the public-spirited citizen as well as the retired teacher; and if, in pursuance of our present purpose, we devote ourselves to a single aspect of the man, it must not be in forgetfulness of his other interests or his other powers. The caution is hardly necessary. If Arnold proves great as a teacher, even at Laleham, the implication is inevitable that he was great in other ways likewise. The great teacher, as we shall remark hereafter, is never merely the teacher and nothing more.

Perhaps the most striking point about his work as a private tutor, was that with which he may be said to have started, in relation to the reception of his pupils. Those who have ever engaged in similar labors can bear witness to the fact that a large proportion of the pupils offered them are below the average, intellectually or morally, or both. It is rare, however, that this is acted upon as it should be; most instructors accepting every offer made them, at least until their numbers are full and overflowing. Arnold knew better, and did better. He would decline a boy, if there was no prospect of doing any thing with him; and, if he detected such a character amongst his pupils, he would dismiss him as soon as improvement seemed out of the question. Nay, while a boy of the sort was with him, Arnold would refuse new pupils, for fear of exposing them to the influences of bad companionship.

It was moral, not intellectual inferiority, to which Arnold was so sensitive. "You could scarcely conceive," he writes at one time, "the rare instances of ignorance that I have met with amongst them, [his pupils.] One had no notion of what was meant by an angle; another could not tell how many gospels there are, nor could he, after due deliberation, recollect any other names than Matthew, Mark, and Luke; and a third holds the first concord in utter contempt, and makes the infinitive mood supply the place of the principal verb in the sentence, without the least suspicion of any impropriety. My labor, therefore, is more irksome than I have ever known it; but none of my pupils give me any uneasiness on the most serious points, and five of them staid the Sacrament when it was last administered. I ought constantly to impress upon my mind how light an evil is the greatest ignorance or dullness when compared with habits of profligacy, or even of wilful irregularity and riotousness." "They are an awful

charge," he writes again, "and I find my comfort depends more and more on their good and bad conduct." In a word, it was the determination to make his instruction Christian, and his pupils Christian, that animated Arnold as a teacher in early as in later years.

This was very far from making him a stern instructor. On the contrary, he was full of considerateness and companionableness with his boys, sharing in their leisure as well as their study hours, and entering into their amusements with the same earnestness in which he led their labors. "My pupils," he says, "all come up into the drawing-room a little before tea, and stay for some time, some reading, others talking, playing chess or backgammon, looking at pictures, &c." It was not only in the evening that the pupils and their master were together; they shared almost alike in the out-of-door sports of the day,—the vigorous exercises to which the men as well as the boys of England are not ashamed to be faithful. Would that they entered into the training of the American, that the young and the old amongst us were learning the lessons of the cricket-match, or of the pull upon the river,—lessons as full of value to the mind as to the body; without which, indeed, there is no complete development of the man.

One of Arnold's pupils gives us a sketch of the work at Laleham. He wrote it eighteen years after he had left the place; but there is a freshness in it beyond any thing that we can hope to give to words of our own.

The most remarkable thing which struck me at once on joining the Laleham circle was the wonderful healthiness of tone and feeling which prevailed in it. Every thing about me I immediately found to be most real; it was a place where a new comer at once felt that a great and earnest work was going forward. Dr. Arnold's great power as a private-tutor resided in this, that he gave such an intense earnestness to life. Every pupil was made to feel that there was a work for him to do; that his happiness as well as his duty lay in doing that work well. Hence, an indescribable zest was communicated to a young man's feeling about life; a strange joy came over him on discovering that he had the means of being useful, and thus of being happy; and a deep respect and ardent attachment sprang up toward him who had taught him thus to value life and his own self, and his work and mission in this world. All this was founded on the breadth and comprehensiveness of Arnold's character, as well as its striking truth and reality; on the unfeigned regard he had for work of all kinds, and the sense he had of its value, both for the complex aggregate of society and the growth and perfection of the individual. Thus pupils of the most different natures were keenly stimulated; none felt that he was left out, or that, because he was not endowed with large powers of mind, there was no sphere open to him in the honorable pursuit of usefulness. This wonderful power of making all his pupils respect themselves, and of awakening in them the consciousness of the duties that God had assigned to them personally, and of the consequent reward each should have of his labors, was one of Arnold's most characteristic features as a trainer of youth; he possessed it eminently at Rugby; but, if I may trust my own vivid recollections, he had it quite as remarkably at Laleham. His hold over all his pupils I know perfectly astonished me. It was not so much an enthusiastic admiration for his genius, or learning, or eloquence which stirred within them; it was a sympathetic thrill, caught from a spirit that was earnestly at work in the world; whose work was healthy,

sustained and constantly carried forward in the fear of God; a work that was founded on a deep sense of its duty and its value; and was coupled with such a true humility, such an unaffected simplicity, that others could not help being invigorated by the same feeling, and with the belief that they too in their measure could go and do likewise.

In all this there was no excitement, no predilection for one class of work above another; no enthusiasm for any one-sided object; but an humble, profound, and most religious consciousness that work is the appointed calling of man on earth, the end for which his various faculties were given, the element in which his nature is ordained to develop itself, and in which his progressive advance toward heaven is to lie. Hence, each pupil felt assured of Arnold's sympathy in his own particular growth and character of talent; in striving to cultivate his own gifts, in whatever direction they might lead him, he infallibly found Arnold not only approving, but positively and sincerely valuing for themselves the results he had arrived at; and that approbation and esteem gave a dignity and a worth both to himself and his labor.

His humility was very deeply seated; his respect for all knowledge sincere. A strange feeling passed over the pupil's mind when he found great, and often undue, credit given him for knowledge of which his tutor was ignorant. But this generated no conceit; the example before his eyes daily reminded him that it was only as a means of usefulness, as an improvement of talents for his own good and that of others, that knowledge was valued. He could not find comfort, in the presence of such reality, in any shallow knowledge.

There was then, as afterward, great simplicity in his religious character. It was no isolated part of his nature,—it was a bright and genial light shining on every branch of his life. He took very great pains with the divinity lessons of his pupils; and his lectures were admirable, and, I distinctly remember, very highly prized for their depth and originality. Neither generally in ordinary conversation, nor in his walks with his pupils, was his style of speaking directly or mainly religious; but he was ever very ready to discuss any religious question; whilst the depth and truth of his nature, and the earnestness of his religious convictions and feelings, were ever bursting forth, so as to make it strongly felt that his life, both outward and inward, was rooted in God.

In the details of daily business, the quantity of time that he devoted to his pupils was very remarkable. Lessons began at seven, and, with the interval of breakfast, lasted till nearly three; then he would walk with his pupils, and dine at half-past five. At seven he usually had some lessons on hand; and it was only when we were gathered up in the drawing-room after tea, amidst young men on all sides of him, that he would commence work for himself, in writing his sermons or Roman history.

Who, that ever had the happiness of being at Laleham, does not remember the lightness and joyousness of heart with which he would romp and play in the garden, or plunge with a boy's delight into the Thames; or the merry fun with which he would battle with spears with his pupils? Which of them does not recollect how the tutor entered into his amusements with scarcely less glee than himself?—*Life and Correspondence, American Edition*, pp. 35-37.

Touching the work of a private tutor, Arnold wrote after leaving it:—

I know it has a bad name, but my wife and I always happened to be fond of it, and, if I were to leave Rugby for no demerit of my own, I would take to it again with all the pleasure in life. I enjoyed, and do enjoy, the society of youths of seventeen or eighteen, for they are all alive in limbs and spirits at least, if not in mind, while in older persons the body and spirits often become lazy and languid without the mind gaining any vigor to compensate for it. Do not take your work as a dose, and I do not think you will find it nauseous. I am sure you will not, if your wife does not, and if she is a sensible woman she will not either if you do not. The misery of private tuition seems to me to consist in this, that men enter upon it as a means to some further end; are always impatient for the time when they may lay it aside; whereas, if you enter upon it heartily as your life's business, as a man enters upon any other profession, you are not then in danger of grudging every hour you give to it, and thinking of how much privacy

and how much society it is robbing you; but you take to it as a matter of course, making it your material occupation, and devote your time to it, and then you find that it is in itself full of interest, and keeps life's current fresh and wholesome by bringing you in such perpetual contact with all the spring of youthful liveliness. I should say, have your pupils a good deal with you, and be as familiar with them as you possibly can. I did this continually more and more before I left Laleham, going to bathe with them, leaping and all other gymnastic exercises within my capacity, and sometimes sailing or rowing with them. They I believe always liked it, and I enjoyed it myself like a boy, and found myself constantly the better for it.—*Life and Correspondence*, p. 33.

The labor at Laleham had not been without glimpses of a larger sphere. Arnold had but begun upon it, when a mastership in one of the public schools was proposed to him, but he declined coming forward. Years later, he actually offered himself as a candidate for a historical professorship at the London University. But his destined battle-field lay elsewhere. The ninth year at Laleham was passing, when Arnold became a candidate for the head-mastership of Rugby school.

He assumed no arrogant position. "Of its being a great deal more lucrative," he wrote, "than my present employment, I have no doubt; nor of its being in itself a situation of more extensive usefulness; but I do doubt whether it would be so in my hands, and how far I am fitted for the place of head-master of a large school." A month after, he was more confident. "I feel as if I could set to work very heartily; and, with God's blessing, I should like to try whether my notions of Christian education are really impracticable,—whether our system of public schools has not in it some noble elements which, under the blessing of the Spirit of all holiness and wisdom, might produce fruit even to life eternal." From this elevation of feeling he did not fall while the election was pending, nor after it was decided in his favor. "For the labor I care nothing," he writes to a friend who had congratulated him on his success, "if God gives me health and strength, as He has for the last eight years. But whether I shall be able to make the school what I wish to make it,—I do not mean wholly or perfectly, but in some degree,—that is, an instrument of God's glory, and of the everlasting good of those who come to it,—that, indeed, is an awful anxiety." "I would hope," he says to another friend, "to have the prayers of my friends, together with my own, for a supply of that true wisdom which is required for such a business. To be sure, how small in comparison is the importance of my teaching the boys to read Greek, and how light would be a schoolmaster's duty, if that were all of it." As weeks pass, and the time for repairing to his post draws nearer, the work before him grows in solemnity. "With regard," he writes, "to reforms at Rugby, give me credit, I must beg of you, for a most sincere desire

to make it a place of Christian education. At the same time, my object will be, if possible, to form Christian men, for Christian boys I can scarcely hope to make; I mean that, from the natural imperfect state of boyhood, they are not susceptible of Christian principles in their full development upon their practice, and I suspect that a low standard of morals in many respects must be tolerated amongst them, as it was on a larger scale in what I consider the boyhood of the human race. But I believe that a great deal may be done, and I should be most unwilling to undertake the business, if I did not trust that much might be done." "You know," he says to another correspondent, as if in deprecation of exaggerated expectations from his new labors, "you know that I never ran down public schools in the lump, but grieved that their exceeding capabilities were not turned to better account; and, if I find myself unable in time to mend what I consider faulty in them, it will at any rate be a practical lesson to teach me to judge charitably of others, who do not reform public institutions as much as is desirable." Thus strengthened by humility as well as by zeal, Arnold prepared himself for the responsibilities of the future.

Pause upon the expressions of the preceding paragraph; review them, group them, and take the sum of them, as they came from Arnold himself. Should we doubt, if we knew no more of him, that he had proposed what few teachers propose, and accomplished what few teachers accomplish? Is he not, as he stands out in bold relief through those words of his own,—is he not, in almost every point of view, an example to men in his position, appointed to places of eminence and of care? He does not gird himself for his duties as if he had nothing more to do than his predecessors had wrought; nor does he talk of reforms that he is to achieve without respect for the works of those before him. The true reformer appears in him, recognizing that there is something to reform, something, therefore, for which to honor the past, as well as something to change in serving the present and the future. Nor is this all. The eyes of the reformer are upon a lofty object. It is not to agitate, not to reproach, not to destroy, that he is arming himself; but to purify and to elevate, in love of God and in love of man. Look upon him, ye who are called to great charges, and learn of him. Look upon him, teachers,—whose charges are greater than yours?—and, if you can not find a work like his to do, or a spirit like his to do it in, let it alone; be true enough to let it altogether alone.

The foundation of Rugby school was laid in the will of Lawrence Sheriff, "grocer," "servant to the Lady Elizabeth, and sworn unto her Grace," in the year 1567. A second instrument directed the trustees

under the will "to cause to be builded a fayre and convenient schoole house," whereof the master is to be "an honest, discreete, and learned man, being a master of art." It was not until nearly a century later, (1653,) that the bequests of the founder were secured to the school in such wise as to complete its establishment. Thenceforward, the institution grew apace; its members increased, its funds multiplied, until, at the time of Arnold's connection with it, (1828,) it was one of the most distinguished public schools in England.

Arnold holds the following language in one of his sermons:—

There is, or there ought to be, something very ennobling in being connected with an establishment at once ancient and magnificent, where all about us, and all the associations belonging to the objects around us, should be great, splendid, and elevating. What an individual ought and often does derive from the feeling that he is born of an old and illustrious race, from being familiar from his childhood with the walls and trees, which speak of the past no less than of the present, and make both full of images of greatness; this, in an inferior degree, belongs to every member of an ancient and celebrated place of education. In this respect every one of us has a responsibility imposed upon him, which I wish that we more considered.—*Life and Correspondence*, p. 74.

But to obtain a more definite idea of the school, we will take an account from the pen of Arnold, in an article for the *Quarterly Journal of Education*, in 1834.

Rugby school was originally a simple grammar school, designed for the benefit of the town of Rugby and its neighborhood. Any person who has resided for the space of two years in the town of Rugby, or at any place in the county of Warwick within ten miles of it, or even in the adjacent counties of Leicester and Northampton to the distance of five miles from it, may send his sons to be educated at the school, without paying any thing whatever for their instruction. But if a parent lives out of the town of Rugby, his son must then lodge at one of the regular boarding-houses of the school; in which case, the expenses of his board are the same as those incurred by a boy not on the foundation.

Boys placed at the school in this manner are called foundationers, and their number is not limited. In addition to these, there are 260 boys, not on the foundation; and this number is not allowed to be exceeded.

The number of masters is ten, consisting of a head-master and nine assistants. The boys are divided into nine, or practically into ten classes, succeeding each other in the following order, beginning from the lowest: first form, second form, third form, lower remove, fourth form, lower fifth, fifth and sixth. It should be observed, to account for the anomalies of this nomenclature, that the name of sixth form has been long associated with the idea of the highest class in all the great public schools of England; and, therefore, when more than six forms are wanted they are designated by other names, in order to secure the magic name of sixth to the highest form in the school. In this the practice of our schools is not without a very famous precedent; for the Roman augurs, we are told, would not allow Tarquinius Priscus to exceed the ancient and sacred number of three, in the centuries of Equites; but there was no objection made to his doubling the number of them in each century, and making in each an upper and a lower division, which were practically as distinct as two centuries. There is no more wisdom in disturbing an old association for no real benefit, than in sparing it when it stands in the way of any substantial advantage.

Into these ten classes the boys are distributed in a threefold division, according to their proficiency in classical literature, in arithmetic and mathematics, and in French. There is an exception made, however, in favor of the sixth form, which consists in all the three divisions of exactly the same individuals. All the rest of the boys are classed in each of the divisions without any reference to their rank in the other two; and thus it sometimes happens that a boy is in the fifth form in

the mathematical division, while he is only in the third or fourth in the classical; or, on the other hand, that he is in a very low form in the French division, while he is in a high one in the classical and mathematical. The masters also have different forms in the three different divisions. The masters of the higher classical forms may teach the lower forms in mathematics or French; and the masters of the higher forms in either of those two departments may have the care of the lower forms in the classical arrangement. Each half year is divided into two equal periods, called language time and history time. The books read in these two periods vary in several instances,—the poets and orators being read principally during the language time, and history and geography being chiefly studied during the history time. This will be more clearly seen from the following table (see page 554) of the general work of the school for a whole year.

Every year, immediately before the Christmas holidays, there is a general examination of the whole school in the work that has been done during the preceding half-year. A class-paper is printed containing the names of those boys who distinguish themselves; and in order to gain a high place on this paper, it is usual for the boys to read some book in one or more of their several branches of study, in addition to what they have read with the masters in school. In this manner they have an opportunity of reading any work to which their peculiar taste may lead them, and of rendering it available to their distinction in the school.

There are exercises in composition, in Greek and Latin prose, Greek and Latin verse, and English prose, as in other large classical schools. In the subjects given for original composition in the higher forms, there is a considerable variety. Historical descriptions of any remarkable events, geographical descriptions of countries, imaginary speeches and letters, supposed to be spoken or written on some great question or under some memorable circumstances; etymological accounts of words in different languages, and criticisms on different books, are found to offer an advantageous variety to the essays on moral subjects to which boys' prose composition has sometimes been confined.

Three exhibitors are elected every year by the trustees of the school, on the report of two examiners appointed respectively by the vice-chancellors of Oxford and Cambridge. These exhibitions are of the value of £60 a year, and may be held for seven years at any college at either university, provided the exhibitor continues to reside at college so long; for they are vacated immediately by non-residence.

One scholar is also elected every year by the masters, after an examination held by themselves. The scholarship is of the value of £25 a year, and is confined to boys under fourteen and a half at the time of their election. It is tenable for six years, if the boy who holds it remains so long at Rugby. But as the funds for these scholarships arise only from the subscriptions of individuals, they are not to be considered as forming necessarily a permanent part of the school foundation.—*Miscellaneous Works*, pp. 341–48.

The foregoing description, written six years after Arnold became headmaster, and eight years before his death, represents the school in a transition state,—his reforms begun but not completed. "You need not fear my reforming furiously," he wrote to one of his nearest friends, at the very time he was entering upon his charge, "there, I think I can assure you; but of my success in introducing a religious principle into education, I must be doubtful; it is my most earnest wish, and I pray God that it may be my constant labor and prayer; but to do this would be to succeed beyond all my hopes; it would be a happiness so great, that I think the world could yield me nothing comparable to it. To do it, however imperfectly, would far more than repay twenty years of labor and anxiety." No purpose of reform could be loftier; none, therefore, could be at once more trying and more sustaining. Arnold appreciated all the difficulty of his undertaking.

TABLE.—Course of Study in Rugby Grammar School, under Dr. Arnold.

	CLASSICS.				MATHEMATICS.	FRENCH.
	Language.	Scripture.	History.			
1st Form.	Latin Grammar. Latin Delectus.	Church catech. New Test. history, abridged.	<i>Markham's</i> England, vol. 1.	Tables; four rules; simple and compound Reduction.	<i>Hamel's</i> Exercises, to auxiliary verb.	
2d Form.	Latin Grammar. Latin Delectus. Eutropius.	St. Luke. Genesis.	<i>Markham's</i> England, vol. 2.	Review of 1st Form. Rule of three; practice.	<i>Hamel's</i> Exercises, to auxiliary verb; the conjugations; <i>Gaultier's</i> Geography.	
3d Form.	<i>Matthiæ's</i> abridged Greek gram.; <i>Valpy's</i> Gr. exercises; do., do. delectus; Florilegium; trans. into Latin.	Exodus, Numbers, Judges, St. Matthew, Samuel.	Eutropius; Physical Geography, (of Soc. for Diff. of Useful Knowledge.)	Rule of three; practice; vulgar fractions; interest.	<i>Hamel's</i> Exercises, part I, continued; irregular verbs. Elizabeth, ou les exiles en Sibirie.	
Lower Remove.	Gr. gram.; <i>Valpy's</i> ex.; Greek iambs; easy iambs of tragedies; Virgil, Ecl., Cic. De Senect.	St. Matthew, in Gr. Testament. Acts, English.	Justin, parts; Xenophon, Anabasis, parts; <i>Markham's</i> France, to Philip of Valois.	Vulgar fractions; interest; decimal fractions; square root.	<i>Hamel</i> , continued and reviewed. <i>Jussieu</i> , Jardin des Plantes.	
4th Form.	Æschyl., Prometheus. Virg., Æn., 2 & 3. Cic. de Amicit.	Acts, Greek. St. John, Eng. Old Testament History.	Xenophon, Hellenics, part; Florus, parts; History Greece, (Soc. for D. of U. K.) <i>Markham's</i> France, rest; Italian and German Geography, details.	Decim., invol., evol., Algebraic add., subtr., mult., & div.; binom. theor., Euclid, I, prop. 1—XV.	<i>Hamel</i> , 2d part; La Fontaine's fables.	
Upper Remove.	Sophocles, Philoct., Æschylus, Eumen., Iliad, 1 & 2, Æneid, 4 & 5; Horace, parts; Cic. Epist., parts.	St. John, Gr.; Deut. & Peter, Eng.; Psalms, select.	Parts of Arrian, and of Paterec, bk. 2. Sir J. Mackintosh's Eng.	Equation of payment, discount, simple equations. Euclid, rest of Book I.	Translations, English into French; La Font. fables.	
Lower Fifth.	Æschyl., Sept., cont. Theb.; Sopho., CEd., Tyr.; Iliad, 3 & 4; Æn., 6 & 7; Cicero's Epist., parts; Hor., parts.	St. John; Tim. & Titus; Bible Hist., 1 Kings to Nehemiah.	Parts of Arrian, and Herodotus, parts; Livy, 2 & 3, parts; <i>Hallam</i> , Middle Ages; France, Spain, Greeks, Saracens. European geography, physical and political.	Exchange, alligation, simple equation with two unknown quantities, problems; Euclid, Book III.	Syntax, idioms. Play of Molière; into Eng. and then back into French.	
5th Form.	Æschyl., Agam., Iliad, 5, 6; Odys., 9; Demosthenes, Sept. in Aphob., 1; Æn., 8; Horace, parts; Cic. in Verr.	Corinthians 1 & 2. Paley, Hor. Paulin.	Parts of Herodotus, Thucydides, & Livy; <i>Hallam</i> , Middle Ages, State of Society.	Quadratic equations, Trigonometry, Euclid, through Book VI.	Pascal, Pensées.— Translations, English into French.	
6th Form.	Parts of Virgil and Homer; one or more Greek tragedies, and of orations of Demosth.; Cic. in Verr.; part of Aristot. Eth.	One Prophet, Septuagint version. Parts of New Test.	Parts of Thucydides, Arrian, Tacitus, Russell's Modern Europe.	Euclid, 3—6; simple and quadratic equations, plain trigonometry, conics.	Parts of Guizot,— Revol. de l'Angleterre; and of Mignet, Revol. Franc.	

The general school hours throughout the week are as follows:—

Monday, Wednesday, and Friday.—First lesson, seven to eight; second lesson, quarter past nine to eleven; third and fourth lessons, quarter past two to five.

Tuesday and Thursday.—First and second lessons as on Monday. Eleven to one, composition. Half holiday.

Saturday.—As on Tuesday and Thursday, except that there is no composition from eleven and one.

There are various other lessons, at additional hours, for different classes.

“I came to Rugby,” was his remark, “full of plans for school reform ; but I soon found that the reform of a public school was a much more difficult thing than I had imagined.” But there was no shrinking ; on the contrary, the earnestness and the rapidity with which the head-master pressed on, were such as to excite apprehensions on the part even of his friends, while they who doubted or opposed his course, broke out into objections and menaces sufficient to shake the resolution of a less resolute man. Arnold was strong, however, both in the principles which led him to reform and in those which guided him in reform. There was nothing indiscriminate or turbulent in his movements. “Another system,” he said in reference to the constitution of the school, “may be better in itself, but I am placed in this system, and am bound to try what I can make of it.” So, without attempting to overthrow, Arnold continued his efforts to repair and to uprear, with a degree of considerateness and of prudence remarkable in one so ardent and so determined. “That’s the way,” wrote one of his pupils, “that all the doctor’s reforms have been carried out when he has been left to himself,—quietly and naturally ; putting a good thing in the place of a bad, and letting the bad die out ; no wavering and no hurry,—the best thing that could be done for the time being, and patience for the rest.”

Instead of singling out one reform after another, we shall attempt a more connected delineation of him who wrought them all. It would be difficult, indeed, to say what there was in the school which Arnold did not reform,—if not by outward change, at least by the inward spirit infused into the whole body of which he was the head. As a matter of fact, therefore, as well as of expression, the portrait of Arnold should be drawn, not simply as that of the reformer, but rather as that of the teacher and the administrator,—the head-master of Rugby school.

In his relation to the trustees of the school, Arnold at once took the position that he must be independent of all interference from them. It was his duty, he said, “not only to himself, but to the master of every foundation school in England,” to resist every intrusion into his own province ; he, and not the trustees, was the master ; he, and not they, must do the master’s work and hold the master’s authority. He had no mind, on the other hand, to shake off any just control. To the trustees, in their proper places, he looked with a respect and a submission that could not have been greater ; nor could the intercourse between him and them have been, as a general rule, more agreeable or more amicable than it was. The point with him was simply this,—that if he was to possess the confidence of the trustees

so far as to be placed or to be retained in the mastership, he must possess it in such measure as to be his own master as well as the master of the school. Fortunately, the constitution of Rugby school favored the independence of the head-master.

There was the same sort of claim on Arnold's part to independence in relation to the parents of his pupils. He bore with no meddling; he deferred to no pretense from them; their putting their boys under him was not putting themselves above him. Yet no teacher was ever readier to recognize his true responsibility to the parents of his scholars. "It is a most touching thing to me," he said, "to receive a new fellow from his father, when I think what an influence there is in this place for evil as well as for good. * * * If ever I could receive a new boy from his father without emotion, I should think it was high time to be off." Nor did the feeling wear away with the residence of the pupil. The letters from Arnold to the parents of those who were with him are amongst the most convincing proofs of his constant watchfulness and constant faithfulness as a teacher.

To exhibit the relations between Arnold and his pupils will require fuller treatment. His idea of a teacher embraced, as we have seen, a variety of qualities, on which he was as intent in practice as in theory. "When I find that I can not run up the library stairs, I shall know that it is time for me to go," he said in reference to that freshness of frame which he deemed essential to freshness of mind, or at any rate to the freshness of mind required in the teacher. Exactly the same principle appears in his pursuit of fresh studies and his cultivation of fresh powers. "I do not judge of them," he said of his private pupils, "as I should if I were not taking pains to improve my own mind." Nor was the most industrious of the Rugby boys half so hard a student as his master. "The qualifications which I deem essential to the due performance of a master's duties here," wrote Arnold to a sub-master on his appointment, "may in brief be expressed as the spirit of a Christian and a gentleman; that a man should enter upon his business not *ἐκ παρέρργου*, (as a subordinate work,) but as a substantive and most important duty; * * * that he should be public-spirited, liberal, and entering heartily into the interest, honor and general respectability and distinction of the society which he has joined; and that he should have sufficient vigor of mind and thirst for knowledge, to persist in adding to his own stores without neglecting the full improvement of those whom he is teaching." All that Arnold thus proposed for the teacher, he proposed, with the necessary qualifications, for the pupil. He was quite as anxious about the

physical as he was about the intellectual condition of his boys; "and whenever," says one of them who became his biographer, "he saw they were reading too much, he always remonstrated with them, relaxed their work, and if they were in the upper part of the school, would invite them to his house in the half-year or the holidays to refresh them." As for the minds of the boys, he had but one wish,—that they should be at work. Their cleverness was altogether an inferior consideration; even the amount of their attainments was comparatively unimportant, so that they were doing what they could. "If there be one thing on earth which is truly admirable," he said, "it is to see God's wisdom blessing an inferiority of natural powers, where they have been honestly, truly, and zealously cultivated." "Its great business," he wrote of education, "as far as regards the intellect, is to inspire it with a desire of knowledge, and to furnish it with power to obtain and to profit by what it seeks for;" words in which we may trace the features of the pupil who would have satisfied Arnold,—the boy who wished and who strove to learn. But far above all intellectual, as above all physical development, was the moral excellence after which he would have teachers and pupils alike exerting themselves. "What we must look for here," he said to the boys, "is, 1st, religious and moral principles; 2dly, gentlemanly conduct; 3dly, intellectual ability." "It must be," he declared at a time when the school was rife with disorder, "it must be a school of Christian gentlemen." "I hold all the scholarship that man ever had," he wrote to a friend, "to be infinitely worthless in comparison with even a very humble degree of spiritual advancement." To this point—the religious element of Arnold's system—we shall revert; it has been alluded to in this place only to complete the outlines of the teacher and the pupil after Arnold's design.

We have no wish to represent Arnold as faultless. The appreciation of his strong points is our object; and we pass by the detection of his weak ones. He had his failings both as a man and as a teacher; and the ideal of the relations between him and his pupils was seldom entirely attained. But we must refer to his biography or to his educational works for an account of his errors; our few pages are hardly ample enough to describe his virtues.

"What a sight it is," writes one of the Rugby men,—"the doctor as a ruler." It was the first and the chief aspect in which he appeared to his pupils. He was not merely the master but the headmaster, the presiding spirit of the establishment, the source of law and authority, of honor and dishonor. It was often said of Arnold that he was born to be a statesman. Of all the signs to this effect, above

his writings, above his exertions as a citizen, his administration of Rugby school may be safely set down as the most remarkable. The school was a state on a small scale; its magistrates the masters, its citizens the three hundred pupils; each with his own tastes, his own powers, his own circumstances; not easily managed by himself, and much less easily directed in the midst of his two hundred and ninety-nine associates. No state was ever better ruled on the whole; none was more carefully guarded from evil and shame; none more consistently guided to nobleness and truth.

Higher still was the position of Arnold as the chaplain of the school. When this office fell vacant, a year or two after he joined the school, he asked it from the trustees on the ground that, as headmaster, he was "the real and proper religious instructor of the boys." Pray let it be remarked before we go further, that he did not make his religious instructions depend upon his being in the chaplaincy. He had begun to preach to the boys, as well as to give a religious tone to his daily teachings, from the very first year of his mastership; and what he began, he continued. Nay more; he would not make his instructions in religious matters depend even on his being a clergyman. Had he been a layman, he would not have preached as often, but he certainly would have addressed the boys on their Christian duties from time to time; while the religious atmosphere of his own recitation-room would have been quite as constant and quite as effective. "The business of a schoolmaster," was a frequent expression with him, "no less than that of a parish minister, is the cure of souls." In this spirit, and not merely in that of a clerical functionary, he assumed the chaplain's office. How well he discharged it, not merely in the chapel, but throughout the school, may be gathered from a pupil's life-like report of his preaching and his influence.

More worthy pens than mine have described that scene. The oak pulpit standing out by itself above the school seats. The tall gallant form, the kindling eye, the voice, now soft as the low notes of a flute, now clear and stirring as the call of the light infantry bugle, of him who stood there Sunday after Sunday, witnessing and pleading for his Lord, the King of righteousness and love and glory, with whose spirit he was filled, and in whose power he spoke. The long lines of young faces rising tier above tier down the whole length of the chapel, from the little boy's who had just left his mother to the young man's who was going out next week into the great world rejoicing in his strength. It was a great and solemn sight, and never more so than at this time of year, when the only lights in the chapel were in the pulpit and at the seats of the præpositors of the week, and the soft twilight stole over the rest of the chapel, deepening into darkness in the high gallery behind the organ.

But what was it after all which seized and held these three hundred boys, dragging them out of themselves, willing or unwilling, for twenty minutes on Sunday afternoons? True, there always were boys scattered up and down the school, who, in heart and head, were worthy to hear and able to carry away the deepest and wisest words then spoken. But these were a minority always,

generally a very small one, often so small a one as to be countable on the fingers of your hand. What was it that moved and held us, the rest of the three hundred reckless childish boys, who feared the doctor with all our hearts, and very little besides in heaven or earth; who thought more of our sets in the school than of the church of Christ, and put the traditions of Rugby and the public opinion of boys in our daily life above the laws of God? We couldn't enter into half that we heard; we hadn't the knowledge of our own hearts or the knowledge of one another, and little enough of the faith, hope, and love needed to that end. But we listened, as all boys in their better moods will listen, (aye, and men too for the matter of that,) to a man who we felt to be with all his heart and soul and strength striving against whatever was mean and unmanly and unrighteous in our little world. It was not the cold clear voice of one giving advice and warning from serene heights, to those who were struggling and sinning below, but the warm living voice of one who was fighting for us and by our sides, and calling on us to help him and ourselves and one another. And so, wearily and little by little, but surely and steadily on the whole, was brought home to the young boy, for the first time, the meaning of his life; that it was no fool's or sluggard's paradise into which he had wandered by chance, but a battle-field, ordained from of old, where there are no spectators, but the youngest must take his side, and the stakes are life and death. And he who roused this consciousness in them, showed them at the same time, by every word he spoke in the pulpit, and by his whole daily life, how that battle was to be fought; and stood there before them their fellow-soldier and the captain of their band. The true sort of captain too for a boys' army, one who had no misgivings and gave no uncertain word of command, and, let who would yield or make truce, would fight the fight out, (so every boy felt,) to the last gasp and the last drop of blood. Other sides of his character might take hold of and influence boys here and there, but it was this thoroughness and undaunted courage which more than any thing else won his way to the hearts of the great mass of those on whom he left his mark, and made them believe first in him, and then in his Master.—*School Days at Rugby*, pp. 154-57.

Let us listen to some of the teachings from that chapel pulpit; they will more than bear out the enthusiasm of the account just given concerning them.

And therefore he who thinks that to provide schools is to provide education, or that to provide schools where the Bible and Catechism are taught is to provide religious education, will, undoubtedly, be disappointed, when he sees the fruit of his work. Be sure that the saving men's souls is no such easy matter; our great enemy is not so easily vanquished. It is not the subscription of some pounds, or hundreds of pounds, nor the building a schoolhouse, nor the appointing a school-master, nor the filling the school with all the children in the parish, which will deliver all those children's souls from death, and mortify in them all the lusts of their evil nature, and foster and perfect all the works of the Spirit of God. Schools can not, as a matter of certainty, do this, but let us see what they can do.

They can give elementary religious instruction. As every child can be taught to read and write, so every child can be taught to say his catechism, can be taught to know the main truths of the gospel, can be taught to say hymns. There is no doubt, I suppose, that schools can certainly compass as much as this, and this is, I think, by no means to be despised. For although we know but too well that the learning this and much more than this, is very far from saving our souls certainly or generally, yet it is no less true that without this we are much worse off, and with this much better off. It is at least giving a man a map of the road, which he is going, which will keep him in the right way if he uses it. The map will not make his limbs stronger, nor his spirits firmer; he may be tired or he may be indolent, and it is of no use to him then. But suppose a man furnished with a very perfect map of a strange country, and that on his day's journey he has wasted many hours by going off his road, or by stopping to eat and to revel, and by and by the evening is coming on, and he knows not where he is, and he would fain make up for his former carelessness, and get to his journey's end before night comes on. The map, which hitherto has been carried uselessly, becomes then his guide and his best friend. So it has been known to be often with religious instruction. Neglected, like the map, while the morning was fair, and we cared

not about our onward journey; when life has darkened, and troubles have come, and a man has indeed wanted light and comfort, then the instruction of his school has been known to flash upon his mind, and more especially what he has learnt in psalms and hymns, which naturally cleave the easiest to the memory. When he would turn he has known where to turn. This has very often happened as the fruit of early religious instruction, when that instruction has been in no way accompanied with education. And therefore, as all our church schools can undoubtedly give to all the elements of religious instruction, as well as teach all to write and read, they deserve, I think, our most earnest support; and it is our part to help according to our best ability in providing every portion of the kingdom, and every one of our countrymen, with the means of certainly obtaining so much of good.

I have said that schools can certainly give religious instruction, but that it is not certain that they will give religious education. I dwell on this distinction for two several reasons: first, because it concerns us all in our own private relations, to be aware of the enormous difference between the two; secondly, because, confounding them together, we either expect schools to educate, which very likely they will not be able to do, and then are unreasonably disappointed; or else, feeling sure that the greater good of education is not certainly to be looked for, we do not enough value the lesser good of instruction which can be given certainly, and thus do not encourage schools so much as we ought. Elementary instruction in religion as in other things, may be certainly given to all who have their common natural faculties; that is, as I said, the catechism and hymns may be made to be learnt by heart, and the great truths of Christ's Gospel may be taught so as to be known and remembered. But even instruction, when we go beyond the elements of learning, can not be given to all certainly; we can not undertake to make every boy, even if we have the whole term of his boyhood and youth given us for the experiment, either a good divine, or a good scholar, or to be a master of any other kind of knowledge. This can not be done, although, as far as instruction is concerned, schools have great means at their command, nor do other things out of school very much interfere with their efficacy. But to give a man a Christian education, is to make him love God as well as know him, to make him have faith in Christ, as well as to have been taught the facts that He died for our sins and rose again; to make him open his heart eagerly to every impulse of the Holy Spirit, as well as to have been taught the fact as it is in the Nicene Creed, that He is the Lord and giver of spiritual life. And will mere lessons do all this,—when the course of life and all examples around, both at home and at school, with a far more mighty teaching, and one to which our natural dispositions far more readily answer, enforce the contrary? And therefore the great work of Christian education is not the direct and certain fruit of building schools and engaging schoolmasters, but something far beyond, to be compassed only by the joint efforts of all the whole church and nation,—by the schoolmaster and the parent, by the schoolfellow at school, and by the brothers and sisters at home, by the clergyman in his calling, by the landlord in his calling, by the farmer and the tradesman, by the laborer and the professional man, and the man of independent income, whether large or small, in theirs, by the queen and her ministers, by the great council of the nation in parliament; by each and all of these laboring to remove temptations to evil, to make good easier and more honored, to confirm faith and holiness in others by their own example; in a word, to make men love and glorify their God and Saviour when they see the blessed fruits of His kingdom even here on earth. And to bring this to ourselves more closely as private persons, let us remember that if we send our children to school, although we give up their instruction to the schoolmaster, yet we can not give up their education. Their education goes on out of school as well as in school, and very often far more vigorously. We shall see this, if we remember again that the great work of education is to make us love what is good, and therefore not only know it, but do it.

I speak of us as a society, as a school, as a Christian school, as a place, that is, to which the sons of Christian parents, and of no other, are sent to receive a Christian education. Such a society is beyond all doubt in its idea or institution a temple of God; God's blessing is upon it, Christ and Christ's Spirit dwell in the midst of it.

It is very fearful to think of the sin and the shame of letting this temple of God be

profaned, of letting it be so overrun with evil that from a house of prayer it should have become a den of thieves. But, is it not also an enkindling and encouraging thought, to dwell on the blessing of not suffering it to be so profaned; of driving out in Christ's power the evil that would most corrupt us; of being indeed a temple of God, wherein his praise should be not only spoken with our lips, but acted in our lives?

I think that this is very encouraging and enkindling to every one who wishes to serve God. But by "encouraging and enkindling," I mean of course, encouraging and enkindling to exertion. It is but folly to say, "How delightful would it be if it were so!" and not rather to say, "This is indeed so glorious and blessed a thing, that I will labor heart and soul that it shall be so."

I well know that such labor becomes us, the older part of our society, most of all, and that our sin is the heaviest of all if we neglect it. But it is no less true that you have your share in the work also, and that more depends upon you than upon us. Nor is your sin light if you neglect it; I mean that every one of you has a duty to perform toward the school, and that over and above the sin of his own particular faults, he incurs a sin, I think even greater, by encouraging faults, or discouraging good in others; and farther still, that he incurs a sin, less I grant than in the last case, but still considerable, by being altogether indifferent to the conduct of others, by doing nothing to discourage evil, nothing to encourage good.

The actual evil which may exist in a school consists, I suppose, first of all in direct sensual wickedness, such as drunkenness and other things forbidden together with drunkenness in the scriptures. It would consist, secondly, in the systematic practice of falsehood,—when lies were told constantly by the great majority, and tolerated by all. Thirdly, it would consist in systematic cruelty, or if cruelty be too strong a word, in the systematic annoyance of the weak and simple, so that a boy's life would be miserable unless he learnt some portion of the coarseness and spirit of persecution which he saw in all around him. Fourthly, it would consist in a spirit of active disobedience,—when all authority was hated, and there was a general pleasure in breaking rules simply because they were rules. Fifthly, it would include a general idleness, when every one did as little as he possibly could, and the whole tone of the school went to cry down any attempt on the part of any one boy or more, to shew anything like diligence or a wish to improve himself. Sixthly, there would be a prevailing spirit of combination in evil and of companionship; by which a boy would regard himself as more bound to his companions in ties of wickedness, than to God or his neighbor in any ties of good;—so that he would labor to conceal from his parents and from all who might check it, the evil state of things around him; considering it far better that evil should exist, than that his companions doing evil should be punished. And this accomplice spirit, this brotherhood of wickedness, is just the opposite of Christian love or charity; for as St. Paul calls charity the bond of perfectness, so this clinging of the evil to one another is the bond of wickedness; it is that without which wickedness would presently fall to pieces and perish, and which preserves it in existence and in vigor.

Let these six things exist together, and the profanation of the temple is complete—it is become a den of thieves. Then whoever passes through such a school may undoubtedly, by God's grace, be afterward a good man, but so far as his school years have any effect on his after life, he must be utterly ruined. An extraordinary strength of constitution, or rather a miracle of God's grace, may possibly have enabled him to breathe an air so pestilential with impunity; but although he may have escaped, thousands have perished, and the air in its own properties is merely deadly.

The sixth evil I left for separate consideration, because it appeared to require a fuller notice. And its very name, if we attend, will make it probable that it does so. I called it the spirit of combination and companionship, whereas the other evils of which I spoke were such things as idleness, falsehood, drunkenness, disobedience; names very different in their character from combination and companionship. They are very different in this, that when we speak of idleness or falsehood we mean things altogether evil, which are plainly and altogether to be avoided and abhorred; but when we speak of combination or companionship, we name things not in their own nature evil, things which have a good sense as well as a bad sense; things, therefore, not plainly and altogether, but only upon con-

sideration and beyond a certain point to be avoided and condemned. Here, therefore, the subject must be gone into more carefully; we must not blame indiscriminately, but opening gently as it were, what lies in a tangled mass before us, we must so learn, if we can, to separate the evil from the good.

What I have called the spirit of companionship, is that feeling by which we are drawn toward our equals, while we are conscious that they and we stand in a certain relation to a common superior. I mean that the feeling of companionship, as I am now taking it, implies that, besides the persons so feeling it, and who are always more or less on an equality with each other, there exists also some superior party, and that his superiority modifies the mutual feeling of the parties on an equality. Thus the feeling of companionship amongst brothers and sisters, supposes that they have all parents also, to whom they stand in another relation, and not in that of companionship; the same feeling amongst the poor supposes that they have also something to do with the rich, the same feeling amongst subjects supposes that they have a government, and if it could exist amongst all mankind toward each other as men, then it would imply the existence of God, and that he interfered in the affairs of mankind. The first element then in this sense of companionship is sympathy, a feeling that we are alike as in many other things, so also in our relation to some other party; that our hopes and fears with respect to this party are in each of us the same. And thus far the feeling is natural and quite blameless, sympathy being a very just cause why we should be drawn together. But then this sympathy is accompanied very often with a total want of sympathy so far as regards our common superior; as we who are each other's companions have with respect to him the same hopes and fears, so we often think that he and we have not the same hopes and fears, or in other words the same interest, in any degree at all; but that his interest is one thing, and ours is the very contrary.

So that while there is a sympathy between us and our companions, there is also between us and our superior the very contrary to sympathy, we conceive ourselves placed toward him in actual opposition.

But if he too could be taken into our bond of sympathy, if we could feel that his interests and ours are also the same, no less than ours and our companions', then the feeling of companionship, if I may so speak, being extended to all our relations, would produce no harm at all, but merely good: it would then, in fact, be no other than the perfection of our nature,—perfect love.

Let companionship expand into communion. You are companions of one another, with many natural sympathies of age, of employment, of place, and of constitution of body and mind. But you are companions of us too, companions in our common work, which is your good, earthly and eternal; you are companions of all God's saints who are engaged in the same warfare; you are companions—high and most presumptuous as the word were in itself, yet God's infinite love has sanctioned it—you are companions of Him who is not ashamed to call us brethren, who bore and bears our nature, who died as we shall all die. Bear all these relationships in mind, and then, as I said, companionship is become communion, the bond of wickedness is become the bond of perfectness, we are one with each other, and with Christ, and with God.—*Sermons; last volume, pp. 55, 57, 58, 66, 67, 68, 74, 75, 76, 77, 82, 83, 90, 91, 92, 93, 94.*

But it was not in preaching alone, as we have said, that Arnold gave religious instruction to his pupils. "No direct instruction," says one of them, "could leave on their minds a livelier image of his disgust at moral evil, than the black cloud of indignation which passed over his face when speaking of the crimes of Napoleon, or of Cæsar, and the dead pause which followed, as if the acts had just been committed in his very presence. No expression of his reverence for a high standard of Christian excellence could have been more striking than the almost involuntary expressions of admiration which broke from him whenever mention was made of St. Louis of France."

So, through all the studies under his direction, there streamed the ray of light from his own lofty faith, breaking in upon the darkest passages of history or of literature, bringing out all the brighter ones, and aiding those who sat beholding, to a faith as lofty and as illumining as that of their master. When he found, one day, that the change from the chamber of a dying pupil to the recitation room was very marked, he announced to his class that he should hereafter begin their lessons with a prayer, this being additional to the prayers for the entire school; his object, as he said, being to make his school work so really religious, that "the transition to it from a death-bed would be slight." It was by these means, even more than by those of the chapel, that his religious reforms were extended, so that his system of education was confessed to be "not based upon religion, but itself religious." From any praises of his system, as he conceived it, he would not have shrunk; he did not regard it as his so much as his Lord and Master's. But from any declaration that the system was carried out in his school, he recoiled at once. "I dread," he would say, "to hear this called a religious school. I know how much there is to be done before it can really be called so." This very consciousness of imperfection proved the greatness of the perfection at which he aimed; and, more than any thing which he did, perhaps, that which he was seen to be endeavoring to do, bore up his pupils to the heights where he was pausing, only to ascend above them.

Comparatively a small number of the boys at Rugby knew Arnold as their every-day teacher. To those of the younger classes he gave no school instruction beyond hearing their lessons at intervals. But his influence was not the less universal; it was felt in the course of instruction as marked and as carried out; his being the selection of the studies, and his the system on which they were pursued. On these topics we must, of course, enlarge.

A reference to the tabular view of studies already given will show the materials of which Arnold made up his course. Foremost amongst them, the great staple of culture, stand the classics. At first disposed to abridge the time usually given to these studies, Arnold was afterwards inclined to enhance rather than diminish their importance. When he entered upon his Rugby duties, a general clamor had arisen against classical instruction, as assuming a place altogether above its merits or its advantages; and his avowed purposes as a reformer, led him to regard himself, as they led others to regard him, in some sort pledged to confine this branch of education to more restricted limits. But as his experience increased, and the resources of the classical department opened more and more beneath his manage-

ment, he not only acknowledged, but applied them with greater appreciation and stronger confidence. "He was the first Englishman," says his pupil and biographer, "who drew attention in our public schools, to the historical, political and philosophical value of philology, and of the ancient writers, as distinguished from the mere verbal criticism and elegant scholarship of the last century." Nor was this all which gave life to classical study in his hands. He entered into the spirit of the great authors of antiquity; if he was reading a historian with his class, he too, was a historian for the time; if they were studying a poet, he showed them by his own expressive earnestness, what it was to share a poet's feeling and a poet's power; whatever, in short, the text-book, it was to the teacher and to all his responsive pupils, the living companionship of the writers, as much so as if the writer were their contemporary and their countryman. "Do'nt you find the repetition of the same lessons irksome?" was a question to which Arnold could honestly reply, "No, there is a constant freshness in them; I find something new in them every time I go over them." Where would be the still prevailing distrust of the classics if they were taught in this way? Who would stay to wrangle about the philology or the mental discipline involved in the study, if it thus comprehended not only all that lived in the past, but all that is yet living in the present?

Let Arnold speak for himself.

It may freely be confessed that the first origin of classical education affords in itself no reasons for its being continued now. When Latin and Greek were almost the only written languages of civilized man, it is manifest that they must have furnished the subjects of all liberal education. The question therefore is wholly changed, since the growth of a complete literature in other languages; since France, and Italy, and Germany, and England, have each produced their philosophers, their poets, and their historians, worthy to be placed on the same level with those of Greece and Rome.

But although there is not the *same* reason now which existed three or four centuries ago for the study of Greek and Roman literature, yet there is another no less substantial. Expel Greek and Latin from your schools, and you confine the views of the existing generation to themselves and their immediate predecessors: you will cut off so many centuries of the world's experience, and place us in the same state as if the human race had first come into existence in the year 1500. For it is nothing to say that a few learned individuals might still study classical literature; the effect produced on the public mind would be no greater than that which has resulted from the labors of our oriental scholars; it would not spread beyond themselves, and men in general after a few generations would know as little of Greece and Rome, as they do actually of China and Hindoostan. But such an ignorance would be incalculably more to be regretted. With the Asiatic mind, we have no nearer connection or sympathy than that which is derived from our common humanity. But the mind of the Greek and of the Roman is in all the essential points of its constitution our own; and not only so, but it is our own mind developed to an extraordinary degree of perfection. Wide as is the difference between us with respect to those physical instruments which minister to our uses or our pleasures; although the Greeks and Romans had no steam-engines, no printing-presses, no mariner's compass, no telescopes, no microscopes, no gunpowder; yet in our moral and po-

litical views, in those matters which most determine human character, there is a perfect resemblance in those respects. Aristotle, and Plato, and Thucydides, and Cicero, and Tacitus, are most untruly called ancient writers; they are virtually our own countrymen and contemporaries, but have the advantage which is enjoyed by intelligent travelers, that their observation has been exercised in a field out of the reach of common men; and that having thus seen in a manner with our eyes what we can not see for ourselves, their conclusions are such as bear upon our own circumstances, while their information has all the charm of novelty, and all the value of a mass of new and pertinent facts, illustrative of the great science of the nature of civilized man.

Now, when it is said, that men in manhood so often throw their Greek and Latin aside, and that this very fact shows the uselessness of their early studies, it is much more true to say that it shows how completely the literature of Greece and Rome would be forgotten, if our system of education did not keep up the knowledge of it. But it by no means shows that system to be useless, unless it followed that when a man laid aside his Greek and Latin books, he forgot also all that he had ever gained from them. This, however, is so far from being the case, that even where the results of a classical education are least tangible, and least appreciated even by the individual himself, still the mind often retains much of the effect of its early studies in the general liberality of its tastes and comparative comprehensiveness of its views and notions.

All this supposes, indeed, that classical instruction should be sensibly conducted; it requires that a classical teacher should be fully acquainted with modern history and modern literature, no less than with those of Greece and Rome. What is, or perhaps what used to be, called a mere scholar, can not possibly communicate to his pupils the main advantages of a classical education.

The knowledge of the past is valuable, because without it our knowledge of the present and the future must be scanty; but if the knowledge of the past be confined wholly to itself, if, instead of being made to bear upon things around us, it be totally isolated from them, and so disguised by vagueness and misapprehension as to appear incapable of illustrating them, then indeed it becomes little better than laborious trifling, and they who declaim against it may be fully forgiven.—*Miscellaneous Works*, pp. 348-350.

The studies which Arnold introduced or developed at Rugby, were not numerous. The table shows how prominent a place was assigned to Scriptural instruction, including exegesis and church history; besides which we find history, modern as well as ancient, geography, mathematics, and the modern languages, of which not only French, but German, was taught. Arnold laid no great stress upon any of these studies but the first, the Scriptural; not that he neglected or undervalued any of them, but that he was not disposed to agree with those who thought the introduction of such a branch as modern history, for example, to be in itself a proof of progress. The "favorite notion of filling boys with useful information" was no favorite with him. "It is not so much an object," he said, "to give boys 'useful information,' as to facilitate their gaining it hereafter for themselves, and to enable them to turn it to account when gained." Modern history, therefore, was not to be made much of at the expense of ancient history, or of any other study which was equally essential to the end in view. "I assume it certainly," he wrote in relation to the study of modern languages, "as the foundation of all my view of the case, that boys at a public school will never learn to speak or pronounce French well under any circumstances. But to most of our boys, to

read it will be of far more use than to speak it; and if they learn it grammatically as a dead language, I am sure that whenever they have any occasion to speak it, as in going abroad, for instance, they will be able to do it very rapidly." Whether we agree or not with all these statements, they show the consistency of him who made them.

The sixth form of the school was that which Arnold himself instructed. He taught them on the principles which he maintained for the whole school. There was no effort to cram them with facts or with rules, no long-winded discourse of any kind or upon any subject. If he was lecturing, he spoke to the point. If he was hearing a recitation, he said as little as possible, teaching the boys by questions rather than by explanations, and so keeping them at work for themselves. In neither case, however, was there any thing like an appearance of isolation or of indifference on his part; his pupils saw that he was working with them, and that what he would not do was simply working for them, while they sat idle. His great aim was to develop the intellect of every boy, to teach each one exactly in such a way as to make him independent so far as was desirable. "You come here not to read, but to learn how to read," was one of his sayings expressive of his leading principle of instruction. "I call that the best theme," he observed, "which shows that the boy has read and thought for himself," and to enable every one thus to read and think for himself was always the grand object. "My own lessons with the sixth form," he writes to an intimate friend, "are directed now, to the best of my power, to the furnishing rules or formulæ for them to work with, viz.: rules to be observed in translation, principles of taste as to the choice of English words, as to the keeping or varying idioms and metaphors, &c.; or in history, rules of evidence or general forms, or for the dissection of campaigns, or the estimating the importance of wars, revolutions, &c. This, together with the opening, as it were, the sources of knowledge, by telling them where they can find such and such things, and giving them a notion of criticism, not to swallow things whole, as the scholars of an earlier period too often did,—this is what I am laboring at, much more than giving information."

We gladly give way to his biographer to complete the portrait of Arnold as the teacher of the sixth form.

It has been attempted hitherto to represent his principles of education as distinct from himself, but in proportion as we approach his individual teaching, this becomes impracticable; the system is lost in the man; the recollections of the head-master of Rugby are inseparable from the recollections of the personal guide and friend of his scholars. They will at once recall those little traits which, however minute in themselves, will to them suggest a lively image of his whole

manner. They will remember the glance, with which he looked round in the few moments of silence before the lesson began, and which seemed to speak his sense of his own position and of theirs also, as the heads of a great school; the attitude in which he stood, turning over the pages of Facciolati's Lexicon, or Pole's Synopsis, with his eye fixed upon the boy who was pausing to give an answer; the well known changes and of his voice and manner, so faithfully representing the feeling within. They will recollect the pleased look and the cheerful "Thank you," which followed upon a successful answer or translation; the fall of his countenance with its deepening severity, the stern elevation of the eyebrows, the sudden "Sit down," which followed upon the reverse; the courtesy and almost deference to the boys, as to his equals in society, so long as there was nothing to disturb the friendliness of their relation; the startling earnestness with which he would check in a moment the slightest approach to levity or impertinence; the confidence with which he addressed them in his half-yearly exhortations; the expressions of delight with which, when they had been doing well, he would say that it was a constant pleasure to him to come into the library. * *

The interest in their work, which this method excited in the boys, was considerably enhanced by the respect which, even without regard to his general character, was inspired by the qualities brought out prominently in the ordinary course of lessons. They were conscious of (what was indeed implied in his method itself) the absence of display, which made it clear that what he said was to instruct them, not to exhibit his own powers; they could not but be struck by his never concealing difficulties and always confessing ignorance; acknowledging mistakes in his edition of Thucydides, and on Latin verses, mathematics or foreign languages, appealing for help or information to boys whom he thought better qualified than himself to give it. Even as an example, it was not without its use, to witness daily the power of combination and concentration on his favorite subjects which had marked him even from a boy; and which especially appeared in his illustrations of ancient by modern, and modern by ancient history. The wide discursiveness with which he brought the several parts of their work to bear on each other; the readiness with which he referred them to the sources and authorities of information, when himself ignorant of it; the eagerness with which he tracked them out when unknown,—taught them how wide the field of knowledge really was. In poetry it was almost impossible not to catch something of the delight and almost fervor, with which, as he came to any striking passage, he would hang over it, reading it over and over again, and dwelling upon it for the mere pleasure which every word seemed to give him. In history or philosophy, events, sayings, and authors would, from the mere fact that he had quoted them, become fixed in the memory of his pupils, and give birth to thoughts and inquiries long afterward, which, had they been derived through another medium, would have been forgotten or remained unfruitful. The very scantiness with which he occasionally dealt out his knowledge, when not satisfied that the boys could enter into it, whilst it often provoked a half-angry feeling of disappointment in those who eagerly treasured up all that he uttered, left an impression that the source from which they drew was unexhausted and unfathomed, and to all that he did say gave a double value.—*Life and Correspondence*, pp. 91, 93, 94.

A closer relation than that between the teacher and the mere pupil existed between the head-master and his sixth form. According to the common practice in the public schools of England, the upper class constituted a band of sub-masters, as it were, intermediate between their instructors and their schoolmates, invested with a power "to be exercised by them," as Arnold describes it, "over the lower boys for the sake of securing a regular government amongst the boys themselves." To enforce this power, certain members of the class, called præpostors, were authorized to inflict personal chastisement on those who resisted them. Against this system, involving as

it did the custom of fagging, (to which we shall presently advert,) a very strong feeling had been aroused at the time of Arnold's removal to Rugby; and amongst the reforms which many anticipated from him, none, perhaps, was more generally looked for than the abolition or at any rate the modification of the authority vested in the sixth form. He checked the abuses that he discovered, but he did no more; on the contrary he maintained the system, asserting that "a government amongst the boys themselves being necessary, the actual constitution of public schools places it in the best possible hands." But Arnold understood it as something more than a means of discipline. "He who wishes really to improve public education," he said, "would do well to direct his attention to this point, and to consider how there can be infused into a society of boys such elements as, without being too dissimilar to coalesce thoroughly with the rest, shall yet be so superior as to raise the character of the whole. It would be absurd to say that any school has as yet fully solved this problem. I am convinced, however, that in the peculiar relation of the highest form to the rest of the boys, such as it exists in our great public schools, there is to be found the best means of answering it." Accordingly Arnold employed the boys of the sixth form not only as *aid-de-camps* to ensure order in the school, but as missionaries to infuse a higher spirit and a nobler purpose. His dependence, to the proper degree, on their coöperation, his making them his fellow-workers and his chosen friends, was touching to behold. "When I have confidence in the sixth," he once said to them, "there is no post in England which I would exchange for this; but if they do not support me, I must go."

We have not yet mentioned one of Arnold's strongest reasons for keeping up the authority of the sixth form,—the influence which the exercise of it would have upon its possessors. "They look upon themselves," he said, "as answerable for the character of the school, and by the natural effect of their position, acquire a manliness of mind and habits of conduct infinitely superior, generally speaking, to those of young men of the same age who have not enjoyed the same advantages." A precisely similar motive induced him to retain the system of fagging. "The discipline," he says, "to which boys are thus subjected, and the quickness, handiness, thoughtfulness and punctuality, which they learn from some of the services required of them, are no despicable part of education."

Fagging, as is well known, is the subjection of the younger boys of a school to the elder ones; but it is a subjection to regularly constituted authority, that is, to the members of the upper class or classes.

This was not exposing the younger boys, according to Arnold's view, to abuse from their seniors. He writes as follows:—

It is important to distinguish such acts of oppression as belong properly to the system of fagging, from such as arise merely from superior physical force, and consequently exist as much, I believe, a thousand times more, in those schools where there is no legal fagging. For instance, your correspondent* complains of the tyranny practiced at Winchester at bed-time, "tossing in the blanket, tying toes, bolstering, &c." These, indeed, are most odious practices, but what have they to do with fagging? I have known them to exist at private schools, where there was no fagging, to a degree of intolerable cruelty. In college, at Winchester, where there were two or three prefects in every chamber, I scarcely remember them to have been practiced at all during the period of which I can speak from my own experience. And this is natural; for the boys who delight in this petty tyranny are very rarely to be found amongst the oldest in a school, and still less amongst those who have raised themselves to the highest rank in it; they are either middle-aged boys, from fourteen to sixteen, or such older boys as never distinguish themselves for any good, and who, never rising high in the school, are by a system of fagging, and by that only, restrained from abusing their size and strength in tyranny. Other abuses which your correspondent mentions, such as toasting, lighting fires, &c., arise so far from a system of fagging, that this system, when ill-regulated, allows a certain well-defined class of boys to exact services which otherwise would be exacted merely by the strongest. But I said, what every one must be aware of, that the government of boys, like every other government, requires to be watched, or it will surely be guilty of abuses. Those menial offices, which were exacted from the juniors at Winchester, were only required of them because the attendance of servants was so exceedingly insufficient, and the accommodations of the boys in many particulars so greatly neglected. If you do not provide servants to clean the boys' shoes, to supply them with water of a morning, or to wait on them at their meals, undoubtedly the more powerful among them, whether the power be natural or artificial, will get these things done for them by the weaker; but supply the proper attendance, and all this ceases immediately. There will remain many miscellaneous services, such as watching for balls at cricket or fives, carrying messages, &c., which servants undoubtedly can not be expected always to perform, and which yet belong to that general authority vested in the boys of the highest form. They belong to that general authority, and are therefore now claimed as rightfully due; but if there were no such authority, they would be claimed by the stronger from the weaker. For I assume it as a certain fact, that if you have two or three hundred boys living with one another as a distinct society, there will be some to command, as in all other societies, and others to obey; the only difference is, that the present system first of all puts the power into the best hands; and, secondly, by recognizing it as legal, is far better able to limit its exercise and to prevent its abuses, than it could be if the whole were a mere irregular dominion of the stronger over the weaker.—*Miscellaneous Works*, pp. 374, 375.

In the same article from which the preceding defence of fagging has been extracted, Arnold explains his retention of flogging.

The total abandonment of corporeal punishment for the faults of young boys appears to me not only uncalled for, but absolutely to be deprecated. It is of course most desirable that all punishment should be superseded by the force of moral motives; and up to a certain point this is practicable. All endeavors so to dispense with flogging are the wisdom and the duty of a schoolmaster; and by these means the amount of corporeal punishment inflicted may be, and in fact has been, in more than one instance, reduced to something very inconsiderable. But it is one thing to get rid of punishment by lessening the amount of faults, and another to say, that even if the faults are committed, the punishment ought not to be inflicted. Now it is folly to expect that faults will never occur; and it is very essential toward impressing on a boy's mind the natural imperfectness and subordination of his condition, that his faults and the state of his character being different from what they are in after life, so the nature of his punishment should

* Of the *Journal of Education*, for which Arnold was writing.

be different also, lest by any means he should unite the pride and self-importance of manhood with a boy's moral carelessness and low notions of moral responsibility.

The beau-ideal of school discipline, with regard to young boys, would appear to be this; that whilst corporeal punishment was retained on principle as fitly answering to, and marking the naturally inferior state of, boyhood, morally and intellectually, and therefore as conveying no peculiar degradation to persons in such a state, we should cherish and encourage to the utmost all attempts made by the several boys as individuals to escape from the natural punishment of their age by rising above its naturally low tone of principle. While we told them that, as being boys, they were not degraded by being punished as boys, we should tell them also, that in proportion as we saw them trying to anticipate their age morally, so we should delight to anticipate it also in our treatment of them personally; that every approach to the steadiness of principle shown in manhood should be considered as giving a claim to the respectability of manhood; that we should be delighted to forget the inferiority of their age, as they labored to lessen their moral and intellectual inferiority. This would be a discipline truly generous and wise, in one word, truly Christian; making an increase of dignity the certain consequence of increased virtuous effort, but giving no countenance to that barbarian pride which claims the treatment of a freeman and an equal, while it cherishes all the carelessness, the folly, and the low and selfish principle of a slave.—*Miscellaneous Works*, pp. 368, 369.

"Flogging, therefore, for the younger part, he retained," says Arnold's biographer, "but it was confined to moral offenses such as lying, drinking, and habitual idleness, while his aversion to inflicting it rendered it still less frequent in practice than it would have been according to the rule he had laid down for it."

One of Arnold's pupils, from whom we have gladly quoted already, describes the visit of three of the younger boys, "late for locking-up," to the study of the head-master. It is so true a picture of Arnold's dealings with his pupils, that we transcribe it, as a corrective of the ideas suggested by our recent extracts.

"That's the library door," said East in a whisper, pushing Tom forward. The sound of merry voices and laughter came from within, and his first hesitating knock was unanswered. But at the second, the doctor's voice said "Come in," and Tom turned the handle, and he, with the others behind him, sidled into the room.

The doctor looked up from his task: he was working away with a great chisel at the bottom of a boy's sailing boat, the lines of which he was no doubt fashioning on the model of one of Nicias' galleys. Round him stood three or four children; the candles burnt brightly on a large table at the further end, covered with books and papers, and a great fire threw a ruddy glow over the rest of the room. All looked so kindly and homely and comfortable, that the boys took heart in a moment, and Tom advanced from behind the shelter of the great sofa. The doctor nodded to the children, who went out, casting curious and amused glances at the three young scarecrows.

"Well, my little fellows," began the doctor, drawing himself up, with his back to the fire, the chisel in one hand and his coat-tails in the other, and his eye twinkling as he looked them over; "what makes you so late?"

"Please, sir, we've been out Big-side Hare-and-hounds, and lost our way."

"Hah! you couldn't keep up, I suppose?"

"Well, sir," said East, stepping out, and not liking that the doctor should think lightly of his running powers, "we got round Barby all right, but then—"

"Why, what a state you're in, my boy," interrupted the doctor, as the pitiful condition of East's garments was fully revealed to him.

"That's the fall I got, sir, in the road, said East, looking down at himself; "the Old Pig came by—"

"The what?" said the doctor.

"The Oxford coach, sir," explained Hall.

"Hah! yes, the Regulator," said the doctor.

"And I tumbled on my face, trying to get up behind," went on East.

"You're not hurt, I hope," said the doctor.

"Oh no, sir."

"Well, now, run up stairs, all three of you, and get clean things on, and then tell the housekeeper to give you some tea. You're too young to try such long runs. Let Warner know I've seen you. Good night."

"Good night, sir." And away scuttled the three boys in high glee.—*School Days at Rugby*, pp. 168, 169.

There was one reform in the way of discipline, on which Arnold was resolved from the outset. It was the introduction, as far as possible, of the principle on which he had acted in his private instruction at Laleham, with regard to the admission and retention of pupils. How far he carried this out, in relation to the admission of boys to Rugby, is not altogether clear in his writings, or in the writings concerning him. But we are told, again and again, that he would never retain a pupil whose stay in the school he considered inadvisable for the pupil himself, or for his fellow pupils. It was not merely expulsion for serious offenses; this existed at Rugby before Arnold's time. His reform consisted in removing a boy on grounds hitherto considered objectionable, but not so much so as to permit his dismissal; what others would have done, had they been bold enough or earnest enough, Arnold did,—here was his reform. It might be a case where the interests of the boy removed, were alone considered; it being deemed desirable, simply on his own account, that he should be educated under different influences. Or it might be for the sake of the school, or of two or three in it, that some boy, whether guilty or not of great wrong doing, was dismissed, in contradiction of all precedent, before Arnold made precedents of his own. He did not pursue this system without exciting remonstrance, and more than remonstrance; but he persisted, declaring that "till a man learns that the first, second and third duty of a schoolmaster, is to get rid of unpromising subjects, a great public school will never be what it might, and what it ought to be."

It would be doing great injustice to Arnold to pass by the relations between him and his assistant teachers. One of his noblest reforms was to raise the position of the under masters from that of little better than menials to that of trusted and honored associates in instruction. He increased their salaries, exalted their services; establishing an altogether new connection between them and the boys under their charge, and giving them all the credit that they deserved, never engrossing it for himself, but rather rejoicing when it was so entirely theirs, that boys came, as he thought, to receive their instructions rather than his own. "I am more and more thankful," is

the language attributed to one of them, "every day of my life, that I came here to be under him." "I think," he wrote himself, "I have a right to look rather high for the man whom I fix upon, [for a vacant mastership,] and it is my great object to get here a society of intelligent, gentlemanly, and active men, who may permanently keep up the character of the school." Admirable as Arnold was in many respects, he was in none more admirable than in this consideration for his assistants; in none, certainly, was he more different from the great majority of principals, who, if they really regard their subordinates in any other light than that of instruments to promote their own interest, do themselves gross injustice. Simple policy ought to teach them better; simple honesty ought to open their hands and their hearts in favor of those whom they are wont so much to wrong.

With this, we close our all too rapid sketches of Arnold as the head-master of Rugby school. But our account of him as a teacher is by no means complete. Rugby was not the solitary sphere of his exertions in behalf of education. If it had been, his labors in it might have been, nay, would have been, less effective than they were; an activity like his would have been wasted rather than concentrated, by being pent up within a single channel.

It was about midway in his Rugby career that he was offered by government a fellowship in the Senate of the London University. His acceptance of the office was shortly followed by a notice of his intention to propose that the examinations for degrees should include the Scriptures. Without this, he maintained the University would have no claim to be called a Christian institution. But with it, others maintained, the charter of the University which provides for the admission of all denominations, will be violated; the institution will at once become sectarian. Arnold did not give way; but on a point of so much moment, he must speak for himself:

I have no wish to have Degrees in Divinity conferred by the London University or to have a Theological Faculty: I am quite content with Degrees in Arts. But then let us understand what Arts are.

If *Arts* mean merely logic, or grammar, or arithmetic, or natural science, then of course a degree in Arts implies nothing whatever as to a man's moral judgment or principles. But open the definition a little farther,—include poetry, or history, or moral philosophy,—and you encroach unavoidably on the domain of moral education; and moral education can not be separated from religious education, unless people have the old superstitious notion of religion, either that it relates to rites and ceremonies, or to certain abstract and unpractical truths. But, meaning by Religion what the Gospel teaches one to mean by it, it is nothing more nor less than a system directing and influencing our conduct, principles, and feelings, and professing to do this with sovereign authority, and most efficacious influence. If then I enter on the domain of moral knowledge, I am thereby on the domain of religious knowledge; and the only question is, what religion am I to follow? If I take no notice of the authority and influences of Christianity, I unavoidably take a view of man's life and principles from which they are excluded, that is, a view which acknowledges some other authority and influence,—it may

be of some other religion, or of some philosophy, or of mere common opinion or instinct;—but, in any case, I have one of the many views of life and conduct, which it was the very purpose of Christ's coming into the world to exclude. And how can any Christian man lend himself to the propagating or sanctioning a system of moral knowledge which assumes that Christ's law is not our rule, nor His promises our motive of action? This, then, is my principle, that moral studies not based on Christianity must be unchristian, and therefore are such, as I can take no part in.

On the other hand, I allow as fully as you can do, that the University should include Christians of every denomination without the slightest distinction. The differences between Christian and Christian are not moral differences, except accidentally; and that is what I meant in that passage in the Church Reform Pamphlet which you, in common with many others, have taken in a sense which I should wholly disclaim. An Unitarian, as such, is a Christian; that is, if a man follows Christ's law and believes His words according to his conscientious sense of their meaning, he is a Christian; and, though I may think he understands Christ's words amiss, yet that is a question of interpretation, and no more; the purpose of his heart and mind is to obey and be guided by Christ, and therefore he is a Christian. But I believe,—if I err as to the matter of fact I shall greatly rejoice,—that Unitarianism happens to contain many persons who are only Unitarians negatively, as not being Trinitarians; and I question whether these follow Christ with enough of sincerity and obedience to entitle them to be called Christians.

Then comes the question of practicability. Here undoubtedly, I am met at a disadvantage, because the whole tendency of the last century, and of mens' minds now, is to shun all notions of comprehension; and as the knot was once cut by persecution, so it is to be cut now by toleration and omission.

But it is an experiment undoubtedly worth trying, whether for the sake of upholding the Christian character of our University, we ought not to venture on ground, new indeed in England, just at present, but which is of the very essence of true Christianity. With all Christians except Roman Catholics the course is plain, namely to examine every candidate for a Degree in one of the Gospels and one of the Epistles out of the Greek Testament. I would ask of every man the previous question, "To what denomination of Christians do you belong?" and according to his answer, I would specially avoid touching on those points, on which I as a Churchman differed from him. I should probably say to him aloud, if the examination were public, "Now I know that you and I differ on such and such points, and therefore I shall not touch on them; but we have a great deal more on which we agree, and therefore I may ask you so and so." With the Roman Catholics there might be a difficulty, because they might possibly object to being examined by heretics, or in the Scriptures: but if so, where would be the difficulty of adding a Catholic to the number of Fellows, on purpose for this object; or where would be the difficulty of requiring from the candidate, being a Catholic, a certificate of proficiency in religious knowledge from his own Priest or Bishop?—*Life and Correspondence*, pp. 304, 305.

Some months after the date of this letter, Arnold carried a resolution through the University Senate, "That, as a general rule, the candidates for the Degree of Bachelor of Arts, shall pass an examination, either in one of the four Gospels or the Acts of the Apostles, in the original Greek, and also in Scripture History." This, though a partial examination in the Scriptures, and one that was to be held only "as a general rule," excited such opposition, both from dissenters and from the government, that it was repealed in two months' time, its place being taken by a resolution to the effect that candidates for degrees might, if they thought proper, pass an examination "in the the Hebrew text of the Old Testament, and in the Greek text of the New, and in Scripture History." Not long afterward, Arnold, having

failed to secure any degree of respect for the examination, even as proposed, resigned his place in the Senate.

Three years later, in the latter half of 1841, he received from the Prime Minister, and gladly accepted, the Regius professorship of Modern History, at Oxford. "I caught," he writes, "at any opportunity of being connected again with Oxford. * * * In short there is nothing which the government could have given me, that would have suited all my wishes so well." We must turn to his biographer, at once the eye witness, the pupil, and the friend, for an account of Arnold's entrance upon his new labors :

On the 2nd of December he entered on his Professorial duties, by delivering his Inaugural Lecture. His school work not permitting him to be absent more than one whole day, he left Rugby with Mrs. Arnold, very early in the morning, and occupying himself from the time it became light in looking over the school exercises, reached Oxford at noon. The day had been looked forward to with eager expectation, and the usual lecture rooms in the Clarendon Buildings being unable to contain the crowds that, to the number of four or five hundred, flocked to hear him, the "Theatre" was used for the occasion; and there, its whole area and lower galleries entirely filled, the Professor rose from his place, amidst the highest University authorities in their official seats, and in that clear manly voice, which so long retained its hold on the memory of those who heard it, began, amidst deep silence, the opening words of his Inaugural Lecture.

Even to an indifferent spectator, it must have been striking, amidst the general decay of the professorial system in Oxford, and at the time when the number of hearers rarely exceeded thirty or forty students, to see a Chair, in itself one of the most important in the place,—but which, from the infirmities of the late Professor, had been practically vacant for nearly twenty years,—filled at last by a man whose very look and manner bespoke a genius and energy capable of discharging its duties as they had never been discharged before; and at that moment commanding an audience unprecedented in the range of academical memory: the oppressive atmosphere of controversy, hanging at that particular period so heavily on the University, was felt at least for the time to be suddenly broken; and the whole place to have received an element of freshness and vigor, such as in the course of the lecture itself he described in his sketch of the renovation of the worn-out generations of the Roman empire by the new life and energy of the Teutonic races. But to many of his audience there was the yet deeper interest of again listening to that well known voice, and gazing on that well-known face, in the relation of pupils to their teacher,—of seeing him at last, after years of misapprehension and obloquy, stand in his proper place, in his professorial robes, and receive a tribute of respect, so marked and so general in his own beloved Oxford,—of hearing him unfold with characteristic delight, the treasures of his favorite study of history, and with an emotion, the more touching for its transparent sincerity and simplicity, declare, "how deeply he valued the privilege of addressing his audience as one of the Professors of Oxford,"—how "there was no privilege which he more valued, no public reward or honor which could be to him so welcome."*—*Life and Correspondence*; pp. 425, 426.

Two months later, he resumed his professorial duties, by reading eight lectures, in which the general principles of his Inaugural were considered with greater details and more various points of view. A few extracts from the course will throw as much light as the limits of our article allow, upon its own character, and upon that of the lectures which were then expected to follow.

* Inaugural Lecture, p. 50, American edition.

A professor of history, if I understand his duties rightly, has two principal objects; he must try to acquaint his hearers with the nature and value of the treasure for which they are searching; and, secondly, he must try to show them the best and speediest method of discovering and extracting it. The first of these two things may be done once for all; but the second must be his habitual employment, the business of his professorial life. I am now, therefore, not to attempt to enter upon the second, but to bestow my attention upon the first: I must try to state what is the treasure to be found, by a search into the records of history; if we can not be satisfied that it is abundant and most valuable, we shall care little to be instructed how to gain it.

Thus far then we seem to have proceeded in our outline of the course of reading to be pursued by the historical student. It has combined at present two points, a full knowledge of the particular period which we choose to study, as derived from a general acquaintance with its contemporary literature, and then what I may call a knowledge of its bearings with respect to other and later periods, and not least with respect to our own times; that is to say, how succeeding ages have judged of it, how far their sympathies have gone along with its own in admiring what it admired; and as collected from this judgment, how far it colored the times which followed it; in other words, what part it has played for good or for evil in the great drama of the world's history; what of its influence has survived and what has perished. And he who has so studied and so understood one period, deserves the praise generally of understanding history. For to know all history actually is impossible! our object should be to possess the power of knowing any portion of history which we wish to learn, at a less cost of labor and with far greater certainty of success than belong to other men. For by our careful study of some one period, we have learnt a method of proceeding with all; so that if we open any history, its facts at once fall into their proper places, indicating their causes, implying their consequences; we have gained also a measure of their value, teaching us what are productive, and what are barren, what will combine with other facts, and establish and illustrate a truth, and what in our present state of knowledge are isolated, of no worth in themselves, and leading to nothing. This will be still more apparent, when we come to examine more carefully our student's process in mastering the history of any one period; for hitherto, you will observe, I have said nothing of the difficulties or questions which will occur to him in his reading: I have only said generally what he should read.

And our object will be to endeavor to represent to ourselves the England of the fourteenth century. To represent it, if we can, even in its outward aspect; for I can not think that the changes in the face of the country are beneath the notice of history: what supplied the place of the landscape which is now so familiar to us; what it was before five hundred years of what I may call the wear and tear of human dominion; when cultivation had scarcely ventured beyond the valleys, or the low sunny slopes of the neighboring hills; and whole tracts now swarming with inhabitants, were a wide solitude of forest or of moor. To represent it also in its institutions, and its state of society; and farther, in its individual men and in their actions; for I would never wish the results of history to be separated from history itself: the great events of past times require to be represented no less than institutions, or manners, or buildings, or scenery: we must listen to the stir of gathering war; we must follow our two Edwards, the second and third, on their enterprises visited with such different fortune; we must be present at the route and flight of Bannoekburn, and at the triumph of Crecy. Finally, we must remember also not so to transport ourselves into the fourteenth century as to forget that we belong really to the nineteenth; that here, and not there, lie our duties; that the harvest gathered in the fields of the past, is to be brought home for the use of the present.—*Lectures on Modern History*; pp. 26, 112, 392.

We gladly recur to the biographer for an account of the work which Arnold proposed to himself as Professor of Modern History.

Having made this introduction to his Professorial duties, he felt that those duties themselves were yet to begin. Their details, of course, were not yet fixed in his own mind, or, so far as they were contemplated by him, would have been open to subsequent modifications. But their general outline had already assumed a definite shape. So long as he remained at Rugby, his visits must necessarily have

been confined to little more than three weeks every year, a disadvantage which seemed to him in some measure counterbalanced by the influence and opportunities of his station as head-master of a great public school. During these periods, which would have been extended after his retirement from Rugby, he intended to give his regular course of lectures, which were naturally the chief, but not in his judgment the only duty of his office. It was his hope to excite a greater interest in history generally than existed in the University; and with a view to this it had been his intention, when first he accepted the chair,—an intention which was subsequently suspended during the reconsideration of the Statutes of the Professorship,—to devote the salary, so long as he remained at Rugby, to the foundation of scholarships in Modern History. Even of the lectures themselves, as of his school lessons at Rugby, he felt that “they may assist our efforts, but can in no way supersede them.” And, accordingly, in the last lecture he mentioned the various authorities connected with the subject of his intended course for the next year, in “the hope that many might thus coöperate, and by their separate researches collect what no one man could have collected alone;” knowing that if “any one shall learn any thing from me, he may be sure also that he may impart something to me in return, of which I was ignorant.”

And further, he looked forward to the position belonging to him, not merely, as a lecturer in history, but as one of the Professorial body in Oxford, to the insight which he should gain into the feelings of the place, to the influence which he might exercise by intercourse with the younger students, and to the share which he might take amongst the leading members of the University, in attempting to carry out some of those academical changes which he had long had at heart. Nor did he overlook, in the existing state of Oxford, the importance of his station as a counterpoise to what he believed to be its evil tendencies, though at the same time it was in full sincerity that he assured his audience, in his parting address to them, “He must be of a different constitution from mine, who can wish, in the discharge of a public duty in our common University, to embitter our academical studies with controversy, to excite angry feelings in a place where he has never met with any thing but kindness, a place connected in his mind with recollections, associations, and actual feelings, the most prized and the most delightful.”

With regard to the subject of his lectures, it was his intention to deliver a yearly course of at least eight lectures, in which he was to endeavor to do for English History, what Guizot in his lectures on the civilization of France had begun for French History. His first design had been, as has already appeared, to have started with the 15th century. But upon its being represented to him that this could hardly be taken as a fair representation of the middle ages, he finally resolved on the plan which he announced in his last lecture, of commencing with the 14th century, not as being equally with the 13th century a complete specimen of the system in Europe generally, but as being the period in which English institutions and characters first acquire any especial interest, and so more fitted for the design of his own lectures.

In these successive courses he would have been enabled to include not only many new fields of inquiry, but most of those subjects which had been long the subjects of his study and interest, and which he had only been withheld from treating by want of time and opportunity. His early studies of the contest of Charles the Bold and of Louis XI., and of the fate of John Huss and Jerome of Prague, of which his mind had always retained a lively impression;—his somewhat later studies of the times of the English Reformation, in which he used to say it was necessary, above all other historical periods, “not to forget the badness of the agents in the goodness of the cause, or the goodness of the cause in the badness of the agents;”—would here have found their proper places. He had long desired, and now doubtless would have endeavored, fully to describe the reigns of the two first Georges, “the deep calm of the first seventy years of the eighteenth century,” which, as “the abused trial time of modern Europe, and as containing within itself the seeds of our future destiny,” had always had such a hold upon his interest, that at one time he was on the point of sacrificing to a detailed exposition of this period even his history of Rome. And here, also, he would have aimed at realizing some of those more general views, for which his office would have given him ample scope—his long cherished intention of bringing the “Politics” of his favorite Aristotle to bear on the problems of modern

times and countries,—his anxiety to call public attention to the social evils of the lower classes in England, which he would have tried to analyze and expose in the process of their formation and growth,—his interest in tracing the general laws of social and political science, and the symptoms of advancing age in the human race itself; and his longing desire, according to his idea* of what the true history of the Church should be, of unfolding all the various elements, physical and intellectual, social and national, by which the moral character of the Christian world has been affected, and of comparing the existing state of European society with the ideal church in the Apostolical age, or in his own anticipations of the remote future.

This was to be his ordinary course. The statutes of his Professorship required, in addition, terminal lectures on Biography. In these, accordingly,—though intending to diversify them by occasional lectures on general subjects, such as Art or Language,—he meant to furnish, as it were, the counterpoise to the peculiarly English and political element in his regular course, by giving not national, but individual life, not British, but European History. Thus the first was to have been on “The Life and Times of Pope Gregory the First, or the Great,” as the name that stands at the opening of the history of Christian Europe. The next would have been Charlemagne, whose coronation he had already selected as the proper termination of ancient History; and along with or succeeding him, the life of Alfred. What names would have followed can only be conjectured. But he had intended to devote one lecture to Dante, in the fourteenth century; and there can be no doubt, without speculating on the wide field of later times, that one such biography would have described “the noblest and holiest of monarchs, Louis IX.,” and that he would have taken this opportunity of recurring to the eminent Popes of the middle ages, Gregory VII. and Innocent III., whose characters he had vindicated in his earlier works,† long before that great change in the popular view respecting them, which in this, as in many other instances, he had forestalled at a time when his opinion was condemned as the height of paradox.

How far any or all of these plans would have been realized—what effect they would have had upon the University or upon English literature—what would have been the result of his coming into personal contact with men, whom he had up to this time known or regarded only as the representatives of abstract systems,—how far the complete renewal of his intercourse with Oxford would have brought him that pleasure, which he fondly anticipated from it,—are questions on which it is now useless to speculate. The introductory lectures were to be invested with the solemnity of being the last words which he spoke in his beloved University.—*Life and Correspondence*; pp. 428–431.

Arnold's exertions as a teacher, were not confined to schools or to universities. He interested himself in the proceedings of the Society for the Diffusion of Useful Knowledge, saying and doing what he could to persuade that body to give a more decidedly Christian tone to their publications. He went out as a lecturer, and spoke to the Mechanics' Institute at Rugby, on the Divisions and Mutual Relations of Knowledge, an address which he published in order “to serve,” as he said, “the cause of adult education.” He took part as a journalist, and started a weekly newspaper, the *Englishman's Register*, in which it was his desire to give his countrymen religious and political instruction, of which, in a time of great public excitement, they seemed to have never had greater need. The paper soon gave out, as its originator appears to have anticipated; but he was not diverted from his main purpose, and indeed, carried it out more effectually, by

* See Sermons, vol. iv. p. 111.

† Pamphlet on “the Roman Catholic Claims,” in 1823, and on “the principles of Church Reform,” in 1833.

contributions to older journals. From some of these papers, we make a few extracts, in order to show the comprehensive sphere of the teacher as it was understood and entered into by Arnold.

It seems to me, that the education of the middling classes at this time, is a question of the greatest national importance. I wish exceedingly to draw public attention to it; and at the same time, if I may be allowed to do so, to impress most strongly on those engaged in conducting it, the difficulty of their task, as well as its vast importance; how loudly it calls for their very best exertions, and how nobly those exertions, wisely directed, may hope to be rewarded. And on this, as on other subjects, feeling sincerely that my own information is limited, I should be very glad to be the means of inducing others to write upon it, who may be far better acquainted with its details than I am.

The schools for the richer classes are, as it is well known, almost universally conducted by the clergy; and the clergy, too, have the superintendence of the parochial schools for the poorer classes. But between these two extremes there is a great multitude of what are called English, or commercial schools, at which a large proportion of the sons of farmers and of tradesmen receive their education. In some instances these are foundation schools, and the master is appointed by, and answerable to, the trustees of the charity; but more commonly they are private undertakings, entered upon by individuals as a means of providing for themselves and their families. There is no restriction upon the exercise of the business of a schoolmaster, and no inquiry made as to his qualifications: the old provision which rendered it unlawful for any man to teach without obtaining a license from the bishop of the diocese, has naturally and necessarily fallen into disuse; and as the government for the last century has thought it right to leave the moral and religious interests of the people pretty nearly to themselves, an impracticable restriction was suffered to become obsolete, but nothing was done to substitute in its place one that should be at once practicable and beneficial.

Now, in schools conducted by the clergy, the parents have this security, that the man to whom they commit their children has been at least regularly educated, and, generally speaking, that he must be a man of decent life. And, if I mistake not, it is merely the prevalence of the feeling that this is so, which has in point of fact given to the clergy nearly the whole education of the richer classes. A man who was not in orders might open a school for the sons of rich parents, if he chose, but he would find it very difficult to get pupils. This state of things has been converted into an accusation against the clergy, by some pretended liberal writers; but it is evidently a most honorable tribute to that union of intellectual and moral qualifications, which, in spite of individual exceptions, still distinguishes the clergy as a body. A layman, who had obtained academical distinctions, would have the same testimony to his intellectual fitness, that a clergyman could boast of; but these distinctions prove nothing as to a man's moral character, whereas, it is felt, and felt justly, that the profession of a clergyman affords to a great extent an evidence of moral fitness also: not certainly as implying any high pitch of positive virtue, but ensuring at least, in common cases, the absence of gross vice; as affording a presumption in short that a man is disposed to be good, and that his faults will be rather those of deficient practice than of habitual carelessness of principle.

But the masters of our English or commercial schools labor under this double disadvantage, that not only their moral but their intellectual fitness must be taken upon trust. I do not mean that this is at all their fault; still less do I say, that they are not fit actually for the discharge of their important duties; but still it is a disadvantage to them that their fitness can only be known after trial,—they have no evidence of it to offer beforehand. They feel this inconvenience themselves, and their pupils feel it also; opportunities for making known their proficiency are wanting alike to both. It has long been the reproach of our law, that it has no efficient *secondary punishments*: it is no less true that we have no regular system of *secondary education*. The classical schools throughout the country have universities to look to: distinction at school prepares the way for distinction at college; and distinction at college is again the road to distinction and emolument as a teacher; it is a passport with which a young man enters life with advantage, either as a tutor or as a schoolmaster. But any thing like local universities,—any so much as local distinction or advancement in life held out to encourage

exertion at a commercial school, it is as yet vain to look for. Thus the business of education is degraded: for a schoolmaster of a commercial school having no means of acquiring a general celebrity, is rendered dependent on the inhabitants of his own immediate neighborhood; if he offends them, he is ruined. This greatly interferes with the maintenance of discipline; the boys are well aware of their parents' power, and complain to them against the exercise of their master's authority; nor is it always that the parents themselves can resist the temptation of showing their own importance, and giving the master to understand that he must be careful how he ventures to displease them.

It is manifest that this disadvantage can not be overcome by the mere efforts of those on whom it presses: the remedy required must be on a larger scale. That the evil occasioned by it is considerable, I can assert with confidence. Submission and diligence are so naturally unwelcome to a boy, that they whose business it is to enforce them have need of a vantage ground to stand upon: they should command the respect of their scholars, not only by their personal qualities, but by their position in society; they should be able to encourage diligence, by pointing out some distinct and desirable reward to which it may attain. For this the interference of government seems to me indispensable, in order to create a national and systematic course of proceeding, instead of the mere feeble efforts of individuals; to provide for the middling classes something analogous to the advantages afforded to the richer classes by our great public schools and universities.

Lord Lansdowne, in the late debate in the House of Lords on the government scheme of education, expressed a benevolent wish that education, if generally introduced amongst our manufacturing population, might greatly reduce the amount of crime. God forbid that I should speak or think slightly of the blessings of education; but I greatly fear that we are expecting more from it in the actual state of our society than it can alone by possibility accomplish. Most wisely has Mr. Laing said in his most instructive account of Norway, that "a man may read and write and yet have a totally uneducated mind; but that he who possesses property, whether he can read and write or not, has an educated mind; he has forethought, caution, and reflection guiding every action; he knows the value of self-restraint, and is in the constant habitual practice of it." What we commonly call education is invaluable when it is given in time to a people possessing the education of property; when it opens to them intellectual enjoyments whilst they are yet in a condition to taste them; and so, by accustoming them to raise their standard of happiness, it prevents them from recklessly sinking to a lower condition. Education, in the common sense of the word, is required by a people before poverty has made havoc amongst them; at that critical moment when civilization makes its first burst, and is accompanied by an immense commercial activity. Then is the time for general education, to teach the man of smaller means how to conduct himself in the coming fever of national development; to make him understand the misery of sinking from the condition of a proprietor to that of a mere laborer; and if this can not be avoided at home, then to dispose him to emigrate to a new country, whilst he still retains the habits which will make him a valuable element in a new society there. But can what is called education,—can book learning really educate beggars, or those whose condition is so low that it can not become lower? Our population want book knowledge, and they also want the means in point of social well-being to render this knowledge available. This is the difficulty of the problem that we know not where to begin. And we shall have gained something, if we are well convinced that no single measure, whether of so called education, or of emigration, or of an improved poor-law,—and far less any political privilege, which, when given to men unfit to use it, is an evil to themselves rather than a good,—will be of real efficacy to better our condition.

If I can impress your readers with this conviction, I shall do more good than by proposing any remedy of my own, to which there might be serious practicable objections; and then he who makes these objections would be supposed to have overthrown all that I have been urging. I can not tell by myself how to mend the existing evil, but I wish to call attention to its magnitude. I wish to persuade men that a prodigious effort is required; we want every man's wisdom and every man's virtue to consider carefully the state in which we are now living, and to shrink from no sacrifices which may be called for to correct it.—*Miscellaneous Works*, pp. 227–230, 480–482.

It would require a larger space than we have already occupied, to do any thing like justice to the other labors, besides those of the teacher, in which Arnold engaged. We must direct the reader to other sources,—to Arnold's works, to Arnold's biography, if he would trace the efforts of the historian and the theologian; or if he would gain a conception of those wider prospects to which Arnold often turned as he thought of a bishopric in the colonies,—in Van Dieman's Land or New Zealand, where episcopal offices would blend with educational; where the school or the college would stand close to the chapel or the cathedral. It is hard for one who honors the subject of this sketch as the writer does, to turn from these noble aspects. Nor is it right to do so without adverting, in the way that we did at an earlier period in Arnold's career, to the strength which the aspirations of the historian, the theologian and the clergyman imparted to the teacher, invigorating his intellect, enlarging his spiritual nature, and crowning the work of the school and the university with the interest and the appreciation excited in the world of letters and of life.

In the midst of these varied works, no one of them apparently completed, Arnold suddenly died on the day preceding his forty-seventh birth-day, June 12, 1842. The circle that knew him was aghast at his loss. The circle that has known of him in the fifteen years elapsing since his death, wonders at the abrupt departure of one so active, so useful, so intent upon higher objects than any as yet attained. Early, however, as the earthly existence of Arnold was ended, it did not need a year or a day to be complete. For he died just when his life had been brought to such a point, that the memory of its exertions and of its achievements would be sure to last, sure to inspire even greater exertions and greater achievements in the future. There was or is nothing so great about this man as the example which he left,—an example which could not prevail as extensively and as beneficently in life as after death.

Read that example aright, and the teacher who would be one in deed as well in name will learn two truths of inestimable moment.

One is that the teacher must be a Christian, not merely a Christian man, but a Christian teacher; that he must see nothing so great, devote himself to nothing so entirely, as to the religion that constitutes at once the foundation, the substance and the crown of education. There is to be nothing vague about his convictions, nothing superficial about his teachings as a Christian instructor; he is to know what religious instruction means, and in what it consists; he is to seek it and to give it in the simplest and in the vastest studies, amid the lisping of the child and the maturer utterances of the man. If

public opinion, or the sentiments of his own society are against him, he must be strong; place must be resigned, emoluments sacrificed, ease and facile labors exchanged for trials and wearing anxieties, rather than that he falter for one instant in his allegiance. If fail he must, he will not, he can not altogether fail. He will have taught himself, if he has taught none besides, that the true scholar is the true Christian; that the real man of intellect is the real man of heart; loftier intellectually, because lofty spiritually; profounder in the learning that is of man, because profound in the learning that is of God.

The other truth involved in Arnold's example is this,—that the teacher must be more than a teacher merely. If teaching is the end, there must be something besides teaching for the means. It is not necessary to be precisely what Arnold was,—a theologian and a historian, a master of a school and a professor in a university; it is given to few to enter upon spheres so various and so wide. But there must be no clinging to a single spot or to a single office; no dependence upon any one work as the solitary employment of the teacher's days. He must be a student, he must be a writer, or a man of public relations; he must be learning if he would teach, working if he would teach, and living a life of service to men if he would live one of service to his pupils.

NOTE.—By a “*public school*” in England, is meant one of the large endowed grammar schools, and the title was formerly confined to Eton, Westminster and Winchester; but in these latter days is extended to Harrow, Rugby, and possibly to a few others of national reputation. They differ from the public schools of this country generally, inasmuch as they are not day schools for elementary as well as for higher instruction, but boarding schools for a liberal education and are supported, not by a tax on the property of the municipality where they are located, or by grants from the state treasury, but by the income of endowments, to which are attached certain conditions and privileges, and by payments made by the pupils who are not admitted on the foundation or endowment. They are *public* because they are not the results of private enterprise, but are endowments held in trust for the public good. They are open to the whole community of the realm, subject to the conditions of the founder, or charter.

By a “*grammar school*,” is meant a school for the study of the Latin and Greek language and literature. It was so-called, because *grammatica*, (*the study of language and linguistic literature*), formed the leading feature of the course of all liberal study,—a part of the *Trivium* of every school, beyond the grade of the “*song scale*” or “*reade scale*.” Since mathematical and physical sciences have been added to the course of study in these schools, the term has ceased to convey its original meaning, especially in this country, where schools bear the title of grammar schools, in which the study of language beyond the elementary uses of the vernacular is excluded. Of grammar schools, or schools for the study of Latin and Greek, there are upward of five hundred in England, with an annual income of nearly \$900,000.

By a “*free school*,” was originally meant, not a school in which instruction was to be given without fee or reward, but a *public school*, *free* from the jurisdiction of any superior institution, open to the *public* of the realm, and in some instances, a school of *liberal* education. In the primary ordinance enacted in the reign of Elizabeth, for the government of the “*Libera Schola Grammaticalis Regis Edwardi Sexti*,” in Shrewsbury, it is enacted that “every scholar shall pay for his admission, viz., a lord's son, ten shillings; a knight's son, six shillings and eight-pence; a son and heir apparent of a gentleman, three shillings, and for every other of their sons, two shillings and six-pence; every burgess' son, four-pence, and the son of every other person, eight-pence.

II. THE SCHOOL AND TEACHER IN LITERATURE.

(Continued from page 190, Vol. IV.)

GEORGE CRABBE, 1754—1832.

GEORGE CRABBE was born at Oldborough, in Suffolk county, December 24, 1754,—and, with such early training as the Dame and the Latin school of the Borough afforded, was apprenticed to a surgeon and apothecary, at fourteen, and in due time essayed practice—but failing to obtain it, in 1775 went to London to try his fortune as a writer—was, in the hour of his utmost need, domesticated in the family of Edmund Burke, and encouraged by him in the publication of the *Library*,—in 1781, showing a strong partiality for the ministry, he was appointed chaplain to the Duke of Rutland, at Beloni Castle, and afterward a curate of his native village,—in 1783, appeared his poem, the *Village*,—in 1807, his *Parish Register*,—in 1810, the *Boroughs*,—in 1813, *Tales in Verse*, and in 1817 and '18, the *Tales of the Hall*. He died at Trowbridge, in February, 1832. His pictures of humble life—of the trials and sufferings of the poor—his tenderness and practical wisdom, will secure him a permanent place in English literature. He has not forgotten his early dame school and schoolmistress, nor the schools of the borough where he was born, whose characters and local history he thus reproduces.

SCHOOLS OF THE BOROUGH.

Schools of every Kind to be found in the Borough—The School for Infants—The School Preparatory: the sagacity of the Mistress in foreseeing Character—Day-Schools of the lower Kind—A Master with Talents adapted to such Pupils: one of superior Qualifications—Boarding-Schools: that for young ladies: one going first to the Governess, one finally returning Home—School for Youth: Master and Teacher; various Dispositions and Capacities—The Miser Boy—The Boy-Bully—Sons of Farmers: how amused—What Study will effect, examined—A College Life: one sent from his College to a Benefice; one retained there in Dignity—The Advantages in either Case not considerable—Where, then, the Good of a literary Life—Answered—Conclusion.

To every class we have a School assign'd, (1.)
Rules for all ranks and food for every mind:
Yet one there is, that small regard to rule
Or study pays, and still is deem'd a School;
That where a deaf, poor, patient widow sits,
And awes some thirty infants as she knits;
Infants of humble, busy wives, who pay (2)
Some trifling price for freedom through the day.
At this good matron's hut the children meet,
Who thus becomes the mother of the street.
Her room is small, they can not widely stray,—
Her threshold high, they can not run away:
Though deaf, she sees the rebel-heroes shout,—

Though lame, her white rod nimbly walks about ;
 With band of yarn she keeps offenders in,
 And to her gown the sturdiest rogue can pin ;
 Aided by these, and spells, and tell-tale birds,
 Her power they dread and reverence her words.

To Learning's second seats we now proceed,
 Where humming students gilded primers read ;
 Or books with letters large and pictures gay,
 To make their reading but a kind of play—
 "Reading made Easy," so the titles tell :
 But they who read must first begin to spell : (3)
 There may be profit in these arts, but still,
 Learning is labor, call it what you will ;
 Upon the youthful mind a heavy load,
 Nor must we hope to find the royal road.
 Some will their easy steps to science show,
 And some to heav'n itself their by-way know ;
 Ah ! trust them not,—who fame or bliss would share,
 Must learn by labor, and must live by care.

Another matron, of superior kind,
 For higher schools prepares the rising mind ;
Preparatory she her learning calls, (4)
 The step first made to colleges and halls.

She early sees to what the mind will grow,
 Nor abler judge of infant-powers I know ;
 She sees what soon the lively will impede,
 And how the steadier will in turn succeed ;
 Observes the dawn of wisdom, fancy, taste,
 And knows what parts will wear, and what will waste ;
 She marks the mind too lively, and at once
 Sees the gay coxcomb and the rattling dunce.

Long has she lived, and much she loves to trace
 Her former pupils, now a lordly race ;
 Whom when she sees rich robes and furs bedeck,
 She marks the pride which once she strove to check.
 A Burgess comes, and she remembers well
 How hard her task to make his worship spell :
 Cold, selfish, dull, manimate, unkind,
 'T was but by anger he display'd a mind :
 Now civil, smiling, complaisant, and gay,
 The world has worn th' unsocial crust away ;
 That sullen spirit now a softness wears,
 And, save by fits, e'en dullness disappears :
 But still the matron can the man behold,
 Dull, selfish, hard, inanimate, and cold.
 A Merchant passes,—"Probity and truth,
 Prudence and patience, mark'd thee from thy youth."
 Thus she observes, but oft retains her fears
 For him, who now with name unstain'd appears ;
 Nor hope relinquishes, for one who yet
 Is lost in error and involved in debt ;
 For latent evil in that heart she found, (5)
 More open here, but here the core was sound.

Various our Day-Schools ; here behold we one
 Empty and still :—the morning duties done,

Soil'd, tatter'd, worn, and thrown in various heaps,
 Appear their books, and there confusion sleeps ;
 The workmen all are from the Babel fled,
 And lost their tools, till the return they dread ;
 Meantime the master, with his wig awry,
 Prepares his books for business by-and-by :
 Now all th' insignia of the monarch laid
 Beside him rest, and none stand by afraid ;
 He, while his troop light-hearted leap and play,
 Is all intent on duties of the day ;
 No more the tyrant stern or judge severe,
 He feels the father's and the husband's fear.

Ah! little think the timid trembling crowd,
 That one so wise, so powerful, and so proud,
 Should feel himself, and dread the humble ills
 Of rent-day charges and of coal-man's bills ;
 That while they mercy from their judge implore,
 He fears himself—a knocking at the door ;
 And feels the burthen as his neighbor states
 His humble portion to the parish-rates.

They sit th' allotted hours, then eager run,
 Rushing to pleasure when the duty's done ;
 His hour of leisure is of different kind,
 Then cares domestic rush upon his mind,
 And half the ease and comfort he enjoys,
 Is when surrounded by slates, books, and boys.

Poor *Reuben Dixon* has the noisiest school (6)
 Of ragged lads, who ever bow'd to rule ;
 Low in his price—the men who heave our coals,
 And clean our causeways, send him boys in shoals.
 To see poor Reuben, with his fry beside,—
 Their half-check'd rudeness and his half-scorn'd pride,—
 Their room, the sty in which th' assembly meet,
 In the close lane behind the Northgate-street ;
 T' observe his vain attempts to keep the peace,
 Till tolls the bell, and strife and troubles cease,—
 Calls for our praise ; his labor praise deserves,
 But not our pity ; Reuben has no nerves :
 'Mid noise, and dirt, and stench, and play, and prate,
 He calmly cuts the pen or views the slate.

But *Leonard* ;—yes, for Leonard's fate I grieve, (7)
 Who loathes the station which he dares not leave ;
 He can not dig, he will not beg his bread,
 All his dependence rests upon his head ;
 And deeply skill'd in sciences and arts,
 On vulgar lads he wastes superior parts.

Alas! what grief that feeling mind sustains,
 In guiding hands and stirring torpid brains ;
 He whose proud mind from pole to pole will move,
 And view the wonders of the worlds above ;
 Who thinks and reasons strongly :—hard his fate,
 Confined forever to the pen and slate.
 True he submits, and when the long dull day
 Has slowly pass'd in weary tasks away,
 To other worlds with cheerful view he looks,
 And parts the night between repose and books.

Amid his labors, he has sometimes tried
 To turn a little from his cares aside :
 Pope, Milton, Dryden, with delight has seized
 His soul engaged and of his trouble eased :
 When, with a heavy eye and ill-done sum,
 No part conceived, a stupid boy will come ;
 Then Leonard first subdues the rising frown,
 And bids the blockhead lay his blunders down ;
 O'er which disgusted he will turn his eye,
 To his sad duty his sound mind apply,
 And, vex'd in spirit, throw his pleasures by.

Turn we to Schools which more than these afford—
 The sound instruction and the wholesome board ;
 And first our School for Ladies : (8) pity calls
 For one soft sigh, when we behold these walls,
 Placed near the town, and where, from window high,
 The fair, confined, may our free crowds espy,
 With many a stranger gazing up and down,
 And all the envied tumult of the town ;
 May, in the smiling summer-eve, when they
 Are sent to sleep the pleasant hours away,
 Behold the poor (when they conceive the bless'd)
 Employ'd for hours, and grieved they can not rest.

Here the fond girl, whose days are sad and few
 Since dear mamma pronounced the last adieu,
 Looks to the road, and fondly thinks she hears
 The carriage-wheels, and struggles with her tears.
 All yet is new, the misses great and small,
 Madam herself, and teachers, odious all ;
 From laughter, pity, nay command, she turns,
 But melts in softness, or with anger burns ;
 Nauseates her food, and wonders who can sleep
 On such mean beds, where she can only weep :
 She scorns condolence—but to all she hates
 Slowly at length her mind accommodates ;
 Then looks on bondage with the same concern
 As others felt, and finds that she must learn
 As others learn'd—the common lot to share,
 To search for comfort and submit to care.

There are, 't is said, who on these seats attend,
 And to these ductile minds destruction vend ; (9)
 Wretches—to virtue, peace, and nature, foes)—
 To these soft minds, their wicked trash expose :
 Seize on the soul, ere passions take the sway,
 And let the heart, ere yet it feels, astray.
 Smugglers obscene ! and can there be who take
 Infernal pains, the sleeping vice to wake ?
 Can there be those, by whom the thoughts defiled
 Enters the spotless bosom of a child ?
 By whom the ill is to the heart convey'd,
 Who lend the foe, not yet in arms, their aid,
 And sap the city-walls before the siege be laid ?

Oh ! rather skulking in the by-ways steal,
 And rob the poorest traveler of his meal ;
 Burst through the humblest trader's bolted door ;

Bear from the widow's hut her winter-store ;
 With stolen steed, on highways take your stand,
 Your lips with curses arm'd, with death your hand ;—
 Take all but life—the virtuous more would say,—
 Take life itself, dear as it is, away,
 Rather than guilty thus the guileless soul betray.

Years pass away—let us suppose them past,
 Th' accomplish'd nymph for freedom looks at last ;
 All hardships over, which a school contains,
 Th' spirit's bondage and the body's pains ;
 Where teachers make the heartless, trembling set
 Of pupils suffer for their own regret ;
 Where winter's cold, attack'd by one poor fire,
 Chills the fair child, commanded to retire ;
 She felt it keenly in the morning air,
 Keenly she felt it at the evening prayer.
 More pleasant summer ; but then walks were made,
 Not a sweet ramble, but a slow parade ;
 They moved by pairs beside the hawthorn-hedge,
 Only to set their feelings on an edge ;
 And now at eve, when all their spirits rise,
 Are sent to rest, and all their pleasure dies ;
 Where yet they all the town alert can see,
 And distant plough-boys pacing o'er the lea

These and the tasks successive masters brought—
 The French they con'd, the curious works they wrought :
 The hours they made their taper fingers strike
 Note after note, all due to them alike ;
 Their drawings, dancings on appointed days,
 Playing with globes, and getting parts of plays ;
 The tender friendships made 'twixt heart and heart,
 When the dear friends had nothing to impart :—

All ! all ! are over ;—now th' accomplish'd maid
 Longs for the world, of nothing there afraid :
 Dreams of delight invade her gentle breast,
 And fancied lovers rob the heart of rest ;
 At the paternal door a carriage stands,
 Love knits their hearts and Hymen joins their hands.
 Ah !—world unknown ! how charming is thy view,
 Thy pleasures many, and each pleasure new :
 Ah !—world experienced ! what of thee is told ?
 How few thy pleasures, and those few how old !

Within a silent street, and far apart
 From noise of business, from a quay or mart,
 Stands an old spacious building, and the din
 You hear without, explains the work within ;
 Unlike the whispering of the nymphs, this noise
 Loudly proclaims a “ Boarding-School for Boys ; (10)
 The master heeds it not, for thirty years
 Have render'd all to his familiar ears ;
 He sits in comfort, 'mid the various sound
 Of mingled tones for ever flowing round ;
 Day after day he to his task attends,—
 Unvaried toil, and care that never ends,—
 Boys in their works proceed ; while his employ

Admits no change, or changes but the boy ;
 Yet time has made it easy ;—he beside
 Has power supreme, and power is sweet to pride ;
 But grant him pleasure ;—what can teachers feel,
 Dependent helpers always at the wheel ?
 Their power despised, their compensation small,
 Their labor dull, their life laborious all !
 Set after set the lower lads to make
 Fit for the class which their superiors take ;
 The road of learning for a time to track
 In roughest state, and then again go back :
 Just the same way on other troops to wait,—
 Attendants fix'd at Learning's lower gate.

The day-tasks now are over,—to their ground
 Rush the gay crowd with joy-compelling sound ;
 Glad to illude the burthens of the day,
 The eager parties hurry to their play :
 Then in these hours of liberty we find
 The native bias of an opening mind ;
 They yet possess not skill the mask to place,
 And hide the passions glowing in the face ;
 Yet some are found—the close, the sly, the mean,
 Who know already all must not be seen.
 Lo ! one who walks apart, although so young,
 He lays restraint upon his eye and tongue ;
 Nor will he into scrapes or danger get,
 And half the school are in the stripling's debt :
 Suspicious, timid, he is much afraid
 Of trick and plot :—he dreads to be betray'd :
 He shuns all friendship, for he finds they lend,
 When lads begin to call each other friend :
 Yet self with self has war ; the tempting sight
 Of fruit on sale provokes his appetite ;—
 See ! how he walks the sweet seduction by ;
 That he is tempted, costs him first a sigh,—
 'T is dangerous to indulge, 't is grievous to deny !
 This he will choose, and whispering asks the price,
 The purchase dreadful, but the portion nice ;
 Within the pocket he explores the pence ;
 Without, temptation strikes on either sense,
 The sight, the smell ;—but then he thinks again
 O money gone ! while fruit nor taste remain.
 Meantime there comes an eager thoughtless boy,
 Who gives the price and only feels the joy :
 Example dire ! the youthful miser stops,
 And slowly back the treasured coinage drops :
 Heroic deed ! for should he now comply,
 Can he to-morrow's appetite deny ?
 Beside, these spendthrifts who so freely live,
 Cloy'd with their purchase, will a portion give !
 Here ends debate, he buttons up his store,
 And feels the comfort that it burns no more.

Unlike to him the Tyrant boy, whose sway
 All hearts acknowledge ; him the crowds obey :
 At his command they break through every rule ;

Whoever governs, he controls the school :
 'T is not the distant emperor moves their fear,
 But the proud viceroy who is ever near. (11)
 Verres could do that mischief in a day,
 For which not Rome, in all its power, could pay
 And these boy-tyrants will their slaves distress,
 And do the wrongs no master can redress :
 The mind they load with fear ; it feels disdain
 For its own baseness ; yet it tries in vain
 To shake th' admitted power ;—the coward comes again :
 'T is more than present pain these tyrants give,
 Long as we've life some strong impression live ;
 And these young ruffians in the soul will sow
 Seeds of all vices that on weakness grow.

Hark ! at his word the trembling younglings flee,
 Where he is walking none must walk but he ;
 See ! from the winter-fire the weak retreat,
 His the warm corner, his the favorite seat,
 Save when he yields it to some slave to keep
 Awhile, then back, at his return, to creep :
 At his command his poor defendants fly,
 And humbly bribe him as a proud ally ;
 Flatter'd by all, the notice he bestows
 Is gross abuse, and bantering, and blows ;
 Yet he's a dunce, and, spite of all his fame
 Without the desk, within he feels his shame :
 For there the weaker boy, who felt his scorn,
 For him corrects the blunders of the morn ;
 And he is taught, unpleasant truth ! to find
 The trembling body has the prouder mind.

Hark ! to that shout, that burst of empty noise,
 From a rude set of bluff, obstreperous boys,
 They who, like colts let loose, with vigor bound,
 And thoughtless spirit, o'er the beaten ground ;
 Fearless they leap, and every youngster feels
 His Alma active in his hands and heels.

These are the sons of farmers, and they come (12)
 With partial fondness for the joys of home ;
 Their minds are coursing in their fathers' fields,
 And e'en the dream a lively pleasure yields ;
 They, much enduring, sit th' allotted hours,
 And o'er a grammar waste their sprightly powers ;
 They dance ; but them can measured steps delight,
 Whom horse and hounds to daring deeds excite ?
 Nor could they bear to wait from meal to meal,
 Did they not slyly to the chamber steal,
 And there the produce of the basket seize,
 The mother's gift ! still studious of their ease.
 Poor Alma, thus oppress'd, forbears to rise,
 But rests or revels in the arms and thighs.

“ But is it sure that study will repay
 The more attentive and forbearing ? ”—Nay !
 The farm, the ship, the humble shop have each
 Gains which severest studies seldom reach.

At College place a youth, who means to raise (13)

His state by merit and his name by praise ;
 Still much he hazards ; there is serious strife
 In the contentions of a scholar's life :
 Not all the mind's attention, care, distress,
 Nor diligence itself, insure success :
 His jealous heart a rival's power may dread,
 Till its strong feelings have confused his head,
 And, after days and months, nay, years of pain,
 He finds just lost the object he would gain.
 But grant him this and all such life can give,
 For other prospects he begins to live ;
 Begins to feel that man was form'd to look
 And long for other objects than a book :
 In his mind's eye his house and glebe he sees,
 And farms and talks with farmers at his ease ;
 And time is lost, till fortune sends him forth
 To a rude world unconscious of his worth ;
 There in some petty parish to reside,
 The college-boat, then turn'd the village guide :
 And though awhile his flock and dairy please,
 He soon reverts to former joys and ease,
 Glad when a friend shall come to break his rest,
 And speak of all the pleasures they possess'd,
 Of masters, fellows, tutors, all with whom
 They shared those pleasures, never more to come ;
 Till both conceive the times by bliss endear'd,
 Which once so dismal and so dull appear'd.

But fix our Scholar, and suppose him crown'd
 With all the glory gain'd on classic ground ;
 Suppose the world without a sigh resign'd,
 And to his college all his care confined ;
 Give him all honors that such states allow,
 The freshman's terror and the tradesman's bow ;
 Let his apartments with his taste agree,
 And all his views be those he loves to see ;
 Let him each day behold the savory treat,
 For which he pays not, but is paid to eat ;
 These joys and glories soon delight no more,
 Although, withheld, the mind is vex'd and sore ;
 The honor too is to the place confined,
 Abroad they know not each superior mind :
 Strangers no *wranglers* in these figures see,
 Nor give they worship to a high degree ;
 Unlike the prophet's is the scholar's case,
 His honor all is in his dwelling-place ;
 And there such honors are familiar things ;
 What is a monarch in a crowd of kings ?
 Like other sovereigns he's by forms address'd,
 By statutes govern'd and with rules oppress'd.

When all these forms and duties die away,
 And the day passes like the former day,
 Then of exterior things at once bereft,
 He's to himself and one attendant left ;
 Nay, John too goes ; nor aught of service more
 Remains for him ; he gladly quits the door,

And, as he whistles to the college-gate,
He kindly pities his poor master's fate.

Books can not always please, however good ;
Minds are not ever craving for their food ;
But sleep will soon the weary soul prepare
For cares to-morrow that were this day's care ;
For forms, for feasts, that sundry times have past,
And formal feasts that will for ever last.

"But then from Study will no comforts rise?"
Yes! such as studious minds alone can prize ;
Comforts, yea!—joys ineffable they find,
Who seek the prouder pleasures of the mind :
The soul, collected in those happy hours,
Then makes her efforts, then enjoys her powers ;
And in those seasons feels herself repaid,
For labors past and honors long delay'd.

No! 't is not worldly gain, although by chance
The sons of learning may to wealth advance ;
Nor station high, though in some favoring hour
The sons of learning may arrive at power ;
Nor is it glory, though the public voice
Of honest praise will make the heart rejoice :
But 't is the mind's own feelings give the joy,
Pleasures she gathers in her own employ—
Pleasures that gain or praise can not bestow,
Yet can dilate and raise them when they flow.

For this the Poet looks the world around,
Where form and life and reasoning man are found ;
He loves the mind, in all its modes, to trace,
And all the manners of the changing race ;
Silent he walks the road of life along,
And views the aims of its tumultuous throng ;
He finds what shapes the Proteus-passions take,
And what strange waste of life and joy they make,
And loves to show them to their varied ways,
With honest blame or with unflattering praise ;
'T is good to know, 't is pleasant to impart,
These turns and movements of the human heart ;
The stronger features of the soul to paint,
And make distinct the latent and the faint ;
MAN AS HE IS, to place in all men's view,
Yet none with rancor, none with scorn pursue ;
Nor be it ever of my Portraits told—
"Here the strong lines of malice we behold."

III. TENDENCY OF MISDIRECTED EDUCATION AND THE UNBALANCED MIND TO PRODUCE INSANITY.

BY EDWARD JARVIS, M. D.,

Dorchester, Mass.

ALMOST from the beginning the risen generations have done what their intelligence, their means, and their conscience, allowed them, to aid in the development and training of those who were to come after them, and to lead children and youth through their narrow paths to the highway of manhood. In the way that seemed to them best they have endeavored to show what should be done with the untaught human mind, as it comes originally from the Creator, — the raw material of thought and intelligence, as it is delivered by Nature into the hands of its rightful possessor or his friends, — and how this should be wrought, shaped and furnished with knowledge of facts and principles, and fitted to bear the responsibilities of mature life. Many have given to their thoughts on this subject a visible form, and sent forth to the broad world treatises on Education, for the benefit of as many succeeding generations as will read them. These have all done, or are doing, their appropriate work, each in its due manner and degree. Generally they have one quality in common, — they treat of man as an integer, an identity composed of body and mind, and presuppose that all have similar powers and similar wants, and are to be educated in a similar manner. Most of them regard the intellect almost exclusively, and propose to fill it with knowledge of various kinds, which may be used for the various purposes of after life. They propose by proper training to develop, and by suitable exercise to strengthen, the mind, and give it power of concentration, energy to grapple with the subjects that may be presented to it, and a capacity to add to its stores of knowledge through its coming years. In this way the perceptive and the reasoning faculties, the memory and the imagination, are cultivated in various degrees, and gain thereby a varied measure of force. This is the usual extent of the plans of education. Even those which are called liberal, and are supposed to be expansive,

are commonly limited to the development, cultivation and discipline of these elements.

In as far as these plans of education are not founded on a proper and comprehensive view of the whole nature of man, and of the great and entire object for which he is placed in the hands of the educator, they fall short of their fulness of purpose; they overlook some of the parts or elements of the human constitution; they leave some of these undeveloped, some untrained, and others undisciplined. The teachers, wanting a thorough knowledge of the material on which they are to operate, and of the fabric which they are to create from it, — without a complete consideration of man in his natural and uneducated state, and of what he may and should be, of the dangers to which he is to be exposed, the burdens he must bear, the responsibilities he may be required to sustain, and the ends he may accomplish, — too often send their pupils forth to the world unfitted to sustain their part in its movements. And these youth, with a disproportionate development of their powers, and without a complete control of their own forces, with minds unbalanced, and wrong conceptions of their relation to society, err in their self-management; they fail to realize their own ideals of life, and are in danger of being overwhelmed with mental disorder.

COMPREHENSIVE PLAN OF EDUCATION.

A rational and a natural plan of education looks upon man not as a simple, but as a compound being, — not as a single integral power, but as composed of many and various powers. Among his elements are included not only the body and the mind, but the moral faculties and the appetites, the passions and the propensities. All of these together make up the man. Each has its own definite station to fill, and its special part to perform, in the human economy. In the perfect and healthy man these are all arranged in suitable proportions, and act in unvarying harmony. Each has its predominant, mediate or subordinate place; each does its own work, and no more; and all cooperate for the good of the whole, — the health of the body and of the mind, — the elevation and happiness of the being to whom they belong.

In this perfect arrangement the moral power, the nobler element, stands above all the rest, and superintends the actions of the whole. The mental powers, like an intelligent overseer of a manufacturing process under the general charge of the proprietor, search out the ways, lay the plans, they direct all the organs and operations of the

body, and control the appetites, passions and propensities, under the guidance of the conscience.

The powers that belong to the body are all necessary for the healthy operation of the whole corporeal frame, and for the sustenance and action of the mental and moral faculties here on the earth. Of these all are, in some degree, and a part of them are wholly, under the control of the mind, and, to that extent, they do its bidding. The appetites, the lower passions and the propensities are active, or ready to be active, from the beginning. They crave indulgence, and, if left to themselves, they hardly know a bound to their gratification. But, being under the control of the higher powers, they are, or should be, restrained within their proper sphere. There seem to be several and various moral and mental powers and faculties, each of which has its special purpose to fulfil in the human economy, and all of which act in concert. Each performs its own appointed work, and no other, and no more. Each has its due position, and its due influence, governing, aiding or obeying, according to the law prescribed to it. All of these attributes, or their germs, are given to man at birth, but not to all in the same proportion. Yet, with some exceptions, they are given to all in sufficient degree for the maintenance of health, and the fulfilment of the responsibilities of their present being. Some of the powers and attributes, as the appetite for food and drink, and the digestive function, are bestowed in full measure at the beginning of life. Of others only the primordial element is given, and these are subject to growth and development from infancy to maturity.

PURPOSE OF EDUCATION.

It is the true purpose of education to draw out, cultivate and strengthen the mental and the moral powers, and to subdue and discipline the appetites and passions. As in the healthy physical frame the various organs of digestion, respiration and locomotion, — the skin, brain and nervous system, — are all in vigorous condition and action, none doing too much, and none coming short of its requirements, each receiving its part, but none demanding too much of the nervous influence, and each contributing its part to the sustenance and health of the whole; so, in the mental and moral constitution, the perceptive faculties, the reason, the memory, the imagination, the conscience, and all the lower powers, should each have its due development and influence, each its due energy and position, each be predominant or subordinate according to its office for the time being, and all act in concert for the good of the whole.

WELL-BALANCED MIND.

This due development of each and all the mental and moral faculties, and their proportionate and harmonious action, constitute that which is called a well-balanced mind, such as belongs to one whose judgment is sound and reliable in all common affairs of life; who, from any given facts or propositions, is sure to come to just conclusions; who lays his plans of action in accordance with the measure and kind of his own strength, and with the circumstances amidst which he must operate; and who is certain, under any conditions, to do that which is right and appropriate. This well-balanced mind constitutes perfect mental health. It comes from original harmonious endowment, and proportionate development and discipline; that is, from appropriate education of all the powers. To this point it is desirable that all should arrive when they reach maturity, and are ready to enter upon responsible life, to take upon themselves their own self-management, and to perform their several parts in the affairs and duties of the world.

LAW OF GROWTH OF THE POWERS AND ELEMENTS OF MAN.

But the education of man is not finished, nor does the necessity of discipline cease with his youth. The growth of the bodily organs alone ends with that period. All the other powers—the mental and moral faculties, the passions, appetites, and propensities—have no such limit to their expansion. They may grow indefinitely even to the end of life, in old age. They may grow with accelerated and accelerating force, each step in the progress increasing the facility of taking another. Every one of these faculties and attributes of man increases in strength and activity by exercise, by use, by indulgence. The growth of the human powers by cultivation is a fixed law; yet it does not operate equally and in the same degree at all times, but with a constantly increasing force by successive repetitions. The longer the cultivation of any faculty or endowment is continued, and the more vigorously it is pursued, the easier its action becomes, and the greater is its accession of strength. The increase is added to the capital already existing, and the augmented capital allows still more rapid increase. As in the progress of fortune all the previous accumulations of money, property or credit, become capital, by which more and more can be gained, so in the constitution of man all growth of any of the faculties, every new acquirement, every increase of force or discipline, every new elevation of purpose, is a new means of gathering more and more of the same kind; for the universal law of both

nature and revelation, that "whosoever hath to him shall be given, and he shall have more abundance," operates in the intellectual and the moral constitution of man, as well as in his outward condition.

On the other hand, as in the decline of fortune every pecuniary loss, and every neglect to secure due and honorable advantage, increases the danger of another sacrifice, and diminishes the power of preventing it, so in the mental and moral constitution every neglect of study or discipline, every misapplication of intellectual force, every perversion of any of the faculties, every undue indulgence of any appetite or passion, every error or sin, increases the danger and the chance of the repetition of the same mistake or fault, and diminishes the securities against their influence; for "whosoever hath not, from him shall be taken away even that he hath."

The practical operation of this law, both of growth and of decline, is manifested everywhere and among all men, and few are they who cannot trace it in some form or other, even in themselves, in the cultivation of any or all of the intellectual powers, in the study of language, mathematics, natural history, or any other branch of literature or science, in the cultivation of the moral and spiritual affections, the religious element, the conscience, the sense of right and wrong, regard to truth, love of man.

In the intellectual progress, the more one learns, the greater is his power of acquisition, and the taste for and the facility of acquiring increase with it. In the moral progress, the more the heart is warmed, the greater warmth does it demand to satisfy its desires; the more the spirit is elevated, the higher are its aspirations towards the true and the infinite. We see the same law in the cultivation of the tastes, the love of nature, of the beautiful, of music, of painting, of any of the fine arts. In these, indulgence creates strength, and strength gives enjoyment and a craving for more and more, and with these come the means and resolution to obtain greater gratification.

All the other faculties and powers, every appetite and passion, all the lower propensities, are subject to the same law of growth. Among the bodily appetites, the fondness for food, if gratified beyond the natural and healthy wants of nutrition, increases with indulgence; and this goes on, day by day, year by year, until the appetite may become the ruling element, and prevail over discretion and reason. The use of tobacco and opium is a still more marked illustration of the law of growth; for at first there is not only no desire for and no pleasure given by these, but even an absolute aversion to them. The mouth loathes, and the stomach is nauseated by them. Yet this aversion is overcome by persevering cultivation, and then a

positive appetite for these narcotics arises, and this increases by fostering, until it becomes strong enough to govern those who use them, and to make them dissatisfied with everything else so long as this their ruling taste is not gratified. The desire for intoxicating drinks grows in the same manner, from small and apparently harmless beginnings, to great and even destructive power, when it subdues the whole man, body and soul, and compels the reason and the will to minister to its purposes. The sensual appetites, and all the lower propensities, obey the same law of growth, when indulged beyond the limit assigned to them by the reason and conscience. The passions, of whatever nature, the likings and the dislikes, the sympathies, antipathies and caprices, all come under the same law, and, when left to follow their own course, uncontrolled by the higher element, they tend to expand and gain power beyond their healthy limit.

As the clay is in the hands of the potter to be moulded into such shapes as may please him, so the plastic elements of man are at first in the hands of his teacher, and afterwards in his own, to be formed and shaped as they may desire and direct. By cultivation of some of these elements, and by neglect and repression of others, one can make himself to be what he pleases. He may give his intellectual, his moral, or his animal nature a predominance. He may become a thinker, a reasoner, a sentimentalist. He may be a philanthropist or a misanthrope, an enthusiastic religionist or a cold-blooded atheist, a wise and sagacious statesman or a crafty politician. He may be a man of serene temper, generous, affectionate, or he may be irritable, passionate, suspicious, hateful, selfish, miserly. He may be an eater, a drinker, a sensualist in any form, the slave of any appetite, the manifestation of any vice. He may be, almost entirely or principally, any one or number of them in various degrees, according to the way and extent his manifold powers and elements are educated by his teachers, by the influences that bear upon him, by his own self-management.

THIS BALANCE OF THE POWERS AND ELEMENTS MUST BE MAINTAINED
THROUGH LIFE.

Each one of the powers, attributes and endowments of man, being given to him for a definite purpose, each having a special station to fill and part to perform in the work of life, and the coöperation of each being necessary at all times for the proper and vigorous action of all the rest, it is requisite for mental health, and for the preservation of a well-balanced mind, not only that the appropriateness of

position and a due proportion of all the intellectual and moral powers should be established during the process of development and growth in youth, but that they should be maintained during the whole of life. From the beginning to the end, each faculty and power should be cultivated or chastened in its due degree. None should be allowed to become excessively strong and active, while others are weak and dormant; none should absorb the force that rightfully belongs to the rest. The higher elements, then, should always be sustained in their commanding position, and the lower should be kept subordinate. The appetites should be indulged, and the propensities allowed to act, only at such times, and in such periods, and so far, as the health of the system requires; and all the passions and the moral affections should be applied to their legitimate purposes, and to no other. All should be measured, directed and controlled, by the reason, which should reign paramount over these, and yet, in its turn, be the faithful servant of the conscience, rendering it a never-failing and implicit obedience.

This condition of mental and physical health requires, — 1. Great discretion to determine what the proper arrangement of the faculties or elements of power is, and what their several forces should be, in order that they may make up the perfect man; 2. Constant self-analysis, through life, to see whether this due order and proportionate power is maintained; 3. An unfaltering self-supervision and self-discipline to maintain, in their proper position and relation, all the elements of our constitution and frame, encouraging the higher, directing the mediate, and chastening the lower.

BALANCE OF THE POWERS DISTURBED IN SOME.

In manifold ways men fall short of this perfect standard of mental condition. In some the deficiency is so slight as to produce no apparent effect on their soundness of mind; in others it is so great as to produce manifest insanity; and between these two extremes there are all intermediate grades of unsoundness. The slighter variations from this normal standard are very frequent. Even after one has been properly educated, and enters upon maturity, there may be, and there commonly is, some one or more of the powers developed and strengthened beyond the rest, in connection with some special employment, in the pursuit of some study, in the cultivation of some salutary taste for good, or in the indulgence of some passion or appetite for evil. Thus, in one man, the perceptive faculties are prominent and most active; and he has a quicker eye or ear, and more readily under-

stands what is presented to him, than the average of men. In another, causality or the reasoning faculty prevails, and he quickly sees the relations of things. He traces events back to their causes, and follows causes onward to their results. In a third, conscientiousness predominates, and he is scrupulously fearful of doing wrong. In a fourth, benevolence is the favored faculty, and he sympathises with suffering more keenly and readily than others. In another, wit is cultivated and made more active than the other powers, and he has a quick perception of the ludicrous, and of singular and droll analogies and relations.

All these, and all the other powers or modifications or combinations of powers, may and do receive in different persons extraordinary cultivation, development and strengthening, in addition to the original and appropriate education of the whole. Thus men qualify themselves for, and become expert or skilful in, the various professions and arts of life, without diminishing their good sense in the common affairs of the world, or impairing their balance of mind. Nevertheless, although these minds act well on ordinary subjects, yet they act better on those to which they are frequently directed, and on which they are habitually employed. The mind always runs more readily and easily in its most accustomed channel.

We not only labor more easily and effectually on those subjects and in those ways which habit has made familiar to us, but there is a degree, and in some a great degree, of danger that the tone or character of the thoughts applied to these will tinge or modify those which we apply to other subjects. It may control the associations of ideas, and give its peculiar coloring and estimate to all others.

The *imagination* is naturally among the most active elements of the mental constitution. It tends to influence the associative faculty and govern the inlets of ideas. It is the foundation of a great variety of mental error, and often at variance with discipline. It is therefore a very unsafe guide to life and principles. It needs the constant aid of the perceptive faculty to correct it, and of the reason to control it. The *law of association* is a manifestation of its power; circumstances, things and ideas are suggested according to their natural or artificial connections. The habit of associating them together gives them an affinity, so that they rise up in the mind in the same series of thoughts. When one is presented, the others follow; and the whole of a familiar scene, or train of circumstances, or range of ideas, follows the presentation of one of their elements or parts. Thus we are reminded of tales, events or trains of facts, by the mention of some single incident similar to any one connected with those that are thus suggested.

In such cases the memory and the associative faculties, which are required to move or act only in an old and familiar course, are more active and energetic than the perceptive faculties, which are acting or endeavoring to act upon a new subject.

While, therefore, the perceptive faculties are trying to present to the mind certain new images, the associative faculties present some old images, and these, mingled together, form a compound idea, consisting in part of the object last presented, and in part, perhaps in great part, of old and remembered objects, which are sufficiently similar to the new to be suggested by it. In these cases the perceptive faculties recognize and convey to the mind so much of the new image as is similar to old and familiar images; but at that point their action ceases, and the mind receives no more ideas through them, but the memory and the imagination fill up the rest of the picture.

From this cause we readily discover resemblances in things, which we see for the first time, or with which we are but little acquainted, to those with which we are familiar. Thus, when one goes from his father's house, and dwells among strangers, he meets many persons who look to him like others whom he has left behind, and he is continually reminded of his home by their similarity. But, after he becomes familiarly acquainted with the new people and circumstances, he fails to see the resemblance, and wonders how he could have seen it before.

This is easily explained by the law of suggestion and the activity of the associative faculties, the memory and imagination, which is greater than that of the perceptive faculties. The homesick boy's mind is filled with the objects that he left behind; their images are familiar and dear to him, and the slightest prompting calls them up. Meeting a stranger, he sees some feature, expression or manner, like a feature, expression or manner, in some one at home. All the features, person and manners of the absent friend are associated with this single feature which is thus presented, and are suggested to him by it. Here the perceptive faculties stop, and the imagination fills up the rest of the picture—not with the other features of the person before him, but with those which are familiar to his mind, and dear to his heart.

But after he becomes acquainted with persons of the new place, and his heart is reconciled to those who are about him, and weaned, in some degree, from those with whom he lived before, the perceptive faculties become more, and the associative and suggestive faculties become less, efficient. Then, when he meets these persons, he sees more and more of their real features, and thinks less and less of those

who seemed to resemble them. The outline is filled with the things before him, and that point which alone he first noticed now bears so small a proportion to those which he now sees, that he finds none of that resemblance which he saw so readily before.

THE RULING FEELING OR INTEREST COLORS NEW IDEAS.

According to the same law, any ruling feeling or interest directs or controls the perceptive faculties in greater or less degree, and infuses itself into and modifies the images that are received from any sources. The same object, presented to several men who have different predominant feelings or interests, will suggest as many and as various images. In the same landscape, the arrangements of the fields, the gracefulness of outline and detail, present to the painter a fit subject for a picture. Its soil suggests to the farmer the idea of its fitness for cultivation of various crops. The speculator sees its appropriateness for building lots; the geologist, the composition of the earth; the botanist, the various kinds of plants that grow upon it.

In all these and similar cases the ruling idea, whatever it may be, directs the perceptive faculties in some degree, and compels the eye to see, and the ear to hear, and the mind to perceive, that which is in accordance with itself, and prevents them from recognizing that which is not in harmony with it. More than this, it accepts the suggestions of the memory and the imagination in place of the present realities which the perceptive faculties, uncontrolled by such influence, might have discovered.

For this reason, witnesses, who testify for opposing parties and interests in courts, may very honestly give very different accounts of the same occurrences or things which they both had seen. Each one saw and perceived the most readily that which was most consonant with the previous feeling or interest; and these modified the remaining perceptions, and controlled the inferences.

Even philosophers, or those who intend to be philosophers, are sometimes subject to this error in their investigations. If they adopt a theory on any subject, its influence, to a greater or less extent, controls their perceptive or reasoning faculties. The former most readily and perhaps exclusively recognize those facts which are in harmony with the preconceived idea. The latter draw conclusions corresponding to it, and the imagination fills up all the vacancies in the picture. Hence, these men are apt to find confirmation of their doctrine in their discoveries. And even men having opposite theories of the same sub-

ject are in some danger of confirming each his own from the examination of the same facts.

The moral affections and the passions have a more powerful influence in controlling the perceptive faculties and the reasoning, than even the preoccupation of ideas. We delight to clothe those whom we love with the raiment of beauty. We see in them virtues and powers which less partial friends cannot discover. The evil passions have more absorbing power, and a more complete government of the channels of ideas. When one is excited with anger, or when he permanently hates, the eye is slow, and even blind to discover virtue, propriety or reasonableness in the object of his ill will. Seeing through the preconceived idea, he clothes this object with evil and wrong; then reason is suspended or made to subserve the passions, and to aid in establishing conclusions corresponding with his predominant emotions, and these compel him to utter language he would not have spoken, and to perform deeds he would not have found a motive for doing, when not under the influence of passion.

EFFECT OF HABIT ON MENTAL ACTION.

Whatever power or element is accustomed to action, acts more easily than such as have lain comparatively dormant; and, in whatever way any of the mental or moral powers are used most, they find more ready action there than otherwise. This is the most agreeable, as well as most easy, and our feelings prompt us unconsciously to let our thoughts run in this course.

These imaginative habits sometimes become very powerful, and require vigilance and self-discipline to control them and prevent their controlling us. The mind of a student, who has great facility in making puns, runs so readily and insensibly in this way, that sometimes, when he attempts to study, he finds it difficult to prevent his analyzing words and forming new combinations of syllables, to make out some new and strange meaning.

UNBALANCED MIND.

Although all of these are consistent with what is usually called mental health, yet such men have a disproportionate distribution of mental force; some ruling idea has undue prominence in, and often undue control over, the mind, and they are, in certain ways, unbalanced; still, as they retain their reason, and can correct their error of judgment by comparing their false perceptions and conclusions with

those which they know to be true, they are presumed to be sound in mind.

DANGER OF ITS GROWTH.

As all habits and powers, all passions and propensities, are liable to grow by exercise, every one of these irregularities may, by cultivation or indulgence, become so strong as to overcome the reason, and cut off the means of correcting mistakes in judgment, and thereby establish insanity. It is the first step that costs; the others are more easily taken. The only absolute security for the mental balance is in the utter avoidance of even the least perversion of thought or feeling.

Some are led to begin this course of error by distinct and well marked tastes for it. In others a feeling is accidentally excited; it may be very slight at first, but by repetition it gains strength, and ultimately becomes powerful. This is remarkably manifested in the caprices and perversities. The mind capriciously determines to be pleased with a small point, and through this sees all the rest. This prepossession compels the perceptive faculties to present the acceptable trait first to the mind, and put it in good humor to see those associated with it, and then it looks upon them, at least, with toleration. By repetition, the toleration becomes satisfaction, and approbation follows after. At last, the whole mind is brought under the power of the caprice; then opinions are formed, and a course of conduct pursued, from which the reason at first would have shrunk; but, being disarmed and made the servant of passion or caprice, it goes to strengthen the error and overthrow the judgment.

DAY-DREAMING.

The day-dreamer loves to form an ideal image of that which he would like to be, and of that which he would wish to have others be, or of what he would like to have done. For this purpose, the images derived through his perceptive faculties are only used as suggestions of better images, or better arrangements of facts and circumstances; something unreal indeed, but more satisfactory than that which is presented to his senses. In this the reason is suspended, for there is no wish to make the ideal image correspond with any rule of truth. Comparison is set aside, for no known standard is to be the measure. But the dreamer is at liberty to create whatever he will, and this he does in a form and manner most agreeable to his taste and his ruling element. Thus he improves upon the circumstances, or acts, or speeches, that are presented to him, and frequently makes himself the principal actor or speaker in the scene of his new creation.

This habit belongs to those who have large self-esteem, or large love of approbation, more than to others; they love to form desirable scenes of distinction, of influence, or even of glory, in which they place themselves. From the little boy who delights to imagine himself the drummer of the train-band, up to the man who indulges the dream of his being a commander, an orator, or philosopher, there are all stages of progress, and all grades of imaginary life and position.

At first, and in some, this may be an honest conception of improvement upon that which is seen and heard. When one sees some work performed, he may readily imagine a better way, and think that he would do it according to the ideal. If he hears a speech, he may conceive of a better argument and an improved series of ideas, and he would so present them if he were the speaker. It is a reasonable gratification to conceive of images of perfect virtue or noble action. One therefore easily allows himself to create this ideal of life and thought, and even to place himself in the centre. It is so pleasant to see one's self in a satisfactory position, that the dream is again indulged. By repetition it becomes more and more easy, and even attractive, and then those who have fallen into the habit find it difficult to escape from it. It is hard to fix their attention exclusively upon the realities of life, and prevent their thoughts from wandering to imaginary scenes, where all is satisfactory, but where none is actual, and but little is true.

KNOWLEDGE TO BE ACQUIRED IN YOUTH.

Beside the work of development and discipline, of harmonizing the several elements of the mental and moral constitution, of establishing each in its due position, and giving to each its proportionate and appropriate force, it is the further purpose of education to instruct the youth in facts and principles, to teach them their own nature, their relation to the world and to outward things, and their responsibilities in their several positions, and to fit them to discharge the duties that must come upon them. It should also prepare them to exercise a constant self-control, and to apply their powers, on all occasions, to proper and desirable purposes.

DEFECTIVE PLAN OF EDUCATION.

Notwithstanding this plan of education seems not only reasonable, but absolutely necessary for the fulfilment of its object, yet many

come short of it, and include only a part of these requisites; and others are still more meagre, and include within their scope none of these things which are the support and direction of every man and every woman, in their true and successful walk through the earth. However valuable the knowledge they impart may be, still the one thing needful, the knowledge of themselves and of life, of external nature and of man, and the relations of these to each other, is not given, and the pupils who are thus trained are sent forth to grope their way through the world, without that light to guide them, and to struggle under their responsibilities of life, without that strengthening and discipline which they should have received at school in their early years, and the forming period of their existence.

In these systems of education it is interesting but painful to see how many needless things are carefully provided, and faithfully done, and how many necessary things are entirely omitted; and when the teachers have finished their work, and the pupils have acquired all that is offered, it is mortifying to see how little it can avail them in bearing the burdens and discharging the duties of life. In these schools the scholar may accumulate the vast treasures of knowledge, and yet be poor indeed in all that will establish and sustain him in the position of life, health, success and happiness, for which he seems to be destined. He may fathom the depths of chemistry, and analyze all compound substances of earth, of vegetation, of animals, and spread before his clear vision their secret elements. He may know of what the mineral, the plant, and even flesh and blood, are composed, and yet be ignorant of the elements of his own constitution, of the nature, extent, uses, limits, and liabilities, of his own powers of body and mind, of emotion and of passion. He may comprehend all the principles of material philosophy, and the measure and character of the natural powers, and understand how to bend them to his purposes. He may master the elements, and compel the waters, the air, steam, gases, electricity, to lend their forces and labor at his will: he may make them bear his ships, turn his machines, and carry his messages, and yet know not the nature and use of his own vital machinery, nor how to apply his own internal forces, to control his appetites and govern his passions. All external nature may be made to serve him, and do the work of his bidding, and he is successful in his plans connected with it; but the elements of his own being, body and spirit, are not at his command, and in his endeavor to use them, and gain and enjoy health, and sanity, and duration of life, he fails, because for these he was not prepared.

There are other plans, or rather customs of education, far worse than these. Their sins are not merely those of omission. They teach not merely facts that are useless, and principles that have no practicable use, but they teach positive error. They give wrong notions of life. They excite expectations which cannot be realized, and lead their pupils to form schemes inconsistent with the circumstances which must surround them. One of the common faults of such education is to develop and cultivate unfounded hope and ambition, rather than discipline and laborious patience. Under this system youth are induced to form purposes which they have neither the strength nor the industry to accomplish, and for which they have made and are making no suitable preparation. They are encouraged to look for a degree of success in life, a measure of prosperity, of respect, and of influence, which they have neither the talent, nor the wisdom, nor the power of adaptation to obtain. Their expectations are rather in accordance with their desires, and perhaps their self-esteem, than with the fitness of their plans, or their perseverance in accomplishment.

Starting with wrong notions of life and of their own relations to the world, and with false conceptions of things as they are, they err in their purposes and expectations of present existence, and in their ideas of self-management, and fail to adapt their plans of action to the opinions and customs of other men, and to the circumstances of the world amidst which they live. Deficient in that good common sense which would always establish and maintain a true and certain relation between their own ideals and the realities of the world, they frequently fail in one unsuited purpose, only to enter upon another alike unsuited. Of course disappointment follows them, because they expect impossible results, or neglect to use the due means and energy to obtain them. Experience does not teach them wisdom, and they do not learn, from one failure, how they may avoid another. Successive defeats distress and confound them more and more, they become less and less able to adapt themselves to things as they are, until, at length, some of them sink into hopeless confusion, and others into mental disorder.

WANT OF PLAN OF LIFE.

There are some who have no settled plans of life to follow, no determined purpose to fulfil. They are deficient in firmness, and unwilling or unable to persevere in what they undertake. They enter upon schemes without a clear conception of what their ends should be, or how they should be accomplished. They are often weary of

their purpose, and leave it even when it may be approaching a successful issue. Wanting a balance-wheel in their mental machinery, they are governed at one time by one motive, and at another by a different one; or, undecided which of two or more diverse motives to obey, they follow one in part, and another in part, but yield fully to and derive advantage from neither. In their indecision, they sometimes adopt several contradictory or irreconcilable plans, and of course they fail in all. Thus they are turning from purpose to purpose, floundering amidst difficulties and unyielding circumstances, striving, in vain, to make opposing plans and conditions harmonize together.

INDISCRETION.

Akin to the last class are the indiscreet, who likewise labor under a disproportion of mental development and action. They have indistinct perceptions, but are impatient of investigation. They have active imaginations, which to them seem to compensate for the want of persevering cultivation of the perceptive faculties and of cautious comparison. They have a habit of rapid deduction, and draw ready and bold inferences from few and insufficient data. They are the people whom the philosopher describes as learning a few facts, guessing at many more, and jumping at a conclusion. They form their opinions without knowing or considering all, and perhaps not even the most important, facts that should be regarded. They arrange their plans and conduct their business, they manage themselves and their affairs, with the same imperfect regard to the facts and circumstances that should govern them as they manifest in the formation of their opinions, and they are necessarily unsuccessful.

On account of their loose habits of reasoning, and proneness to form hasty opinions, these are considered by their associates as men of unreliable and even unsound judgment. Their mental condition is not insanity, but, in some of its phases, there is a great similarity between them. There is a want of a due distribution of force and activity among their mental faculties. They especially lack the necessary activity of the reason to correct their errors of judgment. And though their opinions may be often changed, they discover no mistake in the process through which they are formed. This class, therefore, rarely improve. On the contrary, there is danger that this disproportionate activity of their imagination and slowness of their reason will increase, disturbing the balance of their minds more and more, and rendering their judgment less and less sound through the progress of years.

LOVE OF EXCITEMENT.

The unbalanced mind is sometimes manifested in love of excitement — in the uneasy restlessness of those who do not find sufficient motive of action in the ordinary affairs of life, and the usual interests and affections of home. These persons crave something out of the common course. As the intemperate want alcoholic drink to stimulate their bodies to action, and feel languid without it, so these desire some enlivening circumstance, event, or company, to give activity to their minds, and buoyancy to their feelings.

At their homes and in their own families, they are comparatively languid and listless. Some of them are not interested in domestic affairs; and, when no strangers are with them, some are careless as to their manners, and negligent as to their dress. Interested in no occupation, they dawdle away their time, which, for the want of satisfactory employment, passes wearily onward from one opportunity of indulging their excitability to another. When in company or abroad, they are lively, bright and joyous. Their spirits are full of energy, and their minds are active, and they are acceptable companions in society. But when they return to their homes, or when their company departs, they sink again to their usual languor and indifference. Many of these are fond of amusements, and especially those of a public nature. They love the theatre or concerts; they frequent the lecture-rooms, or other places of general gatherings of the people; they are found in places of public promenade; they take advantage of whatever opportunity may be within their reach to indulge their taste for new means of excitement.

Some demand even greater changes than these: they want changes of home. At one season, they go on distant journeys; at another, their dwelling is at the sea-shore, and anon they visit the mountains. They go from the city to the country, and from the country to the city. These changes, which the well-balanced mind only wants as occasional relaxations from protracted labor or care, seem to the restless lover of excitement to be necessary aliment of satisfactory life. Others are more quiet in their physical habits, but yet have the same mental restlessness. Some find means of gratifying their excitability in reading novels and tales of thrilling interest, some in reading newspapers, some in the agitations of politics, in hearing and telling news, in the gossipry of the neighborhood.

This varying course and habit of life, the alternations from excitement to languor and from languor to excitement, successively, is exhausting to both the physical and mental constitution. If the

excitability is indulged and cultivated, it grows more and more; the mind becomes more dependent on some external and stimulating influence for its lively enjoyment, and grows more languid in the interval, and then the ordinary affairs, the humdrum of every-day life grow less and less interesting, and even burdensome; the mind is dull, and the temper may become irritable and peevish.

After years of this indulgence, in some persons, pleasures, company and novelties, pall upon the heart; the mind is wearied with that on which it feasted before, and sinks into permanent languor, or becomes so unstable in action that the reason loses its power by any effort to direct it.

The frivolous have similar elements of error. They have no elevation of purpose, no stability of character, nor perseverance in action. They are satisfied with small and temporary matters. They are unwilling to take upon themselves the heavy responsibilities of life and society. They trifle with serious things, and treat grave interests with levity. Their delight is in present amusement, the idle occupation of the hour, and beyond this they feel no anxiety. Their unbalanced minds wither with their exhaustive activity, and they faint beneath any burdens that may be laid upon them. The pursuit of pleasure and all amusement, when followed as a principal object, and not as an occasional relaxation from the business of life, both tend to the same result — they waste the mental powers, and exhaust the moral force, and leave their devotee in a state of helpless imbecility.

ECCENTRICITY.

A fondness for notoriety is a tempting passion for some, but it is dangerous to the balance of mind, and often destructive to mental soundness. A perverted taste, a false estimate of themselves and of mankind, or a desire in some way or other to be noticed, leads some to assume habits of thought, or speech, or of body, which will distinguish them as different from the world amidst which they live. From the man who burned the temple of Ephesus that the world might know and remember him, to the college youth who kept a coffin in his room to make his acquaintances stare, men have sought, in manifold ways, to attract attention, and to impress themselves upon others. One is habitually gruff in his manners; one violates the ordinary forms of politeness. Another is peculiar in the form, or color, or material, of his clothing. One affects to be remarkably sincere, and gives opinions and states facts out of place and out of season; or he loves to differ in opinions on ordinary matters, and to say strange and startling

things, or, by some other singularity of thought, or language, or conduct, he manifests his eccentricity to the little or great world who surround him.

The greater part of these peculiarities are voluntary, at least in the beginning, but they are established by repetition; habit makes the eccentric mode of speaking, or thinking, or action, the easiest, and then, perhaps without intention, or even thought, the odd man presents himself in this manner to his associates, with little power to control and direct his thoughts and actions as other men do. In this class there is a want of mental discipline, a defective action of the reasoning faculty. They do not compare themselves with others; or, if they do, they do not see that, although they attract observation, they fail to secure respect and confidence. They do not discover that the world values its own opinions and customs most, and that whosoever violates the least of the requirements of the average common sense makes himself suspected of a liability, at least, to violate any or all of even the greater matters of that law, and is to that extent unsound in mind.

There is a natural and a just ground for distrusting the soundness of the judgment of those who allow any sort of oddity in themselves, or in whom it is even involuntarily manifested. If the reasoning faculty is resisted and set aside in one thing, it may be in another. If self-esteem, will or caprice, rise above it at any time, and claim to interfere with the balance-wheel, they will do the same at any other time, whenever occasion may seem to them to require. The reason which is dethroned, or the judgment which is impaired, in connection with any eccentricity that is adopted or allowed, loses the certainty of its paramount authority, and may fall again at any time.

SELF-ESTEEM.

Self-esteem, in many ways, disturbs the mental balance. It makes self the most active principle of faith and action. It gives a value to whatever proceeds from, or is connected with, self. It makes the perceptive faculties and the reason alike its servants. It allows the one to discover so much as is in harmony with it, and the other to make only such comparisons as will exhibit self to the best advantage, and never that which would mortify it.

Believing in themselves first, those in whom self-esteem is active are averse to laborious investigation and the slow process of reason, for they feel that they are sure to be right in their conclusions, whatever may be their foundation. They, therefore, draw inferences boldly from few facts, and form opinions freely upon subjects of which

they have but little knowledge, and adhere to them with firmness, and speak of them with confidence. They are opinionated, and love to talk oracularly. They are sometimes fond of argumentation, and desire to impress their opinions upon others; and thus they become dogmatists. But their careless habits of reasoning and induction fail to convince others of that in which they have undoubting confidence.

They are impatient of contradiction, because that is an impeachment of their fundamental principle—faith in themselves. They are apt to become boasters, for they think their own acts and acquirements are as important to others as in their own eyes they seem to be. Striving thus to grapple with subjects which they cannot understand, or which they do not use the proper means to master, struggling in positions where they must often fail, their minds sometimes stagger, their mental balance may be entirely lost, and need a healing process to restore it.

MALIGNANT PASSIONS.

All the evil passions—anger, violent temper, hatred, malice, envy and jealousy—are even more injurious to the balance of the mind than any of the merely mental disproportions. While these are in action, they absorb the whole man, his emotions and mind. They direct the perceptive faculties, they control the reason and subvert the judgment. A man in a passion sees in the object of his anger those qualities, and only those, which he wants to see, and his imagination fills up the rest with such as correspond to his own state of feeling. He clothes his antagonist in a garb of his own creation, and then finds undoubted proof that he is wrong. The one offensive point stands for the whole, and those which are true and acceptable are overlooked. The paroxysm of rage may be but momentary, yet it is violent, and gives a shock to the whole mental and moral constitution. The feelings remain disturbed, the reason does not at once regain its ascendancy, but continues, for some time, the servant of the exciting and the maddening passions.

Malignity, hatred, jealousy and envy, are less violent, but more abiding. They have the perceptions and the reason less exclusively under their control, yet they have these powers more or less at their command, and influence the judgment. They enter into, and form a part of, the estimate of objects. They certainly disturb the balance-wheel of the mind, and leave it to run irregularly and uncertainly.

Let us now hear the conclusion of the whole matter. All the original and natural endowments of humanity, the mental and the

moral powers, are distributed unequally among men. These are frequently irregularly developed, disproportionately exercised, and are often misapplied; they, therefore, need great discretion for their education in the beginning, and constant watchfulness and discipline for their government through life. The lower powers, the appetites, the passions and the propensities, are, by nature, sufficiently active and constantly seeking gratification. If indulged, they grow to an unhealthy extent. In some they grow exorbitantly and even destructively. Therefore, they constantly need the control of reason and the supervision of the conscience to restrain them within the bounds appointed to them for the good of the whole.

From all these causes, singly or combined in many complications, there arise manifold varieties of waywardness, which we meet, in some form or other, in every society.

In all these persons the balance of mind is more or less disturbed, and the soundness of judgment is more or less vitiated.

From all proceed at times, opinions, language, or acts, that, taken by themselves, would be deemed insane.

All these perversities are subject to the law of growth by indulgence and cultivation, all disturb or weaken the reason in various degrees, and all tend to overthrow it completely and produce an acknowledged insanity. The danger of those who allow them is not outward, but inward. Their enemies are they of their own household. They go from strength to strength of waywardness, and from weakness to weakness of judgment, until it is lost.

The whole of these classes which we have here described constitute a pyramid of error. The lower stratum or larger class is composed of those who are educated imperfectly, or for undue purposes of present being, in whom some of the mental or moral elements are left dormant, and others energized and quickened to a disproportionate action, whose education either negatively fails to fit them, or positively unfits them, for the world and its unavoidable circumstances. The next stratum is composed of those who start with, or at any time adopt, wrong notions of life and of its responsibilities, of what they may gain, and of what they must endure.

After and above these are those whose minds, in the progress of life, from manifold causes, and in numberless ways, become unbalanced to a greater or less extent; who are struggling to accomplish impossible purposes, or to gain things beyond their reach; of whom some are quailing in disappointment or withering into weakness, and others are approaching, or even standing upon, the confines of mental disorder.

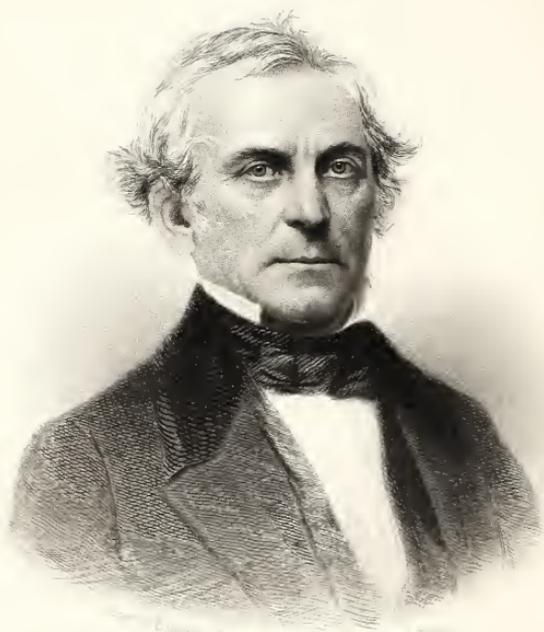
The apex of the pyramid is crowned with those whose reason has fallen in the struggle, and in whom insanity is established.

Considering how richly nature has endowed humanity, and how long, perfect and happy a life she has offered to man and to woman the means and the opportunity of obtaining, by education, by instruction, and by self-discipline, it is melancholy to see how many there are who belong to this pyramid of error, of weakness, and of perversity. There are few persons of so limited observation as not to find within their own range some who are walking in these dangerous paths of waywardness, whose minds are in some measure unbalanced, who are in some degree the subjects of passion and temper and propensity, who are more or less influenced or even governed by caprice, undisciplined feeling, or unfitting desires.

Some of these have little or no firmness of purpose, some are immovably obstinate, wilful and headstrong. Some have no plans of life, and others have plans that cannot be reconciled to the circumstances that must surround them. In some there is a restless seeking for that which they cannot obtain, or which they cannot enjoy when they reach it. Some give an undue importance to whatever interests their feelings, and make mountains of mole-hills. Others frivolously trifle with grave matters, and make mole-hills of mountains. But they all are travelling in that road everywhere strewed with error and failure, and where insanity often lies; and although perhaps only a small proportion of them may arrive at that terrible end of reason's reign, yet they are all in greater or less degree unsound in mind, — they are all more or less prominent candidates for lunacy; and no one is safe who thus allows his mental balance-wheel ever to be disturbed.

The general attention is so little directed to these dangers, so few are educated to meet and escape them, the public conscience is so little trained to feel responsible for mental health, that when insanity, through any of these ways, comes upon one, the friends are taken by surprise; they speak of the mysterious ways of Providence, and wonder that one so gay, so hopeful, should be bereft of reason.

But, as the abundant weeds and the stunted grain in the farmer's field are plainly chargeable to negligent or unskilful cultivation, or as spendthrift habits lead to poverty, so the insanity of many is plainly referable to the misdirected education which their parents gave them, to the unfitting habits which they established, or to the unbalanced mind which they cultivated.



G. P. Thayer

IV. GIDEON F. THAYER.

GIDEON F. THAYER, founder of Chauncy Hall School, Boston,—an establishment which he planned and conducted on a scale of liberality and with a degree of success seldom exemplified previously in any private seminary founded and maintained by the efforts of an individual unaided by any association,—was born in Watertown, Mass., Sept. 21, 1793; and the circumstances of his early life are worthy of notice, as testifying to the effectual character of the mental foundation laid, at that day, by the Massachusetts common school system of education, limited, as it comparatively was, in extent. To the operation of that system, and to his own otherwise unaided self-culture, Mr. Thayer owes all that he attained in the way of intellectual advancement. His father was a house-builder and carpenter. His grandparents, however, on both sides, were officers in the Revolutionary army,—a circumstance which doubtless had its influence in the active part which he afterwards took in the duties of the military company of “Rangers” formed in Boston at the beginning of the war of 1812.

Mr. Thayer's years of boyhood were passed principally in Brookline and Boston, till the age of fourteen, when he entered a retail store, as clerk, in which capacity he continued for six years. In 1814 he commenced his course of life as a teacher. His style of penmanship, for which, when a schoolboy, he had obtained a Franklin medal, enabled him successfully to apply for the situation of usher in the “South Writing School” of Boston, then under the care of Mr. Rufus Webb.

Mr. Thayer's labors in instruction were interrupted, in 1818, by a hemorrhage at the lungs, which, though checked by the invigorating effect of a resort to New Orleans and a horseback journey home, was followed by white swelling in the knee, which suspended his teaching for a year longer. In 1820 he was able to resume his vocation, but in a private school, on a very limited scale. His characteristic energy and devoted attention to his school, however, soon brought him a large increase of pupils; and, in 1828, the confidence felt in his success was such as to enable him to command, on credit, the means of purchasing the eligible site in Chauncy Place (now Chauncy Street), on which,

tee for raising a fund for the Washingtonian Total Abstinence Society, which gathered five thousand dollars in one season; was six years a member of the Common Council of Boston, and, while such, a member of the Committee on Public Instruction, a visitor of the Boston Lunatic Hospital, one of the originators of the movement for establishing the Boston Public Library, and assisted in forming the Association of Franklin Medal Scholars.

Mr. Thayer's liberality of views and strong practical common sense have been markedly shown in his ready appreciation of improvements, and in his independence of personal action. Only a little later than 1820, he had, in connection with his school, some apparatus for physical exercise; and was then accustomed to take his pupils, at recess, to Boston Common, for open-air exercise and practice. He was connected with the gymnastic school which was under the care of Dr. C. Follen, and afterwards of Dr. Francis Lieber; and was early a quiet coöperator with Mr. Josiah Holbrook in introducing into schools a department of natural science.

To the younger members of his former profession Mr. Thayer has furnished a noble example of zeal and industry, and of entire devotedness to the daily duties of a teacher's life, in all the relations of promptness, punctuality, vigilance, regularity, and order; of strictness of requirement, yet generous allowance for the imperfections of childhood and youth, a warm sympathy with juvenile feelings, and unflinching readiness to aid the recovery of the erring to duty and to happiness. He has left also to those who are entering on the teacher's life the benefit of his example, in the earnestness with which he has engaged in all social and civil duties as a member of the community, never allowing himself to plead his school engagements as an excuse for omitting those of any just claim on his attention and effective action as a man, as a neighbor, or a citizen.

Every moment of school hours was sacredly devoted to its particular use; and hours of gratuitous attention were sedulously given to the voluntary discharge of extra duties of all sorts connected with the daily work of teaching. Yet so economically was every moment of the day planned and distributed, that no call of public or private duty seemed ever to be neglected. By method rigorously exact, and a military promptitude of habit and action, he was enabled to meet the demands of a multitude of professional and extra-professional duties connected with official stations in city life and beneficent associations in town and country. An active intermingling with society, and a liberal stake in the business of life, he deemed an aid, not a hindrance, to the true success of a teacher as an educator of men.

To one who, for successive years, enjoyed daily opportunity of observing Mr. Thayer's operations in the school-room, we are indebted for the following testimony :

“ One could not be long within the sphere of his influence, as an instructor, without being fully convinced that he had fallen into the niche for which nature had designed him ; that he was a *master* in every sense of the word. His dignified person and manners bore the seal of authority legibly impressed upon them ; while his exact and thorough knowledge of whatever he undertook to teach was immediately apparent in his mode of communicating it. It was evident that, regarding the trust reposed in him as an important one, he was endeavoring to fill it with conscientiousness, earnestness, and efficiency ; that he knew no half measures in his share of the work of instruction, and would be satisfied with none on the part of his pupils.

“ In his ideas of his duty as a teacher Mr. Thayer was eminently *conscientious*. In taking charge of another's child, he felt, in its full force, what is made the legal obligation of the public teacher, to consider himself *in loco parentis*. Everything was to be done by him that could conduce to the improvement of the mind, heart, health, or manners of the precious charge. He did not consider his duty done by going through any formal routine of lessons or hours, but would *labor* in season and out of season ; ever trying some new expedient to reach conscience or intellect, hoping against hope, and dismayed by no amount of dulness or unappreciating indifference.

“ Personal comfort, or the enjoyment of time that might fairly be considered his own, were never thought of by him, when, by the sacrifice of them, there was a possibility of improving those under his charge. Years of time have been devoted by him in extra and self-imposed labor which could never have been expected of him. But such labor was not unrewarded. Impressions were often produced that could hardly have been looked for ; and the animus of the teacher came to be understood even by the reckless and negligent. Whatever his requisitions or inflictions, his pupils felt that he was conscientiously acting for their benefit ; and in maturer years, if not at the time, have acknowledged their obligations. Independent of any literary improvement, a valuable lesson was thus taught them, that was never forgotten.

“ *Earnestness* was eminently characteristic of Mr. Thayer as a teacher. Regarding his duty as highly important, he undertook the discharge of it with all his might. Holding nothing unimportant in a work that is made up of particulars, a chain of many links, he would not allow one of them to pass from his hand unskilfully forged,

or carelessly polished and united. He was equally alive to the necessity of correcting an error or impressing a truth the ten thousandth time as the first, and would use the same liveliness of manner and clearness of illustration to impress it on the young mind. The writer can distinctly remember, after the lapse of thirty years, *when* various points of propriety and correctness were indelibly impressed upon *his* mind. Education, under Mr. Thayer's direction, was no sleepy process, no mere matter of books, or routine of question and answer, but something that called out the whole man, warm, fresh, and glowing with his subject. Possessed of much native eloquence and power of illustration and persuasion, Mr. Thayer used them freely, and often successfully, to warn, guide, and encourage; and his brief but impressive addresses have planted much good seed in the minds and hearts of his hearers. Mean, selfish, and unmanly actions received a withering condemnation from his lips, and the doers of them were glad to hide their abashed heads; while no one could better portray the honest, the just, the magnanimous in conduct, and confirm his hearers in the practice of them. Mr. Thayer had the qualities that go to make the orator or the advocate, and would, no doubt, have succeeded as well at the bar, or in the pulpit, as in the school-room. Believing that important ends were to be attained, he threw himself into his work with an ardor that increased rather than diminished with increasing years and experience,—not the mere sudden and quickly-spent fire of the novice, but the steady, undying warmth of the veteran.

“*Exactness* and *thoroughness* were original qualities of his mind, and were fully brought into play in the exercise of his profession. Whatever he knew, he *wholly* knew, and tried to impart in all its entirety. In his favorite department of *elocution*, he had early made the orthoëpy of the English language his special study, and had fixed in his mind the best authorized pronunciation of every word in it; at least, during a long intimacy, the writer never knew him at a loss to decide promptly and correctly when appealed to in regard to any doubtful or disputed point. The characteristics and habits of mind which will enable any one to do this, will be appreciated by those to whom the troublesome subject of English pronunciation is ever new, and whose minds are never fully settled in regard to it. His mind held, with a vice-like tenacity, anything connected with the subject, and reproduced it at the shortest notice. As a consequence, his teaching in this or any other branch that he undertook was marked by an unusual degree of promptness and accuracy. If there was a *best way*, he was master of it, and wished his pupils to be also;

and a large proportion of them imbibed a part of his spirit, and realized corresponding results.

“ Prompt, careful, and accurate habits, he considered an essential part of education, and the formation and cultivation of them an important part of his mission as a teacher ; and, though success usually crowned his efforts, the battle was constantly to be fought over again with each new host of thoughtless and undisciplined children. But his zeal never flagged ; his ardor never abated. His short and pithy precepts still ring in the ears of thousands, who, among other benefits, have to thank him for giving them *strict business habits*.

“ In all these respects Mr. Thayer required nothing of his pupils of which he did not set them the most rigid example. He believed in no teaching in which he did not lead the way. If punctuality was required, who was earlier at his post than he ?* If regularity in the discharge of duty, when did he ever allow the pressure of outside business to interrupt the expected engagements of the day ? If nothing slovenly, lounging, or careless, in habits or manners was admissible, who more graceful in language or gesture, who more uniformly urbane and courteous ? He came before his pupils as great orators go before their hearers, as worthy of his best efforts, and not to be insulted with anything slipshod or unfinished.

“ Mr. Thayer had great *executive* ability. He could arrange work for the various departments of a large school, and see that it was all performed, as well as his own share, which was always heavy. He

* None who were either pupils or teachers in Chauncy Hall School in the fierce winter of 1829-30 can ever forget one memorable instance of his spirit and habit in this respect. During the season referred to his family home was situated on Milton Hill. One Saturday afternoon, when bound homeward on his weekly respite from the toils of the school-room, there came on one of the most terrific snow-storms of our New England clime. Such was the force of the storm, and such the depth of the snow that fell, and accumulated in unprecedented drifts, that, after reaching, with incredible labor, and late in the evening, the foot of the hill, Mr. Thayer and his driver toiled till late in the night, or rather early in the morning, without success, to reach his house. Human strength was inadequate to the task ; and Mr. Thayer was at last compelled to relinquish the attempt, and return to the hotel near Dorchester Lower Mills. The snow embargo was so complete that all travelling, even to the shortest distance, was suspended on the following day. On Monday morning, no human being expected to be able to reach Boston during the day. But, contrary to all dissuasion from the attempt, and with no slight difficulty in being permitted to make it, Mr. Thayer set out on foot, soon after sunrise ; and, battling with the immense drifts in the road, walking on the walls, which had in some places been left bare, and occasionally making a detour into the fields, which the violent winds had cleared of obstructions, — in spite of every obstacle, at half-past eleven A. M., to the utter astonishment of pupils and teachers, the indomitable principal entered Chauncy Hall, amid the irrepressible burst of cheers with which he was hailed as the only human being who had reached Boston from such a distance that day. His clothes were thoroughly saturated with perspiration, and his strength wholly exhausted ; but he had accomplished what he resolved to do. The usual morning moral lesson of the school was probably not read at the wonted hour of that memorable day. But the living exemplification of manly energy and perseverance, in the afternoon, left an impression which a lifetime's tear and wear of the world would hardly efface.

could carry in his mind all the different processes and arrangements that were necessary to make the whole machine work harmoniously, and hold in his hand all the cords that regulated its powers, without omitting any of the smallest details of his own teaching. All his pupils, in their ever-varying characters, with all the elements of good and evil that went to make up their disposition and habits, were ever present to his mind; and prompt action in regard to them might certainly be expected in the mode most conducive to each one's well-being. He undertook and executed an amount of labor that would have appalled most men, and devised systems of individual responsibility, which, though highly efficacious and useful to the pupils, brought unceasing care and labor upon himself. Active industry was his element; and his toil was lightened by the positive pleasure that he seemed to take in the various processes of school instruction; for upon no other principle can I account for his successfully bearing so heavy a load for so long a period, with little or no concession to the claims of physical weakness or infirmity.

“Mr. Thayer ever evinced a most liberal and generous spirit in his position as a prominent private teacher. He was never willing that ‘chill penury’ should close the avenues of learning to any one who had a desire to enter them, as far as they were under his control. Many pupils were received into his school as freely as if it had been a public establishment, if they had a desire to profit by its advantages; and no one was allowed to leave it from the want of ability on the part of his friends to comply with its moderate terms. He held that education was twice blessed, and that he could not diffuse its advantages too widely. He took great interest in the career of his pupils upon leaving school, and spared no amount of personal pains to further their views, and obtain them good situations in business.

“Such active and persistent efforts in teaching, put forth in the same field for nearly forty years, have not been without result. He has *made his mark* upon a large number of the active business men of Boston, who have been his pupils; and not of Boston only; they may be found all over the globe, wherever honorable enterprise carries the American merchant; and, wherever they meet, their school days, and the maxims and precepts of their teacher, are a bond of union and source of pleasant reminiscence among them.”

Although an active and influential member of the American Institute of Instruction, and a frequent and always acceptable participant in the discussion of topics connected with the instruction, discipline, and management of schools, in teachers' meetings, Mr. Thayer has not contributed largely to the educational publications of his time.

His lectures before the Institute—the first on “*The Spelling of Words, and a Rational Method of Teaching their Meaning*,” in 1830; and the last, on the “*Connection of Courtesy with School Instruction*,” in 1840—have been widely circulated and read, and have had a marked influence on the opinions and practice of teachers. So highly was the lecture on “*Courtesy*” esteemed by Mr. Mann, that he printed it entire in a number of the *Common School Journal*, as well as in pamphlet form, and of the last sent a copy to every school in Massachusetts. Of a portion of the same lecture Mr. Barnard has given a circulation of over fifty thousand copies in the form of an educational tract, and in his publications on school architecture. In 1856 Mr. Thayer commenced in the *American Journal of Education* a series of Letters to a Young Teacher, which he has continued in successive numbers, and proposes to continue until he has gone over in a plain, practical way all the principal topics of school-keeping. These “*Letters*,” when completed and collected in a volume, will be a valuable contribution to our educational literature.

In consideration of Mr. Thayer’s service to the cause of letters, the corporation of Harvard College, in 1855, and of Brown University, in 1854, conferred on him the honorary degree of Master of Arts.

V. THE HIERONYMIANS.

FROM THE GERMAN OF KARL VON RAUMER.

BEFORE Italy had begun to exert any influence upon German culture, there existed in the Netherlands an order called the brotherhood of the Hieronymians. Its founder was Gerard Groote, better known as Gerard the Great, who was born in the year 1340, at Deventer. From 1355 to 1358, he pursued his studies at Paris, where, in addition to the ordinary branches, he gave his attention to the unhallowed arts of magic, astrology, and necromancy. But, during a dangerous illness, he sent for a priest and gave him all his books, pertaining to these arts, to burn. On his return from Paris he was chosen a canon, both in Aix-la-Chapelle and Cologne; and, in the latter place, he taught scholastic philosophy and theology, and lived respectably but not in extravagance. Once, while diverting himself with looking at certain games, a person accosted him thus: "Do not waste your time upon these vanities; but change your course and become a different man." Soon after he entered Monikhausen, a Carthusian monastery at Arnheim, the prior of which had been his father-confessor at Paris. Here for three years, he led a life of penitence and self-mortification, studying the Holy Scriptures before all other books. He then began his career as a preacher, and, as Thomas-à-Kempis relates, he preached in the spirit and the power of John the Baptist. No church was large enough to hold the throngs that flocked to hear him; and he often held his audience spell-bound for three hours together. The impression that he made was the greater, inasmuch as he did not speak in unintelligible Latin, but in his native Belgian. But these sermons of his, drew upon him the wrath of the begging friars, whose profligate life he had exposed; and the Bishop of Utrecht, at their instance, interdicted him from preaching.

In the year 1367 he, with John Cole, Rector of Zwoll, paid a visit to the venerable octogenarian mystic, Ruysbroeck, prior of the monastery of Grunthal, near Brussels. Ruysbroeck made a profound impression upon him, as he had done upon Tauler before him, and he was specially edified by the pious and benignant demeanor which the old man observed toward the brethren under his charge.

Returning to Deventer, he gathered around him a circle, chiefly

composed of students from the seat of learning at that place, with whom he read good books. These all, while with him, earned their livelihood principally by copying; for he forbade them to beg.

About this time Florentius Radewin filled the office of canon at Utrecht. He was born in 1350, at Leerdam, in South Holland, and had studied at Prague. When he heard of Gerard's influential career at Deventer, he gave up his canonicate, became vicar of the church of St. Lebuin in Deventer, and an intimate friend of Gerard. One day he addressed Gerard as follows: "Dear master, where would be the harm, should I and those clerkly priests of yours, those brethren of a good will, (*bonæ voluntatis*,) form a common fund of the moneys that we have hitherto weekly expended, and live in common, (*in communi?*") Gerard replied: "The begging friars would set themselves against us with every resource in their power." But, when Florentius urged the point, saying, "It can do no harm to begin; perhaps God will crown the undertaking with success," Gerard yielded, adding the promise that he would take immediate measures to carry out the plan.

Such was the origin of that fraternity, which, taking its name from the words of Florentius, was known as the "brotherhood of good will," or the "brotherhood of a common life." They were also called, from Hieronymus and Gregory the Great, both of whom they regarded as patrons, Hieronymians and Gregorians.

Their first house, *fratrum domus* so-called, was erected about the year 1384, at Deventer. There these brethren lived together; and, by the end of the fifteenth century, a chain of such houses had extended from Cambay in the Netherlands, through the whole of Northern Germany, to Culm in West Prussia; from the Scheldt to the Vistula. And all this was the blessed fruit of Radewin's inspired suggestion.

Gerard only survived to witness the first beginnings of the institution: he died in 1384 of the plague. Dying, he appointed Florentius his successor, for he could choose none worthier. His last words were these: "Behold, the Lord is calling me; the hour of my redemption is close at hand: Augustine and Bernard are waiting at the door."

Thomas-à-Kempis depicts Gerard as a man, who worked out the salvation of his soul with the same severe asceticism that had characterized Augustine and Bernard. He denied himself every worldly pleasure, even the most innocent, wore coarse garments, ate his food burnt and unsalted, and avoided all female society.

His views of knowledge, I give in his own words. "Make the gospels, first of all, the root of all your studies and the mirror of your life, for in them is portrayed the character of Christ; then the lives and

opinions of the fathers, the acts and deeds of the apostles, and the Epistles of St. Paul, to which you may add the devotional works of Bernard, Anselm, Augustine," &c.

His *curriculum* of study was accordingly contracted within very narrow limits. "Spend no time," he continues, "either on geometry, arithmetic, rhetoric, logic, grammar, poetry or judicial astrology. All these branches Seneca rejects: how much more, then, should a spiritually-minded Christian pass them by, since they subserve in no respect the life of faith! Of the sciences of the pagans, their ethics may not be so scrupulously shunned, since these were the special field of the wiser among them, as Socrates and Plato. That which does not better a man, or at least does not reclaim him from evil, is positively hurtful. Neither ought we to read pagan books, nor the Holy Scriptures, to penetrate into the mysteries of nature by the means." All literary fame, and the gloss and show of learning alike, Gerard utterly despised.

He evidently prized those things alone, which promoted holiness; and all that did not work for this result, even were it speculative theology, (dogmatics,) to say nothing of other sciences and the arts, he thrust into the back-ground. With such sentiments, the higher studies of course found no favor in his eyes; but, on the other hand, he devoted himself with zeal to the cause of popular education.

Let us now return to Florentius and his brotherly unions. In the ascetic severity of his character, he resembled Gerard, though constitutionally he was more cheerful, and endowed with more practical abilities. By the power of the purest and the most unselfish love, he exerted a wonderful influence over those with whom he had to do, and especially over his disciples, who revered and loved him. Says Thomas-à-Kempis, "he was filled with all spiritual wisdom, and a knowledge of God in Christ. And though he survived Gerard but fifteen years, yet in this brief time he founded many brotherly unions." The establishment at Deventer, over which he himself presided, was, according to Thomas, modeled upon the humility of the apostles, and formed a mirror of piety, all the brethren being of one heart and one mind, self-denying, devout and full of mercy. With regard to the internal economy of these houses or unions, the number of the brethren thus living together was about twenty, and they had a common table and purse. Each house usually had four officiating priests, while the rest of the inmates were either students of divinity or laymen. The students were similar to monks, yet with this difference, that they dispensed with all strict rules and inexorable vows. The brethren were industrious, maintaining themselves by handicrafts, especially by

copying. And, on the invention of printing, it was the Hieronymians at Gouda who set the first types in Holland.

Pursuant to the injunctions of Gerard, Florentius founded, in the year 1386, at Windesheim, near Gouda, a monastery of regular canons, "which, both for council and for action, should be a rallying point for the entire 'Union of the Common Life.'" This was soon followed by the establishment of another on Mount St. Agnes, at Zwoll; and, by the year 1430, there were forty-five such monasteries in existence. Their inmates became most industrious copyists, and they would appear at times to have carried their occupation to excess. And because many of them, through too great abstinence, became crazed, the question was put to new applicants at the monastery of Windesheim, "Do you eat and sleep well, and do you obey with alacrity?" for on these three points their perseverance in piety was thought to depend.*

After a blissful life, such as falls to the lot of few, Florentius died in the year 1400, at the age of fifty years.

After him and Gerard the Great, a third person exerted a vast influence among the Hieronymians. This was Gerard Zerbolt, commonly styled, from the place of his birth, Gerard of Zutphen. He was born in the year 1367. His unremitting efforts were given to the cause of the "diffusion and the use of the Bible in the vernacular, as well as the employment of this, (i. e., the vernacular,) on all religious and ecclesiastical occasions." He wrote a book called "*De libris Teutonicalibus*," in which he expressly insists that the laity should read the Bible in their native tongue. "The books of the Holy Scriptures," he says, "were originally composed in the native tongue of those for whom they were immediately designed; and for all others they should be translated. And the Vulgate version was in Latin for this reason alone, namely, that, when it was made, the Latin tongue was spoken over the whole of the great Roman empire. And the Holy Spirit conferred the gift of tongues upon the apostles, in order that they might be enabled to preach to all the different nations in their different languages." And he closes by quoting, from the most distinguished fathers of the church, expressions confirmatory of his own views. Prayer likewise, he contended, should be offered in the native tongue of the petitioner. So ceaseless and unresting were his labors, that his early death, in the year 1398, when he was but thirty-one years of age, is to be traced directly to over-much study.

We should also speak in this connection of a man, whose name has penetrated into all the world; and that man is Thomas-à-Kempis.

* Delprat and Ulman both quote this question, but without the motive annexed, and base upon it the charge of epicureanism. But the "Lives" of Thomas-à-Kempis leave no room to doubt of the excessive abstinence of the monks.

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Born in 1380, at thirteen he entered the school of Deventer, and there became known to Florentius, who aided him in many ways and that right heartily. Seven years after, or in 1400, he joined the Mount St. Agnes monastery, above mentioned, and there for the long period of seventy-one years he passed a serene and contemplative life, dying, in 1472, at the age of ninety-two years. Thomas has sketched for us the lives of both the Gerards, of Florentius, and of many other distinguished Hieronymians likewise, besides composing many devotional books. One of these latter, the "Imitation of Christ," has been read more than any other book of devotion in the world. It has been translated into very many different languages; the Latin original has passed through more than 2000 editions,—the French translation, more than 1000.*

The hostile machinations of the begging friars, which Gerard the Great experienced, followed the Hieronymians after his death. Grabow, a Saxon Dominican, brought a most insidious accusation against them before Pope Martin V., and was thereby instrumental in placing them under ban. But Chancellor John Gerson, pronounced a decision at the Council of Constance against this accusation, as follows, namely: "that the accusatory document, since it was heretical, should be committed to the flames." And accordingly Grabow was compelled to retract his charge. Thus the Hieronymians obtained a formal recognition both from Pope and Council; for a Bull of Pope Eugene IV., in 1437, and a second of Sixtus IV., in 1474, invested them with full privileges, and Pius II. likewise shewed himself favorable to them.

In the year 1505 the last union, that at Cambray, was established. The greatest efficiency of the brotherhood dates in the 16th century. As the Reformation was inaugurated, many of their number gave in their adhesion to it; and, on the other hand, the Jesuits gradually absorbed many of their establishments.

After this cursory glance at the brotherhood and its founders, let us examine its educational efficiency. For, because of their activity in promoting education, the brethren were also called the "scholarly fraternity," "*fratres scholares*."

And yet it is not an easy task to characterize this activity, for it bore a very different impress according to times and circumstances.

* There has been much controversy as to whether Thomas-à-Kempis were really its author. Delprat mentions one hundred and twenty-seven different treatises adverse to his claim. But Ulman decides in his favor on sufficiently weighty grounds. The "Imitatio Christi" was translated into Latin by Castellio, the same who translated the Vulgate into Latin. "This little book," says Castellio, "I have deemed worthy to be turned from Latin into Latin, that is from a rustic dialect into more elegant and polished language."

The view which Gerard the Great took of knowledge we have already seen. It was the view of a man, who, satiated with scholastic studies, burned his books of magic also, thus bidding a final adieu to all unprofitable sciences, to strive alone after the one thing needful. If he had before toilsomely pursued shadowy theories, he now so much the more applied his whole soul to the substantial and the practical, resolutely refraining from all knowledge except that which had a direct bearing upon a holy life.

With him, the pious, contemplative Thomas-à-Kempis fully coincided. Such expressions as the following abound in the writings of the latter: "Cease from an inordinate desire for knowledge, for this brings great perplexity and delusion with it. Learned men crave the notice of the world, and wish to be accounted wise. But there is much knowledge which adds little or nothing to the welfare of the soul. And that man is surely most foolish, who strives after any thing which does not advance his own supreme good."

With these sentiments, he applied himself, as we might naturally expect, principally to the study of the Bible. So also did the two Gerards. And these men were all prompted by their love for souls to use every energy to make the book of salvation accessible to the unlearned. Gerard of Zutphen, especially, was untiring in his endeavors to give the people a Bible that they could read.

And this is the beginning and the foundation of a *christian popular education*. If you give the Bible to the people, they must learn to *read* it, and *writing* is linked to *reading*, following close upon its footsteps. The germ that began to sprout here, sprang up, in the Reformation, into a broad and vigorous growth.

The Hieronymians devoted themselves, however, not merely to popular instruction, but to the higher branches of learning. This we may gather with certainty from the fact that distinguished scholars were formed in their schools.

It is nevertheless hard to decide what schools we are to regard as theirs. For in some places the brethren themselves were principals, superintending every department of instruction; in others again, they gave assistance in schools already existing, teaching in a subordinate capacity, but yet taking much interest in the scholars. In the houses of the brethren, reading, writing, singing, and Latin conversation and declamation were taught; and there would appear to have been boarding-scholars at all of them. In the house at Deventer, Latin speaking was carried to such an extent, that a penalty was laid upon the scholar who should utter, even though a slip of the tongue, a word of Dutch. Yet the style of Latin which they aimed

to impart was mediæval and barbarous, such as the clergy were then accustomed to employ.

The Latinity of the early Hieronymians, and even that of Thomas-à-Kempis, was very far from classical. But a new era dawned upon these schools, when the Italians exerted a direct influence upon them through such of the Netherlanders and Germans as had in part been molded in them, and had afterward visited Italy. How wide a difference there was between the Hieronymians in their earlier years and the Italians of the 14th and 15th centuries, we need but a hasty comparison to determine. Those as truly as these rejected the divinity of the schools; but how diverse their motives! For the Italians, fascinated by the beauties, the poetry and the eloquence of the pagan classics, conceived an aversion for the hideous jargon of the school-dialecticians, even when these were Christian. The Hieronymians, on the other hand, turned away from scholasticism, because it did not profit them; nay more, because it stood directly in the way of all earnest self-consecration, and the salvation of souls. And hence it was, that they pursued with so much eagerness the study of the Bible, while the Italians scarce gave so much as a thought to it. And still less did these latter think of circulating the Bible, or of promoting popular education, which cause was so dear to the brethren; but when, like Guarino and Vittorino di Feltre, they turned their thoughts to education, they devoted themselves chiefly to the instruction of princes or nobles.

But when a love for the classics was awakened among the Germans and Netherlanders, they still preserved the Christian element, as the ground of all mental culture and instruction, and despite their admiration of pagan authors, that pagan bias, (*paganitas*), which Erasmus reproves in the Italians, was ever an abomination to them.

“Thomas-à-Kempis is to be regarded as the flower of the ascetic piety which the institution of the ‘Common Life’ fostered; Agricola, Alexander Hegius, and, if you will, Erasmus also, of its philosophic learning; and Wessel, of its theological science.”

[Of the educational labors of John Wessel, Rudolph Agricola, Alexander Hegius, and John Reuchlin,—the pioneers of classical culture in the Netherlands and Germany,—we shall give an account in a subsequent article.]



WILLIAM W. WALKER, 1840

WALKER, W. W. 1840

VI. DR. WILLIAM A. ALCOTT.

WILLIAM A. ALCOTT, one of the pioneers in the reformation of common schools in New England, and an indefatigable laborer by pen and voice in the cause of popular education, especially in physiology and hygiene, was born in Wolcott, Connecticut, on the 6th of August, 1798. His father was a hard working farmer, in moderate circumstances, in a poor farming town; and his mother a woman of intelligence and practical good sense, having been a teacher in early life. She inspired her son with a love of personal improvement, and a desire to serve others. His opportunities for instruction were confined to the "District School as it was," for three or four months in the summer, and four months in the winter, until he was eight years old; and during the winter term for four or five years afterward. The staple of a common school education was spelling, reading and writing. Arithmetic was not taught except to the older boys in the evening, and a little geography, gathered from reading Nathaniel Dwight's "Questions and Answers." Young Alcott, however, enjoyed the privilege of home instruction in the rudiments of arithmetic; and at school, of being employed as monitor, and also of being called on to give assistance to his schoolmates out of school hours. But in addition to these opportunities, he attended a school kept by the minister of the parish for six months, where he acquired a little knowledge of grammar, geography and composition; and where too he enjoyed the still greater advantage of learning by teaching others; thus making his knowledge more accurate, and confirming at the same time the habit of doing good to others,—which finally became the master passion and habit of his life. He was not fond of the boyish sports and exercises of those days,—eschewing angling and trapping as cruel, and preferring books and conversation at home, to wrestling, ball playing and jumping.

But books were exceedingly scarce. The catalogue of many a family library in his native neighborhood would at this day be a literary curiosity. His father's, which was far from being the most meager, consisted mainly of the Bible, the Book of Knowledge, Cynthia, Francis Spira, George Buchanan the King's Jester, and John R. Jewett's adventures among the Indians.

His mother, however, who had seen a better class of books, was accustomed, while he was employed, during the long winter evenings, in paring apples, knitting and other domestic occupations, to relate to him their contents; in some instances giving a very full account of a valuable book. His unbounded thirst to know, she thus in some measure kept alive for future better opportunities.

When he had read many times over the books already mentioned, he began to borrow of the neighbors. Whatever could be obtained for several miles round, he eagerly devoured, without much discrimination. It happened, however, that most of the books he borrowed were negatively good, and some of them excellent. Such books as *The Saracen*, *Pamela*, *Sir Charles Grandison*, *Clarissa Harlow*, *Stephen Burroughs*, *Paul and Virginia*, and *Robinson Crusoe*, were among the worst; while *Stiles' Judges of Charles I.*, *Life of Franklin*, *Murray's Power of Religion on the Mind*, *Pope's Essay on Man*, *Milton's Paradise Lost*, *Young's Night Thoughts*, *Gesner's Death of Abel*, *Bunyan's Pilgrim's Progress*, *Vicar of Wakefield*, and *Burgh's Dignity of Human Nature*, especially the last, had a better influence upon him. Chance also threw in his way a work on electricity, *Blair's Moral Philosophy*, and *Trumbull's History of Indian Wars*, of which his hungry and thirsty mind made the most.

There were indeed the fragments of an old library in the place, but many years elapsed before he could get access to it; and when, at the age of fourteen, he obtained a right to it, he found fewer books congenial to his taste than he had expected. *Doddridge's Rise and Progress*, *Fuller's Gospel its own witness*, *Neal's History of the Puritans*, *Trumbull's History of Connecticut*, *The Life of Mohammed*, *Josephus' History of the Jews*, and *Rollins' Ancient History*, were among the best; and some of them exerted a most marked and decided influence upon his character.

He read slowly, and frequently with pen in hand; and some of his notes, still in existence, form considerable volumes. Rare books, which he borrowed, he sometimes copied entire. Still, he generally read for amusement. The idea of self-education and self-advancement had as yet dawned but indistinctly on his mind; although he was unconsciously, but therefore the more surely, educating himself. From one book, however,—*Rollins' History*,—he extracted something beyond amusement. All the leisure time he could find, amid five months of active farm labor, was devoted to the careful perusal of this work; and he seems never to have forgotten it.

At this early period he became fond of versifying; an occupation of uncertain value. Some of his friends, from weakness or thoughtlessness,

encouraged it. But he did not long waste his time in this way; he gradually substituted for it the more valuable habit of letter writing.

As yet there had been no post-office in his native town, and therefore little communication with the surrounding world. In a population of nearly two hundred families, not twenty, perhaps not a dozen, had ever so much as taken a newspaper of any kind. By saving his spending money from time to time, he was at length able for one quarter,—perhaps for a whole half year,—in company with a young friend, to take a weekly newspaper.

In this state of things he attempted to form a juvenile library. A constitution and set of by-laws were prepared with much wisdom; and he was made the librarian. Of seven youths, mostly about fourteen or fifteen years of age, who signed the constitution, only three ever paid the first installment. There was no parental encouragement, even in good words. A small volume entitled *Cotemporary Biography*, was purchased with the fifty cents which had been raised, and thoroughly read, after which they all sold out their rights to the librarian; and thus ended this first attempt at educational improvement.

The habit of epistolary correspondence became almost a pastime with him, as it still is. A regular and frequent and sometimes profitable correspondence with one young friend was begun as early as the age of twelve years, and continued for twenty years or more; and had no little influence in the formation of his general character.

His great aim all this while was to be a printer. Various other employments had indeed been mentioned by his friends. One aged grandmother, with whom he was a favorite, preferred to have him educated to be a minister. Another as strenuously maintained that he ought to be a physician. His own parents said nothing; partly doubtless, from modesty, and partly from poverty.

The young man himself could see no way of ever becoming a printer; yet his attachment to the employment was so strong that he could not willingly give up the idea of one day reaching it. He continued to labor indeed, with great faithfulness, (though he was sometimes a little absent minded,) because he believed it to be his duty. The idea of becoming a teacher or an author was far from his thoughts.

He was little more than eighteen years of age, when application was made to his father to permit his son to keep the school in his native district. The school house stood but a few rods from his father's dwelling, and six hours in school would leave him several hours for labor; besides the sum of ten dollars a month, even though he furnished his own board, looked very tempting. He at length consented to take the school for three months.

His success this winter was limited in two ways. 1. His discipline was harsh and severe; not so much from natural inclination, as he was by nature mild and forbearing, but in the belief that sternness and a kind of martial discipline were indispensable. 2. His heart was too much divided between his labor in the school and that for his father, which consumed nearly every moment out of school, not occupied in sleep. Nevertheless, he had some merit as a teacher, and his reputation went abroad.

For six successive winters, with the single interruption of one year, (when he went South to teach,) he continued to be employed in different parts of Hartford and Litchfield counties, with a gradually increasing compensation. By a few he was valued, because they thought him a smart master, who would make the pupils know their places; by others, for his reputation as a scholar; and by others still, because he was valued highly by the children. It was in those days very much, in essence, as it is now: parents would not visit the schools where their children were if they could help it; and what they knew about the school they had to take at second hand.

Two things he certainly did as a teacher; he labored incessantly, both "in season and out of season." No man was ever more punctual or more faithful to his employers. And then he governed his school with that sort of martial law which secured a silence, that in the common schools of his native region had been little known. This procured for him one species of reputation that extended far and wide, so that his services were by a particular class much sought for. It was his boast, as it was that of part of his friends and pupils, that at almost any moment during school hours—such was the stillness—a pin falling to the floor might be heard distinctly. But it was a silence which was obtained at a very great—almost too great—sacrifice.

The following anecdote will serve as an illustration of the point. One of his pupils was to be punished with the rod. Great preparation was made, and the scholars in general were "put in fear," as was the teacher's intention.

The flagellation, though not remarkably severe, was performed with a stick somewhat brittle at the end, a piece of which broke off, and struck the cheek of another boy, and raised a little blood. The pupils carried home the report. Some weeks afterward, the teacher was surprised to learn that a complaint had been entered against him to the grand jury of the town, by the guardians of the boy whose cheek had been hurt, and that he was in danger of a prosecution. The complaint, however, was taken very little notice of, and the affair

died away. Good order had been secured in school, and all appeared to be going on well; and it was probably deemed unwise to interfere. The whole affair, however, was known abroad, and somewhat injured him.

His popularity was also diminished by the stand he took against public exhibitions, or quarter days as they were called. For though almost everybody spoke well of the change, and preferred, as they said, the new custom of keeping the door always open to visitors, for every day of the week, yet it was easy to see that the plan was regarded as an innovation upon ancient usages. Nobody visited the school now; and the teacher and his pupils were entirely alone, at least nineteen days out of twenty, the whole term.

During the last of these six years of teaching, which was 1821, he had been made an executive officer of his native town, and he endeavored to fulfill the trust reposed in him. But as his school was four or five miles from his field of civil activity, the two kinds of labor did not very well harmonize, and the school sometimes suffered. He had hence been obliged to discontinue his school on a certain occasion, in order to commit to the county prison a common debtor. Anxious to be at his school on the morning of the second day, according to expectation, he traveled in the extreme cold of a January night till nearly morning, and scarcely closed his eyes in sleep during the whole time. The next morning he was in school at the precise hour of nine o'clock; though in order to effect this he had fatigued himself still farther by a long and rapid walk that morning. They who have had a similar experience will not be surprised when they are told that with irritated brain and nerves the school appeared to him more like a bedlam than any thing else. Disappointed in his attempts to secure the wonted silence, he was about to execute vengeance on some of those whom he regarded as the ringleaders, when lo! the injunction of Salzmann, the German educator, to *look for the cause internally*, came to his mind. In himself—his care, fatigue and sleeplessness—he sought for the cause, and in himself he found it!

With all his errors, he was preëminently successful as a teacher; and had been very greatly attached to his employment. He had even begun to cherish the hope of being able one day to teach permanently. And yet there were serious difficulties in the way. His scanty wages, twelve dollars a month, had chiefly gone to aid in the support of his father's family, and he was unable to study his profession, had there been opportunity, for want of the needful funds. Then, too, there was little encouragement to do so, had he possessed the means; since male teachers were seldom employed except for four or

five months of the winter. Indeed it was not usual to continue the schools for more than seven or eight months in the year.

In the spring of 1822, after he had closed his sixth annual winter term of teaching, and at the end of a long search, he found means to obtain a school for one year. It was a new thing in the place, but relying on his fame as a teacher, which had long since reached them, and anxious to obtain his services in the best way they could, and at such time as they could, it was agreed to employ him for the time above-mentioned, including a vacation of one month, at nine dollars a month, or ninety-nine dollars a year and his board. Hitherto, for some time, he had received twelve dollars a month, but here was steady employment. A liberal individual volunteered to add one dollar from his own purse, to make up the sum to \$100, upon which the offer was acceded to, and he began his school early in May. He was now nearly twenty-four years of age. He boarded in the families of his employers, as was the custom of the times. This year, however, he was to traverse the district twice; that is, every six months. As the school was very large, made up from some thirty families or more, his course might have well deserved the usual term of opprobrium,—“begging his bread from door to door.”

But this boarding in the families, to a person of a missionary spirit, has its advantages; and Dr. Alcott endeavored to make the most of it. He soon became, what he had for some time been verging toward, a missionary of education. He spent most of his time while in these families, not in reading, of which, however, he was becoming more and more fond, but in instructing the children by conversation and anecdotes, and incidentally, both directly and indirectly, the parents. His whole heart was in his school, and he endeavored to have theirs strongly turned in the same direction. He threw open his doors and solicited their daily visits. He urged the necessity of reform in many particulars, which, in that district and indeed all over that region, had been till now chiefly overlooked.

One of the first things that he pressed upon the attention of his employers was an improvement of the condition of the school room. Hitherto, for the most part, in Connecticut at least, the seats for the smaller pupils had consisted of a mere plank or slab, usually too high. He did not believe in the usefulness or necessity of suspending any but the most guilty and abandoned between the earth and the heavens. But the proposal to build a few seats with backs was stared at, and by some ridiculed. However, persevering appeals to mothers on the dangerous consequences of deformity in their daughters, from long sitting on these benches, at length prevailed, and a change was effected.

Heating and ventilating came next ; but here he was far less successful. One thing, however, he could and did do. At every recess, in cold or heat, the doors and windows were thrown open, and the pure air of heaven was allowed to sweep through for a few moments.

Yet his largest innovation upon ancient usage, was in methods of instruction, particularly for the youngest pupils. Up to this period, in nine-tenths of the schools, most of the smaller pupils had done little more than "say A, B, and sit on a bench ;" and that, as we have seen, a very indifferent one. As a consequence, those whom Satan found idle he usually employed. Hence many petty school laws, and petty punishments. The idea of employing them in something useful by way of prevention had not occurred to a dozen teachers in all that region.

Blackboards at that time had not been thought of ; but slates were cheap and abundant. Dr. Alcott procured a dozen or two of small size, and one very large one, and a quantity of pencils, and resolved on an experiment.

He would say to his abecedarians sometime after opening school ; Now you have sat so still this long time, that I am going to let you take the slates and and amuse yourselves with them. The small slates and pencils were then distributed, while the large one was either held up by an older pupil, or suspended on a nail where they could all see it.

On this *incipient blackboard*, he had coarsely traced, as a copy for imitation, a house, a tree, a cat, or a dog. They were not slow to follow out his suggestions, and thus to keep themselves, for a time, out of mischief. From the pictures of dogs, birds, cats and other animals, and of houses, trees, &c., they proceeded to making letters, in the printed form, and then to their construction in words, and finally to writing and composition.

But the detail of his innovations, especially in methods of instruction, will hardly be needful to those who have read his "Confessions of a Schoolmaster," written some twenty years afterward, and now of late revised and reprinted. This work reveals a soul struggling with error both internal and external ; though afterward, through good report and through evil, reaching a point of education to which few teachers at that early period ever attained. If its style should be objected to as a little too homespun, yet its plain, straightforward common sense, and its strict adhesion to truth and nature, impart an interest which even now, at this stage of the common school reformation, render it next to the "District School as it was," one of the most suitable books which could be had for the Teacher's library.

So great, indeed, was his enthusiasm and so unreserved his devo-

tion to the cause to which he seemed to be for life devoted, that he could hardly think, converse, or read, on any other subject. It even abridged his hours of sleep, and occasionally deprived him of his usual food. For he often rose before daylight, during the short days of winter, and hastened away to his school room, sometimes a mile or a mile and a half distant, before the family with whom he boarded was up; and occasionally before he had access to even a frugal meal.

If it is asked what he could find to do at the school room for an hour or two before the time of opening the school, the reply is, that in the first place he made his own fires and swept his own floor, and would permit no one else to do it. His maxim, here, in a matter which concerned the happiness of sixty or seventy children, was, "If you want your work well done, do it yourself." This is not mentioned as a thing which should be imitated. The time and energies of the teacher are too valuable. But, in the second place, he had a great deal of preparation to make, copies to be written, lessons to be assigned, &c. Thirdly, he delighted in getting around him a group of children, and telling them stories from day to day, and thus securing their punctual and cheerful attention. Fourthly, there were even at times extra recitations in branches which he was not allowed or expected to permit during the usual formal six hours.

In short—and to repeat—his zeal and labors were as untiring, as they were unheard of before in that region. He would not only labor for his flock in season, but out of season; and as he would himself doubtless now admit, out of *reason* too. For he not only gave up his mornings and evenings to the children or their parents, but he would not even permit himself to *sit* in the school room, for a moment. He was, literally, on his feet from morning till night; and as it was vulgarly expressed by some of his patrons, not only always on his feet, but always "on the jump."

The severity of his self-denials and exertions joined to other causes, especially a feeble and delicate constitution, brought on him, toward the end of summer, a most violent attack of erysipelas, from the effects of which, though he escaped with his life, he never entirely recovered.

At the close of the year for which he had engaged, although the district did not feel able to continue the school any longer by the year, they unanimously engaged him for the unusually long term of six months the ensuing winter, at the price of thirteen dollars per month, or seventy-eight dollars for the term. This was deemed a compensation quite in advance for those times, and was accepted as entirely satisfactory.

Here, then, he was, during the winter of 1823-4, laboring exceedingly hard both in teaching and in discipline; and yet in the end, in both departments, accomplishing his object. It is, however, to be confessed—if he has not himself confessed it—that he resorted occasionally to such measures, in order to secure the desired discipline, as were neither satisfactory to himself, on reflection, nor fully sustained by the public opinion. However, he made his mark, and it was not easily obliterated.

His influence, here, was continued—perhaps increased—by A. B. Alcott, his old friend and kinsman, who became his successor in the pedagogic chair. Within a few years the district in which the last mentioned labors were performed, has, in common with an adjoining district, erected a public school house, which is greatly in advance of any thing of the kind in that part of Connecticut; and at an expense, as it is said, of \$16,000.

During four months of the winter of 1824-5, Dr. Alcott had the care of the central school of Bristol, a district adjoining the scene of his former labors. Here he was useful, but with two or three drawbacks. One was his medical studies; for he was not now boarding around, but in the family of a medical man, to whom he recited. Then, in order to gain time, he restricted himself to four hours sleep, which rendered him more nervous and irritable than formerly; and finally brought on him a fit of sickness, which, though he unexpectedly recovered from it, in some degree impaired his energies, and neutralized his efforts for the whole winter. He did not add to his reputation as a teacher by the efforts of this winter; but rather diminished it.

In studying a new profession, he had no wish or intention to relinquish the profession he had already chosen. But the longer he had taught, the more he had felt his incapacity to the task, and the greater his anxiety to qualify himself if possible, and if not too late, for so responsible an office. And as, on the other hand, there was no Normal School, or Teacher's Seminary to which he could resort, and, on the other, he had not the pecuniary means of pursuing an academic and collegiate course, he not unaptly and unwisely concluded to study medicine as a preparation, indirectly, for the office of educator reserving to himself the privilege, should his health fail, of which there were increasing signs, of practicing medicine as a substitute.

During the winter of 1825-6, he attended a regular course of medical lectures at New Haven, and in the following March received a license to practice medicine and surgery. But his health was far from being good, and he was himself beginning to be more apprehen-

sive than consumptive people usually are, of a fatal result. However he was more determined than ever before, to devote his life, if possible, to the work which Divine Providence seemed to have assigned him.

But he came from the college at a season of the year when it was not customary to employ any but female teachers in the schools; and after some hesitation, he made application, in order not to interrupt his chosen labors, for the central school in his native town, at one dollar and fifty cents a week, and "board round;" that being the usual rate paid to female teachers. This offer, though unexpected and not a little mysterious, was accepted; and in May, 1826, he commenced his work.

It was his settled determination, and he did not hesitate to make it fully known, to have a model school, on his own favorite plan; although the pecuniary means were wanting. He had not ten dollars in the world. All his resources, after paying for his medical education and a few books, and after remunerating his father, as he was proud to believe he did, for the expense of bringing him up, were soon exhausted in fitting up his school room,—in the purchase of maps, designs, vessels for flowers and plants, and such fixtures, as, in his judgment, would conduce to the proper cultivation of the mind and heart and taste of his pupils. He rightly judged that a plain and simple people, who knew him well, would not seriously object to innovations which cost them nothing in dollars and cents. He was, indeed, regarded as a little visionary, but was permitted to go on. And in his missionary life—going from house to house for his board—he had opportunity for making, from time to time, such explanations as were quite satisfactory.

Besides carrying out and perfecting the approved method of teaching the elementary branches, which he had for several years been applying with so much success, he added to them several others, particularly in defining, grammar, and geography. He introduced also, what he called his silent, or Quaker exercise. This consisted in requiring his pupils, at a certain time every morning—usually immediately after the opening of the school and devotional exercises—to lay aside every thing else, and give themselves up to reflection on the events, duties &c., of the twenty-four hours next preceding. At the close of this unbroken silence, which usually lasted five minutes, any pupil was liable to be called upon to relate the recitations and events of the preceding day, in their proper order and sequence.

In commencing this school, in his native town, Dr. Alcott had other, and very exalted ulterior aims. His warm heart embraced no less

than the whole of his townsmen. These he meant to enlighten, elevate, and change, until Wolcott should become, instead of a rude, unenlightened, obscure place, a miniature Switzerland.

But his pulmonary difficulties, which had been for ten years increasing upon him, aggravated, no doubt, by hard study, improper diet, and other irregularities of the preceding winter, now became threatening in the extreme. Besides a severe cough and great emaciation, he was followed by hectic fever and the most exhausting and discouraging perspirations. He fought bravely to the last moment; but was compelled to quit the field and relinquish for the present all hopes of accomplishing his mission.

For a short time he followed the soundest medical advice he could obtain. He kept quiet, took a little medicine, ate nutritious food, and when his strength would permit, breathed pure air. This course was at length changed for one of greater activity, and less stimulus. He abandoned medicine, adopted, for a time, the "starvation" system, or nearly that, and threw himself, by such aids as he could obtain, into the fields and woods, and wandered among the hills and mountains.

In the autumn he was evidently better. He was able to perform light horticultural labors a few hours of the day, and to ride on horseback. For six months he rode on horseback almost daily, as a sort of journeyman physician; at the end of which period he commenced the practice of medicine on his own responsibility, in the same place where he had last labored, and where he was born—still continuing to make his professional visits on horseback.

His hopes of reforming his native town now revived. He not only practiced medicine, but took a deep interest in the moral and intellectual condition of the people. He superintended a Sabbath School; aided in the examination of the public school teachers; held teachers' meetings, in "his own hired house," &c., &c. Not Oberlin himself in his beloved Ban de La Roche, had purer or more benevolent or more exalted purposes.

As a member of the prudential committee on common schools, he was active, efficient, and highly useful. He was, in fact, the soul of the board. If a teacher was to be examined, it was under his direction and eye; if the schools were to be visited officially, he was always on hand to fulfill the public expectation; if the teachers were to convene weekly, for mutual improvement, it was by his suggestion and at his house. If a new school book was needed, he was consulted. His counsels were often regarded as decisive. No time or means which did not interfere with his professional duties, was grudged, when he had the slightest hope of promoting the public good.

Occasionally however, as might have been expected, his zeal outran his knowledge, and his movements were regretted. Cardell's "Jack Halyard," for example, was adopted for a class-book in reading for *all the classes* in the schools; when it *should* have been used by those of a certain stage of progress only. But like Goldsmith's village schoolmaster, "e'en his failings leaned to virtue's side," and were soon forgotten.

We have seen something of his desire for public improvement in his attempt to form a youthful library. While teaching a public school, he was in the habit of collecting a small library of useful books for the young, which he used, during the term, as a school library—giving away the volumes at the close of the term, to his pupils. It does not appear that, at this early period, the subject of school libraries had ever been agitated; but here was at least the idea in embryo.

As soon as he was fairly established as a physician, he began to collect a library for the town. Its volumes were loaned, from time to time, to such persons as had already imbibed a taste for reading; and doubtless had a good influence. But the plan was so troublesome that he soon abandoned it; and in his stead prevailed with his friends and townsmen to establish a public town library on the ruins of the old one already mentioned.

He had already begun to write for the newspapers, on various subjects, particularly on common school education. A long and stormy series had been published—though in an uncouth and somewhat bombastic style—in the *Columbian Register* of New Haven, as early as 1823. Several shorter series on the same subject appeared in this and other papers during the years 1826 and 1827. The habit was not wholly discontinued while he was pursuing the practice of medicine and surgery. Among his contributions of this sort, between the years 1826 and 1829, were a number of articles in the *Boston Journal of Education*, then under the care of Mr. William Russell.

A correspondence was also opened about this time, with Mr. Russell, as well as with Rev. Samuel J. May, of Brooklyn, in Connecticut, and several other warm friends of educational improvement, in different parts of the last mentioned state, particularly in Hartford. This correspondence was valuable as an aid in maturing his own views, and those of others.

On entering the fourth year of his medical practice, he found his health so much improved that he volunteered to return to teaching. This was in the autumn of 1829. In less than two weeks he was teaching a district school in the adjoining town of Southington.

His school, though in a somewhat remote corner of the town, was large, and made up of rather heterogeneous materials. Here he pursued his improved methods of teaching without molestation. There were a few complaints about too rigid discipline; but in general, his course met with approbation. In the method of teaching English grammar, especially Etymology, he even made large advances. This method was published both in the *Journal of Education* and the *Confessions of a Schoolmaster*; but they were so novel, and yet so important, that teachers and friends of education who have not seen either of these works, will doubtless be glad to read a brief description of them. The following, for example, was his method of teaching the definition of the verb.

Without any preliminary information with regard to what he was about to do, he would ask his pupils to take their slates and pencils,—or pen and paper, if more convenient—and be ready to attend to his direction. Then, stamping on the floor with his foot, or clapping his hands, he would require them to write down what they saw him do. When this was done, he would perform some other common action, such as whistling, hopping, jumping, coughing, laughing, or singing, and tell them to write again. When he had proceeded far enough for a single lesson, he would tell them, one by one, to read aloud what they had written. Some would be found to have expressed the action, as *stamping*, in different words, or in more than one word; but in general they were found to have seized the idea; and after a few attempts they would succeed in writing the proper words very readily. “Now,” he would say, “what have you been doing?” The reply would be various, according to the genius of the pupil; but, by cross questions, he would usually soon find they had taken hold of the main idea, viz., that the words they had written described actions. When the point was fairly secured, he would add: “These words, which you have written, are *verbs*.” “Now,” he would ask, “what is a verb?” Nor would he be satisfied till he found they perfectly understood the matter. Such a definition is never forgotten.

He did not always commence with the names of *actions* or verbs, but oftener with *nouns* or the names of *things*. In that case he would set them first to writing down the names of all the things in the room, or in their father’s garden, or in the road between that and the school-house. The names of actions came next; then substitutes for names, or pronouns. For this last, and indeed, for all the parts of speech, and for most of their divisions and subdivisions, he had his peculiar methods.

His first etymological course of teaching on this plan was made as an experiment. It was in the depth of a very cold winter, and some

of the pupils, among whom was one female, had to walk a mile or more, in deep snow. The proposal made by the teacher was, that they should come to the school room at sunrise, and remain an hour. The course was to consist of ten lessons. The class consisted of ten individuals, and not one of them failed of attending punctually from the beginning to the end of the course. Their progress was respectable. They acquired as much solid knowledge on this subject, during the ten lessons of an hour each, as is usually acquired in a whole term on the ordinary plan.

In the progress of the winter he made a successful attempt to convene teachers, one or two evenings in a week, for mutual improvement. They were some eight or ten in number. One was a female. They read such works as Hall's "Lectures on School-Keeping," and the "District School as it was," and made their comments. They also gave an account, mutually, of their experience and progress as instructors.

The impression made by these labors was deep and abiding, but it slowly impaired his health and depressed his spirits; and, being fearful of a relapse of his pulmonary tendencies he abandoned, for a time, all hope of teaching permanently.

His plan now was to find, if possible, a manual labor school, where he might study a little more thoroughly his profession, at little, if any expense. But, as it appeared, on inquiry, that nothing had yet been done, he gave up the pursuit, and concluded to labor on the farm for the summer, near New Haven.

But just as he was settling down on the farm, he had occasion to be in Hartford, where, to his surprise, he met Rev. Wm. C. Woodbridge, who had returned from Europe; and though in feeble health, was endeavoring to rouse the attention of a few friends of education to the necessity of forming a school for teachers, on the plan of Mr. Fellenberg's school, in Hofwyl, which he had been for some time studying. Mr. Woodbridge inquired of Dr. Alcott what he considered the capital error of modern education. "The custom of pushing the cultivation of the intellect at the expense of health and morals," was the reply. This question and reply laid the foundation of an acquaintance and friendship that was as lasting as the life of the parties.

It was not difficult for Dr. Alcott to yield so much of his own individuality of opinion and purpose as to become an assistant to Mr. Woodbridge in his endeavors to effect his purpose of establishing, somewhere in the vicinity of Hartford, a miniature Fellenberg school. He had unbounded confidence in the integrity and plans of Mr. Woodbridge, and high hopes of his success; and of becoming himself a

Vehrli in the new institution. So great was this confidence that though encumbered with a debt of some twelve or fifteen hundred dollars, which he had contracted in order to establish himself in the practice of medicine, and which he had not yet been able, in any part, to cancel, he consented, with the permission of his creditors, to labor for a year or two with Mr. Woodbridge, at the very moderate compensation of twelve dollars a month; which would just clothe him, and pay the annual interest of his debt. And even when, sometime afterward, he had the offer of a school in an adjacent town at \$300 a year—an offer which two years before he would have accepted with all his heart—he only required that Mr. Woodbridge should raise his wages from twelve to fifteen dollars. This is mentioned to shew his devotion, at this time, to the cause of common school improvement.

His employments with Mr. Woodbridge were at first various; for such was his hope of the future, that he was content for the present with "small things,"—the preparation of a map, the correction of a portion of geography, or the preparation of an essay or a review. Mr. Woodbridge not only sanctioned but encouraged the continuance of his appeals to the friends of common schools through the periodicals. He also made frequent and persevering excursions into the surrounding country towns to examine their schools, and report concerning them in the papers and journals. The press teemed with his articles; especially the Connecticut Observer and Hartford Courant. One very substantial and elaborate review of a report on the Manual Labor School of Pennsylvania—the product of his pen—appeared about this time, which met with much favor, and was quoted by foreign writers.

While associated with Mr. Woodbridge he not only made the means of elevating the common schools his constant study, but in concert with him, laid many plans for the advancement of the cause. He conceived the idea of establishing a journal of education, but his own and Mr. Woodbridge's indigence, and his own great inexperience and general diffidence, prevented. He was more successful, however, than formerly, in his attempts to rouse public inquiry on the subject, by his contributions to the periodical press, and by his pedestrian excursions, and occasional conversations and lectures.

It was during this period, that is, the years 1830 and 1831, that he prepared, and on sundry occasions delivered his Essay on the Construction of School Houses, to which the American Institute of Instruction, in the autumn of 1831, awarded a premium, and which led the way to that large and thorough improvement in this department, which is now going on in this country and elsewhere. He also wrote

and presented to the same body an essay on penmanship; which, though it did not obtain the premium, was deemed second in point of excellence, was recommended to be published, and was widely circulated.

One field of labor, in which he was wont to engage, has been thus far unintentionally omitted. The public common school fund in Connecticut had at this time become so large that its increase, as apportioned and applied to common schools, was beginning to be felt to be an evil rather than a blessing. It was sufficient to pay the teachers for a few months of the year, and the parents had almost ceased to take a personal interest in their management and general conduct. The late Mr. Gallaudet, Hon. Roger M. Sherman, Hon. Hawley Olmsted, Mr. Woodbridge, &c., saw the necessity of forming a state society for the improvement of common schools, in which this subject and other topics should be freely discussed. Such a society had been actually formed, when Dr. Alcott and Mr. Woodbridge became associated; and had held several meetings. Into this movement Dr. Alcott entered with all his heart, and he did much to sustain it.

A history of the first public school in Hartford, in which some recent advances had been made, a volume of a hundred pages or so, was written by him about this time, and also a volume of nearly the same size, entitled a Word to Teachers. They were crude productions, but not devoid of a certain kind of merit, in that they were highly practical. But his chief forte, in writing, was the newspaper; for if its style was not more elegant,—it was more racy and spirited. It is believed that his essays in conjunction with the labors of others, had much influence not only in New England but throughout the United States.

But the most important of all his numerous avocations, at this period, was his travels for the purpose of collecting facts concerning schools. When Mr. Woodbridge could spare him, and when, too, his health became somewhat impaired by too much confinement to the desk, he would sally forth on one of these expeditions, on which he was at times absent several weeks.

It may not be uninteresting to insert, in this place, an almost exact copy of one of these records, not only as a literary curiosity, but as an illustration of the character of its recorder, and his zeal for his cause. It relates to the schools of Tolland, the shire town of the county of the same name, in Connecticut. The first was made in summer.

Here is the *key*, as he terms it, to what follows under II:

"I. KEY TO THE CHART OF TOLLAND DISTRICT SCHOOLS, THIRTEEN IN NUMBER.

- A. Location of the school house ; arrangement and scenery around it, &c.
- B. Internal arrangement and furniture.
- C. a, No. of pupils in attendance, between the ages of two and four years ; b, No. between four and eight ; c, No. between eight and sixteen ; d, No. over sixteen ; e, whole No. in the instructor's record, or roll ; f, average No. in attendance the present season ; g, No. in attendance of each sex ; h, No. between four and sixteen residing in the district.
- D. No. of classes in the school, and No. in each class.
- E. No. of children in the district who attend no school at all.
- F. Age of the instructor, Instructor's Experience, Compensation, Residence, Education, &c.
- G. No. of months in which the school is kept, during each summer and winter.
- H. Branches pursued.
- I. Books used—what editions, &c.
- J. Is each pupil well supplied with Books? &c.
- K. Changes of Class Books.
- L. Maps, Globes, Apparatus, and Libraries.
- M. Age at which each elementary study is commenced.
- N. Physical Education.
- O. Religious Instruction.
- P. Does the Instructor have control over his pupils beyond the school room?
- Q. Manner of defraying the expenses of the school.
- R. Methods of conducting, governing, and teaching the school, especially where any improvement is visible.
- S. Peculiarities.
- T. Discipline.
- U. Emulation.
- V. Books, Periodicals, &c., with hands of parents, teachers, committees, or pupils, such as are calculated to throw light on the subject of education.
- W. Educational Anecdotes.

NOTE. Blanks imply an absence of all information on a given subject, at least when Dr. Alcott was present.

II. CHART OF THE TOLLAND SCHOOLS IN 1831.

DIST. NO. 1.—A. In the thickest settled part of Tolland village, close by the road-side. A high school kept in the upper story.

B. Large room, well lighted, stove, seats with backs, desks attached to the walls, entry and closet as usual—very small.

C. a, 4 ; b, 20 ; c, 12 ; d,— ; e, 52 ; f, 35 ; g, 15 m., 21 fem. ; h, 72.

D. Eight. 1st, 5 ; 2d, 7 ; 3d, 6 ; 4th, 3 ; 5th, 12 ; 6th, 4 ; 7th, 2 ; 8th,

F. Instructor, about 28 ; native of Somers, Conn. She has taught six or eight successive seasons ; taught last winter in No. 12 ; always boards around the district ; wages of male teachers \$12 to \$16 a month ; females, \$1 to \$1.25 a week.

G. Four months in summer and four in winter—rarely more.

H. Spelling, Reading, Defining, Writing, Arithmetic, Grammar and Geography.

I. Webster's American Spelling Book, New Testament, Easy Lessons, Scott's Lessons, English Reader, Colburn's Arithmetic, Murray's English Grammar and Exercises, Daboll's Arithmetic, Woodbridge and Olney's Geography, Walker's and Perry's Dictionaries.

J. Very poorly supplied.

K. A few recent changes.

M. Grammar at about twelve years ; geography a little earlier.

N. Knitting and Sewing. All have a short recess each half day, with half an hour or an hour at noon.

R. The pupils read, spell, recite pauses, abbreviations, &c. ; but the whole appears to be an unmeaning, and mechanical process. No practical use is made of the abbreviations, pauses, &c., nor to emphasis, cadence, inflection, tone, enunciation, loudness, slowness, distinctness, &c. Nearly all is done in a monotonous, unmeaning manner, with the exception of Grammar and Geography.

T. Good, though rather rigid ; a large rod used.

U. In full force ; the rod in one hand—sugar, toys, and medals, in the other.

V. None taken.

DIST. NO. 2.—A. Situated by the road-side, in an unpleasant situation.

B. Large room, well lighted, stove, seats with backs, good entrance.

C. a, — ; b, 13 ; c, 2 ; d, — ; e, 25 ; f, 20 ; g, 7 m., 8 fem. ; h, 50.

D. Four. 1st, 2 ; 2d, 5 ; 3d, 5 ; 4th, 2 ; and 1 in the Alphabet.

E. Instructor about 30 ; Native of Tolland ; has taught once before, but not in this district ; compensation, 83 cents a week, for three months, and boards round the district ; male instructor four months last winter, at \$12 a month.

G. Three to three and a half months in winter, and three in summer.

H. Spelling and Reading ; in winter, Writing, Arithmetic, Grammar, and Geography.
I. Webster's American Spelling Book, Testament, American Preceptor, and English Reader ; in winter are added Daboll's Arithmetic, Murray's Grammar, and Woodbridge's Geography.

J. Not very well supplied.

N. Knitting, Sewing, &c., with the usual recesses.

Q. In winter from the school fund ; in summer solely by subscription.

R. Nearly as in District No. 1, only rather worse.

T. Greatly defective—worse than in No. 1. A large ferule in school.

U. Nothing done to stimulate in any way, except that the instructor carries a rod about the room.

DIST. No. 3.—A. Situated near a rivulet contiguous to a garden, in a very romantic spot, with a beautiful grove at only a little distance.

B. Large, well lighted, a good stove, seats with backs, desks as usual.

C. a, 3 ; b, 5 ; c, 2 ; d, — ; e, 14 ; f, 10 ; g, 3 m., 6 fem. ; h, 26.

D. Pupils read separately—in classes. Two in the Alphabet.

E. Many of the pupils of the district attend school only in the winter.

F. Instructor, 21 ; inhabitant of Springfield, Mass ; never taught before ; compensation, 50 cents a week and board ; compensation varies in summer, in this district, from 50 to 67 cents a week, and board ; in winter, it is from \$8 to \$10 a month, board around as before.

G. Three to three and a half months in winter ; from three to four in summer. This season three and a half months.

H. Spelling and Reading in summer ; in winter are added Writing, Arithmetic, Grammar, and Geography.

I. Webster's American Spelling Book, Testament, American Preceptor ; in winter, Daboll, Woodbridge and Murray.

J. Not well supplied.

N. Knitting and Sewing, with the usual recesses.

Q. In winter by fund ; in summer by subscription.

R. Much as in Dist. No. 1.

T. Tolerable ; a rod.

U. Emulation used, though not largely.

DIST. No. 4.—A. House quite retired and well secured from bleak winds, but largely exposed to the sun.

B. Large room, with entrance and closet, house old, well lighted, stove, one seat with back, desks as usual.

C. a, 1 ; b, 11 ; c, 7 ; d, — ; e, 28 ; f, 20 ; g, 7 m., 12 fem. ; h, 47.

D. Five. 1st, 4 ; 2d, 4 ; 3d, 2 ; 4th, 3 ; 5th, 2 ; 4, not classed.

F. Instructor, about 19 ; native of Tolland ; never taught before ; compensation 67 cents a week, for twelve weeks ; usual price of teaching in this district, 75 cents a week in summer, \$10 to \$12 a month in winter, and board round as usual.

G. Three to four months in winter, rarely over three in summer.

H. Spelling, Reading, and Writing ; in winter, Arithmetic, Geography and Grammar are added, but they are not permitted at all in the summer.

I. Webster's American Spelling Book ; Murray's English Reader ; Easy Lessons ; Bible, morning and evening. In winter, Daboll, Woodbridge and Murray.

N. Knitting and Sewing, with hat braiding in two instances, and the usual recesses.

O. None unless prayer and this uncertain.

P. Public opinion opposed to any such thing.

Q. In winter from the school fund ; in summer from the same, and a subscription.

R. Much as in No. 1, except that the teacher suffers herself to be constantly interrupted by calls, during all her varied duties and exercises.

S. The letter q, was called *cufe*, both by teacher and pupils.

T. Tolerable. Rod.

U. In full force.

W. During my visit to this school, the instructor and a first class of girls were put to the blush by reading from Scott's Lessons a sentence in a dialogue, the purport of which was, "that nobody thinks of marrying a woman now-a-days, unless she bring him some property, besides a petticoat."

DIST. No. 5.—A. House near several dwellings with outhouses gone to decay, and on a very public road.

B. Large enough, well lighted, stove, entry and closet, desks as usual, seats have no back.

C. a, 5 ; b, 11 ; c, 3 ; d, — ; e, 22 ; f, 18 ; g, about an equal number of each ; h, 30.

D. Five. 1st, 3 ; 2d, 5 ; 3d, 3 ; 4th, 2 ; 5th, 3 ; and 3 in Alphabet.

E. Many attend only in the winter, and some that attend very little even then.

F. Instructor 30. Native of the district. Has recently taught the same school twice before. Receives \$1 a week and boards herself ! In winter the usual terms are \$8 to \$10 a month and board, as usual.

G. Three months in winter, and three to three and a half in summer; present is about three and half.

H. Spelling and Reading; in winter, Writing, Arithmetic, Grammar and Geography.

I. Webster's American Spelling Book, Webster's Elements of Useful Knowledge, American Preceptor, Testament; in winter, Woodbridge, Daboll and Murray.

J. Well supplied, except the smallest pupils.

N. Knitting and Sewing, and recesses.

Q. In winter from the fund; in summer by subscription. This season \$5 subscribed by those not intimately concerned, in order to prevent a failure.

R. Nearly as in District No. 8.

T. Tolerable, without any rod.

U. In full force.

W. The paupers of Tolland are received into the school, whenever there is any money subscribed on their account; but the present season, though there are seven of them between the ages of 4 and 16, they are excluded for want of means of support!

DIST. No. 6.—A. A tolerable house, situated in a retired spot, on the banks of the Willimantic river, near the junction of four towns, and belongs to them all.

B. A very commodious room, stove, desks as usual, one seat only with back.

C. a,—; b, 7; h, 19.

F. Instructor, a native of Willington, about 25 years of age; never taught before; Compensation, 75 cents a week and board; Price in winter, \$10 to \$13 a month and board.

G. Three to three and a half months of each season; this summer only three.

H. Spelling and Reading only; in winter, Writing, Arithmetic, Grammar and Geography.

I. Same as in District No. 2.

J. Tolerable supply.

K. No changes of importance.

N. Knitting, Sewing, &c.

O. Catechising has been begun by the present teacher, but the people are dissatisfied with it.

Q. From the fund in winter; in summer from the fund, so far as the towns of Mansfield and Willington are concerned; and by subscription on the part of Tolland and Coventry.

R. Nearly as in No. 1.

T. Tolerable, no rod.

U. In full force.

W. A pupil read for his lesson about 3 pages from the English Reader, including probably about 500 words, of which meaning he was ignorant. Another read a piece from the American Preceptor, including about 300 words, of similar character.

DIST. No. 7 AND 9.—Vacant this season. They have recently been united. Have a good house, well lighted, in a most retired, shady, and delightful situation, but no stove, and very indifferent benches. Children in the two districts between 4 and 16, in all 38. A few attend the other schools, but they are generally at work, or in idleness and mischief.

DIST. No. 8.—A. In a cold bleak place; no trees nor even any outhouses near it; in contact with the public road and well cultivated fields.

B. School room of middle size, with a small closet, well lighted, only one seat has a back to it, desks as usual.

C. a, 6; b, 9; c, 4; d, —; e, 23; f, 18; g, equal number of each sex; h, 33.

D. Four. 1st, 3; 2d, 3; 3d, 2; 4th, 4; unclassified 7.

E. A few colored children attend a very little.

F. Instructor's age 20; compensation 75 cents a week; has taught once before; native of Tolland; general compensation here, \$10 a month in winter and board around the district, and 75 cents to \$1 a week in summer.

G. Three months in winter and three in summer—occasionally two weeks more.

H. Spelling and Reading, in summer; Writing, Arithmetic, Geography, and a *little* Grammar are added.

I. Webster's American Spelling Book, Testament, Easy Lessons; in winter they have Elements of Useful Knowledge, American Preceptor, and Daboll, Woodbridge and Murray.

J. Very poorly supplied.

K. Little change; the introduction of Leavitt's Easy Lessons was recent, and but few have yet purchased it.

L. None except in connection with Geography.

N. Knitting, Sewing and recesses.

P. Public opinion in general, opposed to any such control.

Q. Chiefly from the public fund or school money; but to what remains from this, after paying for the winter report, it is usual to add by subscription enough to pay for the summer school; this year it is done wholly by subscription—the funds having been spent in a winter school.

R. Much as it is in District No. 1.

T. Lax, though not the worst; rod in the school room.

U. In full operation.

DIST. No. 10.—A house comparatively large and exceedingly well ventilated; stove, but situated at the junction of four roads in a hollow; an additional building for entrance, closet, &c.

B. Large room, well lighted on four sides, desks as usual, seats with backs, outbuildings, &c.

C. a, 4; b, 12; c, 8; d,—; e, 42; f, 34; g, 8 m., 16 fem.; h, 51.

D. Six. 1st, 4; 2d, 3; 3d, 4; 4th, 2; 5th, 2; 6th, 3; not classed, 6.

F. Instructor, 26; native of Tolland; has taught twice before, last summer here; 83 cents a week and board for five months; in winter the compensation varies from \$10 to \$15 a month, with and without board.

G. From three to four months in summer, and from three to five in winter.

H. Spelling, Reading, Writing, and a little Grammar; in winter, Geography and Arithmetic are added.

I. Webster's American Spelling Book, New Testament, Scott's Lessons; in winter, Daboll, Woodbridge, and Olney's Geography, and Dowd's Grammar.

J. Not well supplied.

K. No changes for many years, except the introduction of Dowd's Grammar.

N. Knitting, Sewing, &c.

O. None but a frequent daily reading of the New Testament.

Q. In winter as usual, from the school fund, in summer chiefly by subscription; doors open to all who do not subscribe. This summer \$2 received for the fund.

R. Nearly as in No. 1, with one exception; though no pauses, &c., are recited, some good degree of attention is paid to the pauses. Instructor read *with* the scholars, which is not usual.

S. The letter q, called *cufe* by many of the pupils.

T. Discipline excellent.

U. In full force.

DIST. No. 11.—Vacant this summer. They have a bad house, badly situated, with bad seats, but a good stove, and 47 children between 4 and 16! The public money, and a small subscription was sufficient to continue a school last winter, three and a half months, at \$14 a month; but the people feel too poor to have a school this summer.

DIST. No. 12.—A. On a retired and sheltered road, but no accessible shade, and no outhouses.

B. Room 18 feet square, plastered and arched, well lighted and ventilated, desks as usual, seats for the small pupils with backs, stove, and a large entrance room for clothes, wood, &c.

C. a, 2; b, 17; c, 10; d,—; e, 35; f, 30; g, 8 m., 25 fem.; h, 38.

D. Five. 1st, 7; 2d, 7; 3d, 2; 4th, 4; 5th, 2; and 7 in the Alphabet.

F. Instructor, a native of Tolland, and very young; has taught the same school twice. Compensation, 75 cents a week, with board around in summer, and \$10 a month in winter.

G. In general three months in winter; but the *female* teacher of last winter, taught 4; in summer three to four; three the present season.

H. Spelling, Reading and Grammar; in winter are added Writing, Arithmetic and Geography.

I. Webster's American Spelling Book, Leavitt's Easy Lessons, Testament, American Preceptor, and Webster's Elements of Useful Knowledge; in winter, Dowd's and Murray's Grammar, Daboll, Woodbridge and Olney.

J. Well supplied, except with Easy Lessons.

K. No changes except the introduction of Easy Lessons and Dowd's Grammar.

M. Geography at 10; Grammar at 12.

N. Knitting, Sewing, and Marking, with the recesses.

P. Public opinion opposed to any control.

Q. By the school fund at present.

R. As in No. 1, or worse; the teacher, in teaching almost all things, was continually telling the pupil, by way of anticipation, as if to assist him; but really to produce injurious results: in one instance, in a single reading, the teacher told the pupil that no less than thirty-five words were by way of anticipation; in another instance no less than seventeen.

T. Discipline tolerable—aided however by the rod.

DIST. No. 13.—A. House on a public road, exposed to storm and sunshine; outhouses peculiarly exposed to general observation.

B. Room 16 to 18 feet square, with an addition for entrance, &c., well lighted, desks as usual, seats with backs and back shelves, with a stove; house exceedingly small for fifty pupils in winter.

C. a, 2; b, 16; c, 7; d,—; e, 40; f, 25; g, 3 m, 26 fem.; h, 48.

D. Five. 1st, 5; 2d, 5; 3d, 4; 4th, 2; 5th, 4; unclassified, 5.

F. Instructor, 30; native of Tolland; has taught six or eight seasons; compensation, 75 cents a week; the instructor here last summer, though she had taught twenty seasons, only received 75 cents a week; about \$10 a month in winter.

G. Generally three months in winter, and three in summer; this summer 3 3-4.

H. Spelling, Reading and Grammar; in winter, they add Writing, Arithmetic, and Geography.

I. Webster's American Spelling Book, American Preceptor, Testament, Easy Lessons, English Reader, Little's Lessons, Daboll, Woodbridge, and Murray.

J. Not very well.

K. Leavitt's Easy Lessons were introduced about a year ago.

N. Knitting, Sewing, and recesses.

R. Teacher's pronunciation very bad, as well as her enunciation; thus the diphthong *ou*, had, with her, a very flat, nasal sound. There was little if any real studying in the school. The books, instructor, methods, pupils, were all faulty. Amazing dullness!

S. Instructor thinks the New Testament an improper reading book for classes, because too difficult of comprehension.

T. Miserably lax in discipline, and yet the teacher is constantly governing, or at least wielding the rod. She has a most unhappy countenance and manner.

U. In full operation and force.

W. There was a girl in this school, fourteen years of age, who could only read in words of three syllables, and a very few of the simplest ready lessons. This is believed to be the consequence of parental neglect, as she has a brother in school who has just commenced and learns well. There was much of irregularity of attendance, here and elsewhere."

Appended to the chart was a sort of summary, not only of each district, but of the whole. Thus important general facts were educed, such as, for example, defective attendance. Thus, while there were in Tolland about five hundred children between the ages of four and sixteen years, the average attendance was only a little more than two hundred, or about two-fifths of the whole number; and the whole number on the teachers' records was only two hundred and eighty-eight. Such things, of course, ought not to be, even in midsummer, when many elder pupils were at work; and even when allowance is made for some thirty-five or forty at the high school. And then the disparity between the whole number of pupils enrolled, and the average attendance, is most astonishing.

But the object of the foregoing extract was not to bring out facts, at the present time, for the sake of the facts themselves, but rather to show the nature of these pioneer labors, to which a quarter of a century ago, this adventurer into the hitherto unexplored world of common schools, devoted himself; and also to show by a comparison of the past with the present, the degree of progress which has been actually obtained, even in this land of steady habits.

In 1831, Mr. Woodbridge, having removed to Boston, to superintend and edit the *Journal of Education*, which he had purchased of its first proprietor, urgently solicited Dr. Alcott to follow him. At first he hesitated, as it was feared, both by him and his friends, that a residence in the eastern part of Massachusetts would hasten apace his consumption. But having in 1830, abandoned all exciting food and drink, and adopted such other improved physical habits, as seemed to be imparting new energies to his frame, he at length

concluded to accept the proposals ; and very early in the year 1832, he removed to Boston.

The journey was made during a great snow storm in January, which before he reached Boston, turned into a severe drenching rain, in which by an accident to the stage coach he became so much exposed, that immediately after his arrival at Boston, he was taken ill with hemorrhage from the lungs, and other threatening symptoms. But under the care of Dr. J. C. Warren and good nursing, he recovered slowly, and was able to proceed to the duties which by his engagement with Mr. Woodbridge, were assigned him. From that day to this, a quarter of a century, he has, with the exception of one or two less formidable attacks, enjoyed a most surprising immunity from pulmonary disease ; nor has he often had so much as a common cold.

Dr. Alcott had formed many valuable acquaintances in Connecticut ; among them, Dr. John L. Comstock, Rev. Horace Hooker, Rev. C. A. Goodrich, Noah Webster, A. F. Wilcox, and Josiah Holbrook. He left the state with regret ; but with the expectation of returning to it in at most a few months. He did not however, return until after nearly twelve years.

Besides assisting Mr. Woodbridge in conducting the *Journal* (now *Annals*) of Education, by writing a large proportion of the articles on physical education, methods of instruction, &c., and a considerable number of book notices and reviews, he was for two years, 1832 and 1833, the practical editor of a *Children's Weekly* paper, started by Mr. Woodbridge and his aged father ; one of the objects of which was to serve as a reading book in common schools. The paper was called the *Juvenile Rambler*. It was perhaps, the first paper of the kind ever issued in this country ; and it so far succeeded as to be taken by several schools in very large numbers, and to be used with great satisfaction and profit. But it was troublesome to its editors, and at the end of two years was discontinued.

Dr. Alcott's labors in the cause of education, now became much more varied and extended. Besides assisting Mr. W., he wrote many fugitive pieces on various subjects connected with physical education and morals, and the advancement of common education—for amid all his miscellaneous labors he never lost sight for one moment, of the public school. He even lectured on this subject, not only before the American Institute of Instruction, the American Lyceum, and associations for educational improvement, but to teachers and parents, in various towns and cities of the commonwealth of Massachusetts, as well as of Rhode Island and Connecticut, and when he could

not in person attend public meetings of the friends of education, he often sent an essay to be read before them.

Among the latter was a tract entitled, "Missionaries of Education," which was subsequently published, and had a tolerably wide circulation. But his theory on this point, was evidently half a century in advance of the age, though it could not fail to recommend itself to all thinking men who took the trouble to peruse it, as replete with good sense, and dictated by a heart expanding with benevolence toward the rising generation.

In the years 1832 and 1833, he wrote a small volume for young men, entitled, "The Young Man's Guide," which besides being the first popular book of this class, that was perfectly reliable, and which expressed in a lucid manner, and in such a style as not to offend, some of the physiological dangers of young men, was written throughout in such a spirit of fatherly kindness, and such a simple style, as to win attention and secure an extensive sale. From the avails of this work, chiefly at four cents a copy, the author in the thirty-sixth year of his age, paid his debts, now of very long standing, and once more felt himself a free man. At the end of the year 1833, he was solicited by S. G. Goodrich to become the acting editor of a little monthly journal, which he had now been conducting one year, entitled Parley's Magazine. He had the editorial charge of this work four successive years; with how much of wisdom he conducted it, the public have long ago decided. He also edited "The People's Magazine," a semi-monthly work, for one year.

In 1834 came out the "House I Live in." Many of the ideas had indeed already appeared either in the *Juvenile Rambler* or elsewhere, but here they were incorporated into a volume. This was one of the most truly original works of the age. It is still popular with a certain class of people, and deservedly so; though it never had a rapid sale. It was re-published in England, and has been used in some places as a class-book in the schools.

"The Moral Reformer and Teacher in the Human Constitution," a monthly periodical devoted to the discussion of various topics in the department of physical education, was begun in 1835, without pecuniary means, and with only a single subscriber. It was indorsed however, by such men as the late talented Dr. John C. Warren; and had for nine years, under the various names of *Moral Reformer*, *Library of Health*, and *Teacher of Health*, a very considerable influence; though it was directly and indirectly a source of much pecuniary loss to the editor.

In 1836, the "Young Mother" appeared. This was a work on

physical education, for the female heads of families; and though not very original, was a work of much value. The "Young Wife," "Young Husband," "Young Woman's Guide," and "Young House-keeper," all of them possessing various degrees of merit, and written for the family, followed in the course of two or three years. So did the "Mother in Her Family," "Living on Small Means," "The Sabbath School as it should be," "Confessions of a Schoolmaster," &c., &c. "The Mother in Her Family" had a more limited circulation than most of Dr. Alcott's other family books, and perhaps deserved it. The author's attempt at imagination was an effort for which his peculiar education had not prepared him. It had merit, but it had many faults.

It is also worthy of remark that one or two of the forty or fifty volumes of various sizes which Dr. Alcott has written for the Sabbath School Libraries of various Christian denominations, though works of general worth and merit, are slightly open to the same criticism; while the greater part of this class of his works are, in every respect, as juvenile works, of a high order. A catalogue of all his works, of itself a literary curiosity, is annexed to this memoir.

His contributions to the periodical press, some of which have been alluded to, many of them to the Recorder, Watchman, and Traveler of Boston, and to the Boston Medical and Surgical Journal, have been almost innumerable. He has preserved copies of more than a thousand.

Dr. Alcott continued to labor on the Annals of Education, to the end of its career. After having long aided Mr. Woodbridge, sometimes for pay and sometimes without, and the failure of the latter's health in 1836, Dr. Alcott became his coadjutor, and then for several years his successor.

Probably no living individual has devoted more hours, during the last forty years, to education, especially that of the common school and the family, than Dr. Alcott. Not many days have passed during that time, in which he has not performed some labor in that field. Besides his writings, he has also spoken much and often; giving, usually, lectures either on hygiene to the scholars,* or on instruction and discipline, mainly for the benefit of teachers.

* He has related to us the following anecdotes, which may serve for illustrations. Not long since a little boy came running up to him, saying: "How do you do, Dr. A? When are you coming to see our school again?" "Have I ever visited your school?" was the reply. "Oh, yes sir, more than a year ago; and you said you would try to come again." "Where is your school?" Here in West Newton; don't you remember it? You told us about the *houses we lived in*; and about eating green apples; and I have not eaten a green apple since."

She wife of an eminent lawyer said to him very recently, "Do you remember a visit you

It is his habit, wherever he is, when circumstances will permit, in the most unceremonious manner to drop into schools, not only to see and hear, but with permission to be heard. Sometimes he remains five minutes; sometimes half an hour; and sometimes longer still. He has been known to visit twelve schools a day, and to address them twenty or thirty minutes each on an average. Oftener, however, he has visited about half that number daily; especially in country places. But even at the rate of four schools a day, for an hundred days only of each year, during the last twenty-five years, he must have visited ten thousand schools; and he has doubtless given more than half as many familiar lectures as he has made visits. This number does not include many more general and public lectures on health, education, temperance, &c.

There can be little doubt that Dr. Alcott, like some of our other self-made men among the corps of educational pioneers would have secured more worldly honors, and might have been more useful too, had he been privileged, in early life, with a regular academic and collegiate education. Conscious of his own want of mental discipline, and at the same time modest even to diffidence, he has not only neglected to seek office and positions of influence, but has actually shrunk from them.

He has, notwithstanding, at various times occupied such stations. Besides those already mentioned, he was an officer of the American Institute of Instruction, the American Lyceum, and the American School Society. He has been repeatedly asked to become a candidate for the superintendency of the Farm School near Boston, and to accept positions of educational or medical trust in Pennsylvania, Kentucky, Indiana, Florida, and elsewhere. As sub-committee on common schools in Hartford, he excited and directed the public mind in that city to an extent not easy of estimation. The invitations to attend Teachers' Institutes which he has received, and not nearly one tenth of which he has been able to accept, have been very numerous. From one superintendent alone, he has received more than twenty such invitations, sometimes with the request that he would occupy the place of the superintendent himself.

Dr. Alcott's whole life and labors have fitted him, in an uncommon degree, for a work which has in fact been his highest ambition for many years—that of a common school missionary. It is difficult to

once paid to Mr. Bellows' school in Taunton?" "Not particularly, madam," was the reply. "Well, Sir, you were there, and I was one of the pupils; and you said something about posture in sitting, that has probably been a means of prolonging my health, if not of saving me from a premature grave. The hereditary tendency of this young woman was to pulmonary consumption.

imagine any mode in which more beneficial results could be secured to the schools than by the varied and instructive lectures which he could deliver to teachers, parents, or pupils, and the innumerable hints and suggestions which his conversation would supply, on the subjects of hygiene, elementary instruction, and physical and moral training, to all, whether old or young, who are interested in schools and teaching. It is exceedingly to be desired that no fruits of so long and useful a life may perish in the grave with him.

CATALOGUE OF DR. WILLIAM A. ALCOTT'S PUBLICATIONS.

[The dates are usually those of the first publication of the respective volumes; the names are those, *where known*, of the present publishers. We have classified them merely for convenience.]

Class I. *Works more particularly designed for Schools and Teachers, and the Friends of Education.* 19 volumes.

PRIZE ESSAY ON THE CONSTRUCTION OF SCHOOL HOUSES. Boston; Hilliard, Gray, Little & Wilkins. 1831, pp. 66.

ESSAY ON PENMANSHIP. Boston; Little, Waite & Colman. 1831, pp. 24.

MISSIONARIES TO COMMON SCHOOLS. pp. 16.

HISTORICAL DESCRIPTION OF THE FIRST PUBLIC SCHOOL IN HARTFORD. Hartford, Ct.; D. F. Robinson & Co. 1832, pp. 108.

ESSAY ON THE IMPROVEMENT OF TOWNS AND VILLAGES. pp. 11.

THE JUVENILE RAMBLER, (a weekly periodical.) 2 Vols. quarto; Boston. 1832-1833, pp. 208 each.

A WORD TO TEACHERS. Boston; William D. Ticknor. 1833, pp. 84.

THE CONFESSIONS OF A SCHOOLMASTER, Revised Edition. Reading, Pa.; H. A. Lantz. 1856, pp. 309. Price 87 1-2 cents.

THE HOUSE I LIVE IN. Boston; C. D. Strong. 1856, pp. 280. New Edition. In all 13 editions. Price 50 cents.

THE LAWS OF HEALTH, OR A SEQUEL TO THE HOUSE I LIVE IN. Boston; John P. Jewett & Co. 1856, pp. 424.

SLATE AND BLACKBOARD EXERCISES FOR COMMON SCHOOLS. Reading, Pa.; H. A. Lantz. 1856, pp. about 120.

PARLEY'S MAGAZINE, (semi-monthly;) Vols. II, III, IV, and V. Boston. 1834, 1835, 1836, 1837; pp. 416 each.

THE ANNALS OF EDUCATION, (a monthly journal. Vols. VII, and VIII. Boston. 1837, 1838, pp. 800; 576 each.

PICTORIAL HISTORY OF THE UNITED STATES, by S. G. Goodrich. Phil. Sorin & Ball, and Samuel Agnew. 1844, pp. 354.

Class II. *Physiology, Physical Education, and Health.* 31 volumes.

RATIONAL VIEW OF THE ASIATIC CHOLERA. Boston; Clapp & Hull. 1832, pp. 36.

THE MORAL REFORMER, (monthly,) two volumes. Boston; Light & Stearns. 1835-1836 pp. each 384.

THE YOUNG MOTHER. Boston; C. D. Strong. 1836, pp. 336. 21st edition. 75 cents.

EARLY RISING. Boston; Light & Stearns. 1836, pp. 88.

ADDRESS BEFORE THE AM. PHYS. SOCIETY. Boston; Light & Stearns. 1837, pp. 36.

FIRST, SECOND AND THIRD ANNUAL REPORTS OF THE AM. PHYS. SOCIETY. Boston; 1837, 1838, 1839, pp. 148, 40, 32.

LIVING ON SMALL MEANS. Boston; Light & Stearns. 1837, pp. 134. Six editions.

NOTES TO ARMSTRONG ON HEALTH. Boston; G. W. Light. 1848, pp. 120.

THE LIBRARY OF HEALTH, (monthly,) six vols. Boston; G. W. Light. 1837, 1838, 1839, 1840, 1841, 1842, pp. 384 each.

THE MOTHER IN HER FAMILY. Boston; Weeks & Jordan. 1838, pp. 291. Three editions. Price 87 1-2 cents.

TEA AND COFFEE. Boston; G. W. Light. 1839, pp. 174. Twelve editions.

THE TEACHER OF HEALTH, (monthly.) Boston; D. S. King. 1843, pp. 384.

THE YOUNG HOUSEKEEPER. Boston; C. D. Strong. 1842, pp. 424. Twelve editions. Price 87 1-2 cents.

USE OF TOBACCO. Boston; G. W. Light. 1844, pp. 86. Fifteen editions.

WATER CURE FOR DEBILITATED YOUNG MEN. Boston; Bela Marsh. 1846, pp. 124.

THE VOICE OF SOLOMON TO YOUNG MEN. Hartford; D. B. Moseley. 1846, pp. 317.

THE MOTHER'S MEDICAL GUIDE. Boston; T. R. Marvin. 1848, pp. 322. Three editions. Price 75 cents.

THE YOUNG WOMAN'S BOOK OF HEALTH. New York; Miller, Orton & Mulligan. 1850, pp. 311. Two editions. Price 75 cents.

VEGETABLE DIET. New York; Fowler & Wells. 1853, pp. 312. Second edition. 75 cts.

LECTURES ON LIFE AND HEALTH. Boston; Phillips, Sampson & Co. 1843, pp. 500. Two editions. Price \$1.

PRIZE ESSAY ON TOBACCO. New York; Wm. Harned. 1823, pp. 30.

THE PHYSIOLOGY OF MARRIAGE. Boston; John P. Jewett & Co. 1855, pp. 254. Fifteen editions. Price 75 cents.

THE MORAL PHILOSOPHY OF COURTSHIP AND MARRIAGE. Boston; John P. Jewett & Co. 1857, pp. 300. Price 62 1-2 cents.

Class III. *Books for the Family and School Library.* 14 volumes.

HENRY AND ANNA, OR THE STORY OF THE MONEY BOX. Boston; Clapp & Broadus. 1834, pp. 66.

THE YOUNG MAN'S GUIDE. Boston; T. R. Marvin. 1833, pp. 392. Twenty-two editions. Price 62 1-2 cents.

THE PEOPLE'S MAGAZINE, (monthly.) Boston; Litty, Waite, Colman & Holden. 1834, pp. 192.

THE YOUNG WIFE. Boston; C. D. Strong. 1837, pp. 376. Fifteen editions. 75 cents.

THE YOUNG HUSBAND. Boston; C. D. Strong. 1838, pp. 388. Twelve editions. 75 cts.

THE YOUNG WOMAN'S GUIDE. Boston; Clark, Austin & Smith. 1839, pp. 356. Seventeen editions. Price 62 1-2 cents.

CHARLES HARTLAND, or the Village Missionary. Boston; Weeks, Jordan, & Co. 1839, pp. 191.

- MY PROGRESS IN ERROR. Boston; Gould & Lincoln. 1841, pp. 240.
 THE BOYS' GUIDE. Boston; Waite, Peirce & Co. 1844, pp. 180. Price 37 1-2 cents.
 THE GIFT BOOK FOR YOUNG WOMEN. New York; Derby, Jackson & Co. 1849, pp. 307.
 Price 75 cents.
 THE GIFT BOOK FOR YOUNG MEN. New York; Derby, Jackson & Co. 1850, pp. 312.
 Price 75 cents.
 LECTURES FOR THE FIRESIDE, ON THE TEN COMMANDMENTS. Rochester; E. Darrow.
 1850, pp. 336.
 THE MAN OF TWO WORLDS. Boston; D. S. King. 1842, pp. 193.
 ARVINE'S CYCLOPEDIA OF LITERATURE AND THE FINE ARTS. Boston; Gould & Lincoln.
 1852, pp. 698.

Class IV. *Books for the Sabbath School Library.* 44 volumes.

- THE SABBATH SCHOOL AS IT SHOULD BE. New York; Jonathan Leavitt. 1841, pp. 299.
 FIRST FOREIGN MISSION. Boston, (Mass.; Sabbath School Society.) 1834, pp. 148.
 SECOND FOREIGN MISSION. " " " 1835, " 173.
 STORY OF RUTH. " " " 1835, " 138.
 STORY OF THE PRODIGAL. " " " 1836, " 59.
 THE NOBLE PRINCE. " " " 1836, " 36.
 HAPPY FAMILY MADE HAPPIER. " " " 1836, " 89.
 LIFE OF PETER. " " " 1836, " 188.
 ADVENTURES OF LOT. " " " 1836, " 100.
 PETER PARLEY'S BIBLE GAZETTEER. New York; Freeman, Hunt & Co. 1836, pp. 192.
 " " " DICTIONARY. Philadelphia; Alexander Towne. 1836, pp. 208.
 THE SHEPHERD BOY AND THE GIANT. Boston; (Mass.; S. S. Society.) 1837, pp. 89.
 CEDARS OF LEBANON. " " " 1837, " 58.
 STORIES OF ELIOT. " " " 1838, " 138.
 THE YOUNG MISSIONARY. " " " 1836, " 100.
 RELIGION AT COURT. " " " 1839, " 90.
 JESUS AT NAIN. " " " 1839, " 72.
 MOUNT CARMEL. " " " 1839, " 48.
 ALWAYS DO RIGHT. " " " 1839, " 64.
 SKETCHES OF WILLIAM PENN. Roston; D. S. King. 1839, pp. 137.
 TRAVELS OF OUR SAVIOUR. Boston, (Mass.; Sabbath School Society.) 1840, pp. 311.
 TRUST IN THE LORD, OR ELIJAH AND THE RAVENS. Boston; D. S. King. 1841, " 35.
 PAUL'S SHIPWRECK. Boston, (Mass.; Sabbath School Society.) 1842, pp. 126.
 PAUL AT EPHESUS. " " " 1846, " 198.
 ANANIAS AND SAPPHIRA. New York; Lane & Tippett. 1844, pp. 72.
 ANNA THE PROPHETESS. " " " 1844, pp. 48.
 NO KING IN ISRAEL. " " " 2844, pp. 54.
 THE FORTY-TWO CHILDREN. " " " 1844, pp. 47.
 THE BELOVED PHYSICIAN. " " " 1845, pp. 179.
 THE FIERY CHARIOT. Boston, (Mass.; Sabbath School Society.) 1846, pp. 54.
 PHILIP THE EVANGELIST. New York; Lane & Tippett. 1846, pp. 85.
 THE FIERY FURNACE. " " " 1846, pp. 64.
 JEROBOAM. " " " 1846, pp. 85.
 THE EVENING RAMBLE. " Castleton & Phillips. 1854, pp. 41.
 SUNDAY AMONG THE PURITANS. " " " 1854, pp. 95.
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 THREE DAYS ON THE OHIO RIVER. New York; Carlton & Phillips. 1854, pp. 60.
 THE KITTEN IN THE WELL. " " " 1844, pp. 82.
 RAMBLES AT THE SOUTH. " " " 1854, pp. 196.
 THE YOUTH'S BOOK OF THE HAND. Boston, (Mass.; Sab. School Society.) 1856, pp. 198.
 HENRY'S BIRTH DAY. New York; Carlton & Phillips. 1856, pp. 159.
 LIFE OF ROBERT MORRISON. " " " 1856, pp. 132.
 TALL OAKS FROM LITTLE ACORNS. N. York; " 1856, pp. 369.

Whole number of volumes in all the four classes, 108.

VII. HISTORY OF COMMON SCHOOLS

IX

CONNECTICUT.

[The following article was originally prepared and published by the Editor of this Journal, when acting as Superintendent of Common Schools in Connecticut.]

PERIOD I.

ACTION OF THE TOWNS AND COLONY OF CONNECTICUT UP TO 1665.

THE outline and most of the essential features of the present system of common, or public schools, will be found in the practice of the first settlers of the several towns which composed the two original colonies of Connecticut and New Haven, before any express provision was made by general law for the regulation and support of schools or the bringing up of children. The first law on the subject did but little more than declare the motive, and make obligatory the practice which had grown up out of the character of the founders of these colonies, and the circumstances in which they were placed. They did not come here as isolated individuals, drawn together from widely separated homes, entertaining broad differences of opinion on all matters of civil and religious concernment, and kept together by the necessity of self-defense in the eager prosecution of some temporary but profitable adventure. They came after God had set them in families, and they brought with them the best pledges of good behavior, in the relations which father and mother, husband and wife, parents and children, neighbors and friends, establish. They came, with a foregone conclusion of permanence and with all the elements of the social state combined in vigorous activity—every man, expecting to find or make occupation in the way in which he had been trained. They came with earnest religious convictions, made more earnest by the trials of persecution; and the enjoyment of these convictions was a leading motive in their emigration hither. The fundamental articles of their religious creed that the Bible was the only authoritative expression of the divine will, and that every man was able to judge for himself in its interpretation, made schools necessary to bring all persons “to a knowledge of the Scriptures,” and an understanding “of the main grounds and principles of the Christian religion necessary to salva-

tion." The constitution of civil government, which they adopted from the outset, which declared all civil officers elective, and gave to every inhabitant who would take the oath of allegiance the right to vote and to be voted for, and which practically converted political society into a partnership, in which each member had the right to bind the whole firm, made universal education identical with self-preservation. But aside from these considerations, the natural and acknowledged leaders in this enterprise—the men who, by their religious character, wealth, social position, and previous experience in conducting large business operations, commanded public confidence in church and commonwealth, were educated men—as highly and thoroughly educated as the best endowed grammar schools in England could educate them at that period, and not a few of them had enjoyed the advantages of her great universities. These men would naturally seek for their own children the best opportunities of education which could be provided; and it is the crowning glory of these men, that, instead of sending their own children back to England to be educated in grammar schools and universities, they labored to establish free grammar schools and a college, here amid the stumps of the primeval forests; that, instead of setting up "family schools" and "select schools" for the ministers sons and the magistrates sons, the ministers and magistrates were found,—not only in town meeting, pleading for an allowance out of the common treasury for the support of a public or common school, and in some instances for a "free school,"—but among the families, entreating parents of all classes to send their children to the same school with their own. All this was done in advance of any legislation on the subject, as will be seen from the following facts gleaned from the early records of the several towns, or plantations.

The early records of the Town of Hartford are lost. The first mention of the school is in 1642, seven years after the first log-house was erected—when an appropriation of thirty pounds is settled upon it, not as a new thing, but as one of the established interests of the town—a thing to be looked after, as much as the roads and bridges, the support of public worship, and protection against the Indians. In April, 1643, at a general town meeting, it was ordered—

That Mr. Andrews should teach the children in the school one year next ensuing from the 25th of March, 1643, and that he shall have for his pains £16, 0, 0; and therefore the Townsmen shall go and inquire who will engage themselves to send their children; and all that do so, shall pay for one quarter, at the least, and for more if they do send them, after the proportion of twenty shillings the year, and if they go any weeks more than an even quarter, they shall pay six pence a week; and if any would send their children and are not able to pay for their teaching, they shall give notice of it to the Townsmen, and they shall pay it at the Town's charge; and Mr. Andrews shall keep the account between the children's schooling and himself, and send notice of the times of payments and

demand it; and if his wages do not come in, the Townsmen must collect and pay it; or if the engagements come not to sixteen pounds, then they shall pay what is wanting, at the Town's charges.

In February, 1648, the following action was had :

The necessities of the Town and the desires of many, calling for some provision to be made for the keeping of a school with better conveniency than hitherto hath been attained, the want whereof hath been both uncomfutable to those who have been employed in that service and prejudicial to the work under hand, which is looked upon as conducing much to the good of the present age, and that of the future ;

It was agreed and consented to by the Town, that Forty pounds shall be paid in the way of a rate to the Townsmen for the time being, for carrying on the said work ; which being considered to fall much short of attaining the end in building such House as may be suitable for the said employment.

It was agreed unto by the Town, that in case any other shall make such an addition to the said sum, that the work may be carried on and finished, either with timber or brick, as may be judged most convenient ; that the building so to be erected, shall not be diverted to any other use or employment, but in a way of schooling, without the consent of the parties that shall contribute. * * *

In a subsequent meeting the following vote was passed :

The Town chose Mr. Taleott, Mr. Fitch and Goodman Stebbins, John Barnard, as their Committee, to act for them, either in buying or building a house for a school-house ; and if they do agree to build, they are not to exceed the sum of money that was due to the Town from Mr. Goodwin ; and if they buy, they are not to exceed the sum of money due from Mr. Goodwin ; and the Town doth engage to stand what their Committee shall do in this business.

The mode of supporting the school in Hartford was adopted in the other towns of the colony of Connecticut,—it was made partly a charge on the general funds, or property of the town, and partly a rate bill, or tuition paid by the parents or guardians of the children who attend school, "paying alike to the head." The following vote was passed at a Town meeting in Wethersfield, held March 12th, 1658 :

It was ordered by the Town, that Mr. Thomas Lord should be schoolmaster for the year ensuing, and to have twenty-five pounds for the year, and also the use of the house lot and the use of the meadow as formerly ; and the twenty-five pounds is to be raised,—of the children eight shillings per head of such as come to school, and the remainder by rate of all the inhabitants made by the lists of estates.

In all of these and other entries on the early records of the towns, the name of the schoolmaster is introduced with the prefix which indicated a respect equal to that paid to the minister, or the magistrates ; and as evidence of this respect, it may be mentioned, that in the bill for fitting up the first meeting-house in Windsor, there is a separate item for wainscotting and elevating pews, to be occupied by the magistrates, the deacon's family, and the schoolmaster.

In April, 1646, Mr. Roger Ludlow, the highest legal authority in the colony, was requested to compile "a body of laws for the government of this commonwealth," which was not completed till May 1650, and is generally known as the code of 1650. It comprised, besides a complete codification of all the laws passed by the general court, and of such local practices as had grown up in any of the towns, which seemed worthy of adoption by the whole colony, many provis-

ions borrowed from the corresponding experience of Massachusetts, which seemed necessary to perfect the system ; and in framing these provisions in Massachusetts originally, there is good reason for believing Mr. Ludlow was concerned. In this code there are the following important enactments under the titles—CHILDREN and SCHOOLS, which remained with trifling modifications, and such only as were calculated to give them greater efficiency, on our statute book for one hundred and fifty years, until the act of 1792, and particularly the revision of the school law in 1801.

CHILDREN.

Forasmuch as the good education of children is of singular behoof and benefit to any commonwealth ; and whereas many parents, and masters are too indulgent and negligent of their duty in that kind—

It is therefore ordered by this court and the authority thereof, That the selectmen of every town in the several precincts and quarters where they dwell, shall have a vigilant eye over their brethren and neighbors, to see, first, that none of them shall suffer so much barbarism in any of their families, as not to endeavor to teach by themselves or others, their children and apprentices so much learning, as may enable them perfectly to read the English tongue, and knowledge of the capital laws, upon penalty of twenty shillings for each neglect therein ; also, that all masters of families, do, once a week, at least catechise their children and servants, in the grounds and principles of religion, and if any be unable to do so much, that then, at the least, they procure such children or apprentices to learn some short orthodox catechism, without book, that they may be able to answer to the questions that shall be propounded to them out of such catechisms by their parents or masters, or any of the selectmen, when they shall call them to a trial of what they have learned in this kind ; and further, that all parents and masters do breed and bring up their children and apprentices in some honest lawful calling, labor or employment, either in husbandry or some other trade profitable for themselves and the commonwealth, if they will not nor can not train them up in learning, to fit them for higher employments ; and if any of the selectmen, after admonition by them given to such masters of families, shall find them still negligent of their duty, in the particulars aforementioned, whereby children and servants become rude, stubborn and unruly, the said selectmen, with the help of two magistrates, shall take such children or apprentices from them, and place them with some masters,—boys till they come to twenty-one, and girls to eighteen years of age complete,—which will more strictly look unto and force them to submit unto government, according to the rules of this order, if by fair means and former instructions they will not be drawn unto it.

The following enactments constitute section 14 and 15 of the Capital Laws :

SEC. 14. If any child or children above sixteen years old and of sufficient understanding, shall curse or smite their natural father or mother, he or they shall be put to death ; unless it can be sufficiently testified, that the parents have been very unchristianly negligent in the education of such children, or so provoke them by extreme and cruel correction that they have been forced thereunto to preserve themselves from death, or maiming.

SEC. 15. If any man has a stubborn, or rebellious son of sufficient understanding and years, viz., sixteen years of age, which will not obey the voice of his father, or the voice of his mother, and that where they have chastized him, he will not hearken unto them ; then may his father or mother being his natural parents lay hold on him and bring him to the magistrates assembled in court, and testify unto them that their son is stubborn and rebellious, and will not obey their voice and chastisement, but lives in sundry notorious crimes, such a son shall be put to death.

SCHOOLS.

It being one chief project of that old deluder Satan, to keep men from the knowledge of the scriptures, as in former times, keeping them in an unknown tongue, so in these latter times, by persuading them from the use of tongues, so that at least, the true sense and meaning of the original might be clouded with false glosses of saint seeming deceivers; and that learning may not be buried in the grave of our forefathers, in church and commonwealth, the Lord assisting our endeavors:

It is therefore ordered by this court and authority thereof, That every township within this jurisdiction, after the Lord hath increased them, to the number of fifty householders, shall then forthwith appoint one within their town, to teach all such children, as shall resort to him, to write and read, whose wages shall be paid, either by the parents or masters of such children, or by the inhabitants in general, by way of supply, as the major part of those who order the prudentials of the town, shall appoint; provided, that those who send their children be not oppressed by paying more than they can have them taught for, in other towns.

And it is further ordered, That where any town shall increase to the number of one hundred families, or householders, they shall set up a grammar school, the masters thereof, being able to instruct youths, so far as they may be fitted for the university, and if any town neglect the performance hereof, above one year, then every such town shall pay five pounds per annum, to the next such school, till they shall perform this order.

The proposition concerning the maintenance* of scholars at Cambridge, made by the commissioners, is confirmed.

And it is ordered, That two men shall be appointed in every town within this jurisdiction, who shall demand what every family will give, and the same to be gathered and brought into some room, in March; and this to continue yearly, as it shall be considered by the commissioners.

In the revision of 1672, the above laws, respecting "children" and "schools," are re-enacted with a trifling variation in the phraseology, and the omission of the last clause respecting the college.

Before proceeding with the history of the legislation of the original colony of Connecticut, respecting education and the nurture of children, we will glance at the records of the colony of New Haven up to the union of the two colonies under the charter in 1665.

ACTION OF THE TOWN AND COLONY OF NEW HAVEN UP TO 1665.

The first settlement in the colony of New Haven was made at Quinnipiac (New Haven,) in 1638, and within a year, a transaction is recorded which, while it proves the existence of a school at that early period, also proclaims the protection which the first settlers extended to the indigent, and the desire to make elementary education universal.

* This "proposition concerning the maintenance of poor scholars at Cambridge," was presented to the Commissioners of the United Colonies at their meeting at Hartford, in Sept. 1644, by Rev. Mr. Shepard "and fully approved by them and agreed to be commended to the several general courts as a matter worthy of due consideration and entertainment for the advancement of learning, which we hope will be cheerfully embraced." Mr. Shepard, after requesting the Commissioners to consider "some way of comfortable maintenance for that school of the Prophets which now is," suggests that, "if therefore it were commended by you, and left to the freedom of every family which is able and willing to give, throughout the Plantations, to give yearly but the fourth part of a bushel of corn, or something equivalent thereto—and for this end if every minister were desired to stir up the hearts of the people once in the fittest season of the year, to be freely enlarged therein, and one or two faithful men appointed in each town, to receive and seasonably to send in what shall thus be given by them, it is conceived that as no man could feel any grievance hereby, so it would be a blessed means of comfortable provision for the diet of divers such students as may stand in need of some support, and be thought meet and worthy to be continued a fit season therein."

In 1639, Thomas Fugill is required by the court to keep Charles Higinson, an indented apprentice "at school one year ; or else to advantage him as much in his education, as a year's learning comes to."

At a General Court held on the 25th of the 12th mon., 1641, the following order was adopted :

It is ordered that a free school be set up in this town, and our pastor, Mr. Davenport together with the magistrates shall consider what yearly allowance is meet to be given to it out of the common stock of the town, and also what rules and orders are meet to be observed in and about the same.

Not content with an elementary school, within three years after the first log-house was built, a public grammar school was established in New Haven under the charge of Ezekiel Cheever, who was afterwards master of the Latin School in Boston. To this school the following order refers :

For the better training up of youth in this town that through God's blessing they may be fitted for public service hereafter, in church or commonwealth, it is ordered that a free school be set up, and the magistrates with the teaching elders are entreated to consider what rules and orders are meet to be observed and what allowance may be convenient for the schoolmasters care and pains, which shall be paid out of the town's stock.

Not content with establishing, what we should now call an elementary or primary, and a grammar or high school, the necessity of a still higher education for those who should aspire, or be summoned to posts of honor and trust, the colony of New Haven responded promptly to the proposition of the Commissioners, in 1644, to make an annual contribution to aid such children as should show the requisite talent, but whose parents were not able to support them at the college at Cambridge. The following order of the General Court, in November 1644, refers to this subject :

The proposition for the relief of poor scholars at the college at Cambridge, was fully approved of, and thereunto it was ordered that Joshua Atwater and William Davis shall receive of every one in this plantation, whose heart is willing to contribute thereunto a peck of wheat or the value of it.

At the next meeting of the court, "Mr. Atwater reported that he had sent forty bushels of wheat, the gift of New Haven, to the college."

This vote was renewed from year to year ; and we find from the records of 1647, that the Governor urged the prompt payment of this contribution as follows :

The Governor propounded that the college commissioners might be forthwith paid, and that considering the work is a service to Christ, to bring up young plants for his service, and besides it will be a reproach that it shall be said, New Haven is fallen off from this service.

In the same year, (1647,) in a vote concerning the distribution of home lots, it is added—"and also to consider and reserve what lot they shall see meet, and most commodious for a college, which they desire may be set up so soon as their ability will reach thereunto."

The records of the town of New Haven, from 1641 to 1660, are full of entries, respecting the appropriation of monies to teachers, and reports of committees on the subject of schools; and on those committees, we find either the governor, minister, magistrate, or deputies, always placed. Under date of Nov. 8, 1652, there are the following entries:

The Governor informed the court that the cause of calling this meeting is about a schoolmaster to let them know what he hath done in it, he hath written a letter to one Mr. Bower who is schoolmaster at Plymouth and desires to come into these parts to live, and another letter about one Rev. Mr. Landson a scholar, who he hears will take that employment upon him; how they will succeed he knows not, but now Mr. Janes is come to the town—and is willing to come hither again if he may have encouragement—what course had been taken to get one he was acquainted with, and if either of them come he must be entertained, but he said if another come, he should be willing to teach boys and girls to read and write if the town thought fit, and Mr. Janes being now present confirmed it.

The town generally was willing to encourage Mr. Janes his coming, and would allow him at least ten pounds a year out of the treasury, and the rest he might take of the parents of the children he teacheth by the quarter as he did before to make it up a comfortable maintainance and many of the town thought there would be need of two schoolmasters—for if a Latin schoolmaster come, it is feared he will be discouraged if many English scholars come to him. Mr. Janes seeing the town's willingness for his coming again, acknowledged their love and desired them to proceed no further in it at this time, for he was sure he shall get free where he is—and if he do he doubt it will not be before winter. Therefore no more was done in it at present.

The town was informed that there is some motion again on foot concerning the setting up of a college here at New Haven, which if attained will in all likelihood prove very beneficial to this place—but now it is only propounded to know the town's mind, and whether they are willing to further the work by bearing a meet proportion of charge, if the jurisdiction upon the proposal thereof shall see cause to carry it on, no man objected but all seemed willing, provided that the pay which they can raise here will do it.

That the matter of a college was thus early and seriously agitated in the colony of New Haven, is evident from a vote passed at a general court held at Guilford, June 28, 1652, in which "it is thought to be too great a charge for us of this jurisdiction to undergo alone." "But if Connecticut do join, the planters are generally willing to bear their just proportion for erecting and maintaining of a college there, (New Haven.)"

Gov. Eaton seems to have taken the lead, in connection with Mr. Davenport, in all movements connected with schools, or the college. At one time he reports his correspondence with a teacher in Wethersfield, then with one at old Plymouth, and again with one at Norwalk, "so that this town might never be without a sufficient schoolmaster." He seems to have been considerate of the health of the teachers, and proposes to excuse one, "whose health would not allow him to go on with the work of teaching"—which he seems to regard as more laborious than that of the ministry. On another occasion, he introduces to the court a schoolmaster, who has to come to treat about the school.

The committee in this case allow 30 shillings "toward his travel in coming here," and £20 a year, besides his board and lodging, and that he have liberty once a year to visit his friends, "which he proposes to be in the harvest time, and that his pay be such as wherewith he may buy books." These particulars are cited simply to show the constant and thoughtful interest taken by Governor Eaton, and all in authority with him, in the town, in every thing which concerned the school and the education of children. This interest was embodied in the Code of Laws, drawn up by Gov. Eaton in 1655, for the colony, (consisting of seven towns,) and published in London in 1656, with the following title—"New Haven's settling in New England and some laws for government, published for the use of that Colony." The following is the provision in this code respecting the education of children :

CHILDREN'S EDUCATION.

Whereas, too many parents and masters, either through an over tender respect to their own occasions and business, or not duly considering the good of their children and apprentices, have too much neglected duty in their education while they are young and capable of learning. It is ordered that the deputies for the particular court in each plantation within this jurisdiction for the time being; or where there are no such deputies, the constable, or other officer or officers in public trust, shall from time to time, have a vigilant eye over their brethren and neighbors within the limits of the said plantation, that all parents and masters, do duly endeavor, either by their own ability and labor, or by improving such school-master, or other helps and means as the plantation doth afford, or the family may conveniently provide, that all their children and apprentices, as they grow capable, may through God's blessing attain at least so much as to be able duly to read the Scriptures and other good and profitable printed books in the English tongue, being their native language, and in some competent measure to understand the main grounds and principles of Christian religion necessary to salvation. And to give a due answer to such plain and ordinary questions as may by the said deputies, officer or officers be propounded concerning the same. And when such deputies, or officers, whether by information or examination shall find any parent or master one or more negligent, he or they shall first give warning, and if thereupon due reformation follow, if the said parents or masters shall thenceforth seriously and constantly apply themselves to their duty in manner before expressed the former neglect may be passed by; but if not, then the said deputies and other officer or officers, shall three months after such warning, present each such negligent person or persons to the next plantation court, where every such delinquent, upon proof, shall be fined ten shillings to the plantation to be levied as other fines. And if in any plantation there be no such court kept for the present, in such case the constable, or other officer or officers warning such person or persons, before the freemen or so many of them as upon notice shall meet together and proving the neglect after warning, shall have power to levy the fine as aforesaid. But if in three months after that, there be no due care taken and continued for the education of such children or apprentices as aforesaid, the delinquent (without any further private warning,) shall be proceeded against as before, but the fine doubled. And lastly, if after the said warning and fines paid or levied, the said deputies, officer or officers, shall still find a continuance of the former negligence, if it be not obstinacy, so that such children or servants may be in danger to grow barbarous, rude, and stubborn, through ignorance, they shall give due and reasonable notice that every such parent and master be summoned to the next court of magistrates, who are to proceed as they find cause, either to a greater fine, taking security for due conformity to the scope and intent of this law, or may take such children or apprentices from such parents or masters, and place them for years, boys till they come to the age of one and twenty, and girls till they come

to the age of eighteen years, with such others who shall better educate and govern them, both for the public conveniency and for the particular good of the said children or apprentices.

Such is the origin of common schools in the original colonies of Connecticut and New Haven—the sources in common with the public schools of Massachusetts, of the wide spread and incalculable benefits of popular education in America. Without intending any invidious distinction as between the two colonies, or the founders of either of the towns of Hartford and New Haven, it is due to historical truth, to ascribe to the early, enlightened, and persevering labors of Theophilus Eaton and John Davenport, the credit of establishing in New Haven before it ceased to be an independent colony, *a system of public education*, at that time, without a parallel in any part of the world, and not surpassed in its universal application to all classes, rich and poor, at any period in the subsequent history of the State.

PERIOD II.

LEGISLATION OF THE COLONY OF CONNECTICUT FROM 1665 TO 1700.

On the union of the two colonies, under the charter and with the name of Connecticut, which was not consummated till 1665, the laws of New Haven colony were superseded by those of the original colony of Connecticut. Among the laws of Connecticut, extended by the union over the towns of New Haven colony, were several relating to the education of the Indians.

EDUCATION OF THE INDIANS.

The earliest legislation respecting the education of the aboriginal inhabitants of Connecticut, is found in the code of 1650, in these words :

This Court, judging it necessary that some means should be used to convey the light and knowledge of God and of his word to the Indians and natives among us, do order that one of the teaching elders of the churches in this jurisdiction, with the help of Thomas Stanton, shall be desired, twice at least in every year, to go amongst the neighboring Indians, and endeavor to make known to them the counsels of the Lord, and thereby to draw and stir them up to direct and order all their ways and conversations according to the rule of His word : And Mr. Governor, and Mr. Deputy, and the other magistrates are desired to take care to see the thing attended, and with their own presence, so far as may be convenient, encourage the same.

In September 1654, at the instance of the commissioners of the United Colonies, the court premising that under the former provisions little had been done owing to the want of an able interpreter, and “being earnestly desirous to promote and further, what lies in them, a work of that nature, wherein the glory of God and the everlasting welfare of those poor, lost, naked sons of Adam is so deeply concerned, do order, that Thomas Mynor, of Pequot, shall be

wrote unto from this court, and desired that he would forthwith send his son John Mynor to Hartford, where this court will provide for his maintenance and schooling, to the end he may be for the present assistant to such elder, elders, or others, as this court shall appoint, to interpret the things of God to them as he shall be directed, and in the meantime fit himself to be instrumental that way, as God shall fit and incline him thereto for the future."

In 1727, masters and mistresses of all Indian children were ordered to teach them to read English, and also to instruct them in the principles of the Christian faith, and the selectmen and grand jurors were to make diligent inquiry in this matter, and if any persons were found negligent they were to be fined, and the fine to be appropriated to the benefit of the school in the town where the offender lived.

Individual exertions for their benefit were numerous. Thus, in 1657, John Eliot preached to the Podunks in their own language; in 1660, Rev. Abraham Pierson, minister at Branford, began to preach to the Indians in that vicinity. Mr. Newton and Mr. Hooker, who were ministers of Farmington from 1648 to 1697, taught an Indian school in that town, and notices of such a school there are found in the colonial records from 1733 to 1736. In 1671, Rev. James Fitch, the first minister of Norwich, preached to the Mohegans; a grandson of Capt. John Mason commenced teaching them in English and the principles of religion about 1725, and the assembly granted him £15. The society for the propagation of the gospel in foreign parts, also hired a schoolmaster, and employed the Rev. Messrs. Adams and Jewett to preach to them, and when in 1752, the school and master's house needed repairs, the assembly granted £150 for that purpose; and in 1760-2, granted the schoolmaster, Clelland, a small addition to his salary. Other instances might be multiplied, but with a brief notice of the Institution founded by Rev. Eleazar Wheelock, we will dismiss the subject.

In December, 1743, a young Mohegan, who, during the great religious excitement of 1739-40, had been convinced of the truth of the Christian religion, applied for admission as a scholar, in the family of Rev. Mr. Wheelock, who was settled in Lebanon as a clergyman. This young man was Samson Occum, who afterwards became more famous than any other of his tribe, except, perhaps, the first Uncas. The case of Occum encouraged Wheelock to undertake the enterprise of an Indian school, to educate teachers and ministers who might be employed in the conversion of their

countrymen. He began in 1754 with two Delaware boys, and by 1762 his scholars amounted to over twenty. Mr. Joshua Moor bequeathed a house for their use, whence the institution took the name of "Moor's Indian Charity School." The Assembly granted a brief in 1763, and other donations were received from the pious and liberal in this country and in Europe. In 1770, the school was removed to Hanover, in New Hampshire, and incorporated by royal charter with Dartmouth College, it being thought that an Indian Seminary would flourish better there than in the more thickly settled Colony of Connecticut.

The laws regarding the education of the Indians remained on our statute book till 1821.

COUNTY GRAMMAR SCHOOLS.

In the revisions of the laws prepared under an order of the Court in May 1671, and approved in 1672, the provisions of the Connecticut code of 1650 are re-enacted, with a trifling variation in the phraseology, and a substitution of the following clause respecting a county grammar school, in place of the provision, respecting the college at Cambridge, and the grammar school in towns having one hundred families.

And it is further ordered, that in every county, there shall be set up and kept a grammar school for the use of the county, the master thereof being able to instruct youths, so far as they may be fitted for college.

There were at this date (1672,) four counties, viz., Hartford, New London, New Haven, and Fairfield, all constituted as judicial districts in 1666. To aid these town in carrying out the above provision of the school law, six hundred acres of land were appropriated by the General Court, at the same session, to each of the four county towns forever, "to be improved in the best manner that may be for the benefit of a grammar school in said county towns, and to no other use, or end whatever."

In 1677, at the May session, the following order was adopted :

Whereas, in the law, title *SCHOOLS*, it is ordered that every county town shall keep and maintain a Latin school in the said town, which is not fully attended to in some places, to move, excite, and stir up to the attendance of so wholesome an order.

It is ordered by this court, That if any county town, shall neglect to keep a Latin school according to order, there shall be paid a fine of ten pounds by the said county towns to the next town in that county that will engage and keep a Latin school in it, and so ten pounds annually till they shall come up to the attendance of this order. The grand-jury to make presentment of the breach of this order to the county court, of all such breaches as they shall find after September next.

It is also ordered by this court, Where schools are to be kept in any town, whether it be county town or otherwise, which shall be necessary to the maintaining the charge of such schools, it shall be raised upon the inhabitants by way of rate, except any town shall agree to some other way to raise the maintenance

of him they shall employ in the aforesaid works, any order to the contrary notwithstanding.

At the same session, it was ordered, that any town "that shall neglect to keep a school above three months in the year, shall forfeit five pounds for every defect, which said fine shall be paid toward the Latin school in their county. All breaches of this order to be taken notice of and presented by the grand-jury at every county court."

In the year following, in answer to a petition, "the court doth *recommend* it to the county court of Fairfield, to grant unto the inhabitants of Paquanake so much out of their county revenue by customs, fines, &c., so much as their rates shall come to, toward the maintenance of a grammar school at Fairfield, and also this court doth recommend it to the said court of Fairfield, to improve so much of their county revenues as they can spare besides, for the settlement and encouragement of a grammar school there."

Not content with providing grammar schools in the four county towns, the court endeavored, in 1690, to make two of these county schools of a higher order, and to declare them free.

This court considering the necessary and great advantage of good literature, *do order and appoint* that there shall be two good free schools kept and maintained in this colony for the schooling of all such children as shall come there after they can distinctly read the psalter, to be taught reading, writing, arithmetic, the Latin and English languages—the one at Hartford and the other at New Haven—the masters whereof shall be chosen by the magistrates and ministers of the said counties, and shall be inspected and displaced by them if they see cause—each master is to receive sixty pounds, thirty pounds of which is to be paid out of the county treasury, and the other thirty out of the school revenue given by particular persons or to be given for this use so far as it will extend, and the rest to be paid by the respective towns of Hartford and New Haven.

By the "school revenue given by particular persons" probably was intended the avails of the legacy left by Gov. Hopkins, in his will executed March 7, 1657, and the more extensive and special enjoyment of which avails by the towns of Hartford and New Haven, was probably the ground of imposing on them the obligation of maintaining the free schools of the higher character above ordered. As these schools, under many forms of administration have been maintained for nearly two centuries, much of the time as free, and always as public schools, and for most of that long period have provided facilities for preparing young men for college, in accordance with the will of Gov. Hopkins, a brief notice of this instrument, and the application of the bequests will be appropriate in this place as part of the educational history of the State.

EDUCATIONAL BEQUESTS OF GOVERNOR HOPKINS.

Among the first settlers of Hartford, distinguished alike by his private virtues, administrative talents, and large public spirit, was Edward

Hopkins. He was born near Shrewsbury England, in 1600, was educated in the Royal Free Grammar School of that town, and followed mercantile and commercial pursuits in London, by which he accumulated a considerable fortune. He became early in life a convert to the religious doctrines and observances of the Puritans, and in 1637 embarked his fortunes with a company of personal friends of the same faith, among whom was his father-in-law, Theophilus Eaton, and Rev. John Davenport, to find, if not a "refuge and receptacle for all sorts of consciences," at least an opportunity to worship God in their own way, and administer their civil affairs "more according to the rule of righteousness," than was then the fashion in the old world. After a brief sojourn at Boston, where he received many overtures to settle, he joined the settlement at Hartford, where his character and confidence in business immediately called him to share in the administration of public affairs. In the same year of his arrival, his name is found among the "committee" at the general court at Hartford, and we can easily suppose that he took part in that assembly of 1638, by which the "inhabitants and residents of Hartford, Windsor, and Wethersfield, did associate and conjoin themselves to be one Public State, or Commonwealth," "to maintain and preserve the liberty and purity of the Gospel of the Lord Jesus which we now profess," and "in civil affairs to be guided and governed according to such laws, rules, orders and decrees, as shall be made, ordered, and decreed," not by the king and council—not even by Royal Parliament, but by the General Court, elected by the whole body of freemen," in which "THE SUPREME POWER OF THE COMMONWEATH" was declared to reside. That constitution, was the nearest approach to a republican and organized democracy,—a democracy in which the people, and the whole people of the several towns acting through representatives in a legislature, elected twice a year by all the inhabitants thereof—which the world had yet seen. One feature of that constitution, besides its broad elective basis, I mean its federative character through the representation of the several towns, is believed to have suggested the distinguishing feature* of our National Government, which gives it a capacity of adaptation to the expanding wants of constant accessions of territory and population, without weakening the force of the general government at the extremities. To have had any agency in establishing that frame-work of government, should place the names of Ludlow, Haynes, Hooker, and Hopkins, into the imperishable keeping of history.

Mr. Hopkins was elected the first secretary of the colony of Connecticut, and deputy governor under the constitution of 1638, and

* Speech of Mr. Calhoun, in the Senate of U. S., Feb. 12th, 1847.

succeeded Mr. Haynes as governor in 1640, and again in 1646, 1648, 1650, 1652, and 1654.

In the alternate years he usually filled the office of deputy governor, and was frequently chosen assistant, and also one of the Commissioners of the United Colonies. In this last capacity, he signed, in behalf of Connecticut, the articles of Confederation in 1643, by which the colonies of Massachusetts, Plymouth, Connecticut, and New Haven, united for future help and strength under the name of the United Colonies of New England, and was president of that body, when a settlement was made with the Dutch, in 1650. In 1640, he was one of the committee appointed to negotiate the purchase from Mr. Fenwick, the post and appurtenances at Saybrook. And, indeed, there was hardly a committee raised on "the foreign relations" of the colony with Massachusetts, the Dutch, or the Indians, in which he did not occupy a prominent place, with Gov. Haynes, Capt. Mason, Mr. Whiting, and Mr. Wyllys. Like the other public men of the colony, in the intervals of public duties, he was diligently engaged in business on his own account.

Governor Hopkins went to England in 1653, on the occasion of his brother's death, with the intention of returning to his family and friends in New England; but he was, soon after his arrival, made warden of the fleet, (an office filled by his brother at the time of his decease,) commissioner of the admiralty, and member of parliament. Detained by these new duties, he sent for his family, and died in London in March or April, 1658. By his will, dated London, March 7, 1657, after disposing of much of his property in New England, in legacies, and particularly to the family of Rev. Mr. Hooker, his pastor, he makes the following bequests:

"And the residue of my estate there, [in New England,] I do hereby give and bequeath to my father, Theophilus Eaton, Esq., Mr. John Davenport, Mr. John Cullick and Mr. William Goodwin, in full assurance of their trust and faithfulness in disposing of it according to the true intent and purpose of me the said Edward Hopkins, which is to give some encouragement in those foreign plantations for the breeding up of hopeful youths both at the grammar school and college, for the public service of the country in future times."

"My farther mind and will is, that within six months after the decease of my wife, five hundred pounds be made over into New England, according to the advice of my loving friends, Major Robert Thomson and Mr. Francis Willoughby, and conveyed into the hands of the trustees beforementioned in further prosecution of the aforesaid public ends, which, in the simplicity of my heart, are for the upholding and promoting the kingdom of the Lord Jesus Christ in those distant parts of the earth."

As there is a very general misapprehension as to the language of Gov. Hopkins' will, and particularly as to the objects and places to which the bequests were to be applied, we give below the document entire from a copy in the library of Yale College—it being the in-

strument deposited with the town court of New Haven, in 1660 by Mr. John Davenport.

"The sovereign Lord of all creatures giving in evident and strong intimations, of his pleasure to call me out of this transitory life unto himself,—it is the desire of me, Edward Hopkins Esq., to be in readiness to attend his call in whatsoever hour he cometh,—both by leaving my soul in the hands of Jesus, who only gives boldness in that day, and delivers from the wrath to come,—and my body to comely burial, according to the discretion of my executors and overseers,—and also, by settling my small family, if it may be so called, in order, and in pursuance thereof, do thus dispose of the estate the Lord in mercy hath given me.

"First my will is, that my just debts may be first paid out of my entire estate, where the said debts shall be found justly due, viz., if any debts shall be found to be justly due in New England, then they be paid out of my estate there. And if any shall appear to be due here in Old England, that they be paid out of my estate here.

"As for my estate in New England, (the full account of which I left clear in book there, and the care and inspection whereof was committed to my loving friend, Mr. John Cullick,) I do in this manner dispose: Item, I do give and bequeath unto the eldest child of Mrs. Mary Newton, wife to Mr. Roger *Newton of Farmington, and daughter to Mr. Thomas Hooker, deceased, the sum of £30; as also the sum of £30 unto the eldest child of Mr. John Cullick by Elizabeth his present wife. Item, I do give and bequeath to Mrs. Sarah Wilson, the wife of Mr. John Wilson, preacher of the gospel, and daughter of my dear pastor, Mr. Hooker, my farm at Farmington, with all the houses, outhouses, buildings, lands, &c., belonging thereunto, to the use of her and the heirs of her body forever. I do also give unto Mrs. Susan Hooker, the relict of Mr. Thomas Hooker, all such debts as are due to me from her, upon the account I left in New England. And the residue of my estate there I do hereby give and bequeath to my father, Theophilus Eaton, Esq., Mr. John Davenport, Mr. John Cullick, and Mr. William Goodwin, in full assurance of their trust and faithfulness in disposing of it according to the true intent and purpose of me the said Edward Hopkins, which is, to give some encouragement in those foreign plantations for the breeding up of hopeful youths, both at the grammar school and college, for the public service of the country in future times. For the estate the Lord hath given me in *this* England, I thus dispose, and my will is, that £150 per annum be yearly paid per my executor to Mr. David Yale, brother to my dear distressed wife, for her comfortable maintenance, and to be disposed of per him for her good, she not being in a condition to manage it herself; † and I do heartily entreat him to be careful and tender over her; and my will is, that this be paid quarterly by £37.10 each quarter, and to continue to the end of the quarter after the death of my said wife, and that my executor give good security for a punctual performance hereof. My will also is, that the £30 given me per the will and testament of my brother Henry Hopkins, lately deceased, be given to our sister Mrs. Judith Eve, during her natural life, and that it be made up to £50 per annum during her life. I do give to my sister Mrs. Margaret Thomson the sum of £50, to be paid her within one year after my decease. I do give unto my nephew Henry Thomson £800, whereof £400 to be paid within sixteen months after my decease, and the other £400 within six months after the death of my wife. I do likewise

* First minister of Farmington.

† Governor Winthrop, senior, in his Journal of Occurrences in New England, under date of 1644, makes mention of Mrs. Hopkins in the following language:

"Mr. Hopkins, the governor of Hartford upon Connecticut, came to Boston, and brought his wife with him, (a godly young woman, and of special parts,) who was fallen into a sad infirmity upon her divers years, by occasion of her giving herself wholly to reading and writing, and had written many books. Her husband, being very loving and tender of her, was loath to grieve her; but he saw his error, when it was too late. For if she had attended her household affairs, and such things as belong to women, and not gone out of her way and calling to meddle in such things as are proper for men, whose minds are stronger, &c., she had kept her wits, and might have improved them usefully and honorably in the place God had set her. He brought her to Boston, and left her with her brother, one Mr. Yale, a merchant, to try what means might be had here for her. But no help could be had.—*Savage Ed. of Winthrop History of New England*, vol. ii., p. 216."

give and bequeath to my niece Katharine Thomson, but now Katharine James, (over and above the portion of £500 formerly given her,) £100. I do also give and bequeath unto my nieces Elizabeth and Patience Dalley, unto each of them, £200, provided they attend the direction of their brother or aunts, or such as are capable to give them advice in the dispose of themselves in marriage. I give unto my brother Mr. David Yale, £200; to my brother Mr. Thomas Yale, £200, and to my sister Mrs. Hannah Eaton, £200. My farther mind and will is, that, within six months after the decease of my wife, £500 be made over into New England, according to the advice of my loving friends Major Robert Thomson and Mr. Francis Willoughby, and conveyed into the hands of the trustees beforementioned, in farther prosecution of the aforesaid public ends, which, in the simplicity of my heart, are for the upholding and promoting the kingdom of the Lord Jesus Christ in those parts of the earth. I do further give unto my beloved wife a bed, with all the furniture belonging unto it, for herself to lie on, and another for the servant maid that waits on her, and £20 in plate for her present use, besides one-third part of all my household goods. I give unto Mr. John Davenport, Mr. Theophilus Eaton, Mr. Cullick, each of them, £20, to be made over to them into New England where they are; and my will and pleasure is, that £20 be put into a piece of plate, and presented in my name to my honored friend Dr. Wright, to whom I owe more than that, being much engaged, desiring him to accept it only as a testimony of my respects. I do give unto my servant James Porter, £10; unto my maid Margaret, £5; unto my maid Mary, 40s. I do give unto my honored and loving friends Major Robert Thomson and Mr. Francis Willoughby, £20 apiece, in a piece of plate, as a token of my respects unto them; and I do give unto my servant Thomas Hayton, £20. I do give unto my sister Yale, the wife of Mr. David Yale, £20; as also to John Lollo, a youth now with my sister Eve, £20, to farther him out to be an apprentice to some good trade, and £20 more at the time of his coming to his own liberty, to encourage him to set up his trade, if he continue living so long. I do give unto my nephew Henry Dalley, master of arts in Cambridge, my land and manor of Thukor in the county of Essex; and, for the payment of all debts, dues and legacies, do give unto him all my personal estate, and, by these presents, renouncing and making void all other wills and testaments, do declare, constitute, and make him my sole executor, and my good friends Major Robert Thomson and Mr. Francis Willoughby overseers, of this my last will and testament. Signed, sealed, declared and published by the said Edward Hopkins, Esq., at his house at London, on the 7th day of March in the year of our Lord 1657, to be his last will and testament."

For reasons which do not always appear on the face of the transaction, but which may be gathered from a knowledge of the relations of the trustees to certain controversies which then divided the town of Hartford, and kept the two colonies in a ferment, the General Court of Connecticut by sequestering the estate, and by directing the payment of all rents or debts, not to the trustees, but to the selectmen of the several towns where the property was situated who were also held accountable to the General Court, delayed for six years the final settlement of the estate.*

* The following abstract of the proceedings of the general court, is gathered from Trumbull's Colonial Record, Vol. 1., p. 322, et. seq., and from original records.

"The first mention of the will of Gov. Hopkins, occurs under date of Aug. 23. 1658, when the general court directs that the several towns "where any of the estate of Edward Hopkins, Esq., is known to remain shall speedily take an inventory of said estate and present it under the hands of those that order the prudentials of the town to the court in October next." From a vote passed June 15, 1659, it appears that the above order had been neglected, and it was then voted, "that whatsoever person or persons in this colony have in their present possession or improvement any estate that either is, or has been reputed the estate of (Geo. Fenwick or) Edward Hopkins Esq., that they secure and preserve the said estate in their own hands, or the value thereof, (casualties accepted) to be accountable to this court, when re-

The probable reason of this action on the part of the General Court was to retain the estate in the colonies of New Haven and Connecticut, according to what appeared to be the intent of the donor, by selecting his trustees equally from these colonies, from his former relation to them, and his previous declarations. After Mr. Hopkins' departure

quired thereunto, until the wills and inventories of the said gentlemen be exhibited into this court and right owners to the estate appear and administration be granted according to law."

Oct. 6, 1669. "The last will of Edward Hopkins Esq., being exhibited into this court, it is thought meet by the court that the former restraint laid upon the estate should be taken off, and that the debts due to the said estate should be required and gathered in to prevent damage in the estate." This order probably originated in the fact that owing to a council held at Hartford, in June 1659, to compose the difficulties in the church at Hartford, Elder Goodwin and his friends temporarily gave up the design of removing to Hadley, but resuming their intentions to leave, the sequestration was removed by the following order of the general court Feb. 23, 1659, "Whereas, there hath been a repealing of the former restraint laid upon the estate of Edward Hopkins, Esq., that debts due to the estate might be taken in. Upon further consideration, this court orders that the estate aforesaid be secured within this colony, until the said estate be inventoried and the inventory presented, and administration granted by this court."

By an order passed May 17, 1660, it appears that an inventory of the estate had not been presented, whereupon individuals holding the estate, and the selectmen of the several towns, were required to make presentment thereof at the next court, on penalty of £5, for each neglect. By a subsequent order dated June 8, 1661, the treasurer was required to take the custody of the rents of portions of the estate occupied by John Cole and by William Hills.

In pursuance of this order (May 17.) Joseph Mygatt, John Allen, James Steele, and William Kelsey, "townsmen" of Hartford, presented to the general court, June 18, 1660, a month after the order was passed,—an Inventory of Mr. Hopkins' estate, amounting to £1382. 63. 06—"Besides the *Negar*." On the back of this Inventory, is the following indorsement: "Hartford, June 16, 1660. Concerning Mr. Hopkins' estate, we underwritten having presented the order of court to Dea. Stebbing and Lieut. Bull, desiring their return; they answered as followeth:—that the Inventory on this paper, was a true inventory, as far as they knew, only his farm at Farmington and some trifles excepted, come to hand since, and they do engage to preserve the said estate and make return of it to the court at any time it is demanded: until the Will and Inventory of Mr. Hopkins be proved in the court at Hartford." In this Inventory, "his housing and land in Hartford and Wethersfield" are set down at £629, which deducting £84 for Wethersfield, leaves £545 for the value for his real estate in Hartford.

On the third of October 1661, "The will and testament of Edward Hopkins, Esq., being presented to this court legally attested, is accepted as authentic. This court do likewise order and empower Edward Stebbing and Lt. Thomas Bull, to take the management of the estate of Mr. Hopkins deceased, into their hands, and the gathering in the debts due to the estate, and to be accountable to the court for the same, when called thereunto."

Deacon Stebbing and Lieut. Bull, had the charge of Gov. Hopkins' estate in Connecticut, not only by appointment of the general court, but by a prior appointment of the trustees in Sept., 1658, under authority given by Henry Dalley, sole executor of the will.

"Upon a proposition presented from Mr. Goodwin, in reference to the legacy belonging to this colony, by the last will of Mr. Hopkins, and whereas there was by a writing a tender of £350 to this colony out of that estate; th's court doth declare that they do not reject the tender. And further, this court doth appoint Major Mason, Mr. Matthew Allyn, Mr. Wyllys and Capt. John Talcott, as a committee to treat with the trustees of Mr. Hopkins' estate about the foresaid legacy, and what the major part of those that meet do conclude, shall stand as an issue of that business, and the secretary is to write a letter to the trustees to appoint time and place of meeting." This committee corresponded with Mr. Goodwin desiring the trustees to appoint a time and place to meet with the committee, "to put a final issue to the business respecting the legacy." This proposition was declined, but Mr. Goodwin writes under date of Feb. 24, 1661, that the committee have ordered £350, to be allowed to Hartford on these conditions, (1.) "That it be by them improved according to the mind of the donor expressed in his will. (2.) That the court do also engage to remove all obstructions out of our way, that we may not be disturbed, nor any way hindered, from, by, or under them, in the management of the rest of the estate, according to our trust, that so love and peace may be settled and established between us. (3.) That you will deliver us back the attested copy of the will sent us from England, or else a true copy of it under the seals of the colony."

On the 8th of October 1663, the court appoint another committee consisting of the Governor, (Winthrop,) Mr. Matthew Allyn, Mr. Wyllys, and Capt. Talcott, to consider what is meet to be attended to in reference to Mr. Hopkins' estate, "and report their thoughts to the next court." This committee also correspond with Mr. Goodwin, who in reply claimed that the estate should be returned to the trustees who only have right to dispose thereof, with due satisfaction for all damage that shall appear to be done unto it since it was taken out of our hands, "the which if you shall decline to do after the end of March, the tentry is to be judged a nullity, and we shall forthwith endeavor the freeing of the estate elsewhere." At its next session, March 10, 1663-4, the general court ordered, "This court do see cause upon good advice to take off the sequestration formerly laid upon the estate of Edward Hopkins, Esq." The subject is not again introduced in the records of the general court, but in the records of the government council under date of Jan. 13, 1664-5, we find the following order, "This council doth hereby declare that the estate of our honored friend Edward Hopkins, Esq., shall not be molested by sequestering in the behalf of the country."

to England, differences of opinion as to discipline, baptism, and church-membership had grown up in the church at Hartford, between the pastor Rev. Samuel Stone, and Mr. William Goodwin, (one of the trustees of Mr. Hopkins' will,) the ruling elder, which in its progress not only rent the church but involved all the neighboring churches, and almost every church in the colony. At the date of sequestering the estate, Mr. Goodwin and his friends had decided to withdraw from the church, and from the jurisdiction of Connecticut, which was finally consummated by removing to Hadley, in the spring of 1659. Mr. Cullick, who sympathized with Mr. Goodwin, removed to Boston in 1659. Mr. Davenport was known to sympathize with the "disaffected party," as Mr. Goodwin and his friends were called. In this state of things, it seems to have been the intention of the trustees in 1660, to divide the estate between New Haven and Hadley—but in the year following, an offer was made by them, through Mr. Goodwin, of an allowance of £350 to the General Court of the Colony of Connecticut upon these conditions—1. "That it be improved according to the mind of the donor, expressed in his will. 2. That the court do also engage to remove all obstructions out of our way, that we may not be disturbed or hindered in the management of the estates according to our trust." The offer was not accepted—and the order of sequestration was continued. In October, 1663, Gov. Winthrop, Mr. Allyn, Mr. Wyllys, and Capt. Talcott, were appointed by the General Court, "to consider what is meet to be attended to in reference to Mr. Hopkins' estate by him bequeathed to be improved for the promoting of learning, and to make report of their thoughts to the court." On the 1st of February 1664, in reply evidently to a communication received from this committee, Mr. Goodwin insists on the removal, by the court, of all obstacles to the legal settlement of the estate, "the which if you shall decline to do betwixt this and the end of March next ensuing the date hereof, this tendery (of £350) is to be judged a nullity, and we shall forthwith endeavor the freeing of the estate elsewhere." This determination of the trustees to apply "elsewhere," (meaning thereby, the English Court of Chancery, or direct application to the king, for power of administration on the estate,) and other considerations were sufficient to induce the General Court, at its next session in May 1664, to remove the restraint.

On the 13th of June following, (1664,) the surviving* trustees, Rev. John Davenport of New Haven, and Mr. William Goodwin of

* Governor Eaton, died in New Haven, January 7th, 1658, before the death of Gov. Hopkins was known to him. Mr. Cullick, who was for several years one of the magistrates, and secretary of the colony, removed to Boston in 1659, and died there on the 23d of January, 1663.

Hadley, signed an instrument under seal, by which, after allotting £400 to the town of Hartford, for the support of a grammar school according to the will of the donor, they ordered that "the residue of the estate, both that which is in New England, and the £500 which is to come from Old England, when it shall become due to us after Mr. Hopkins' decease, be all of it equally divided between the town of New Haven and Hadley, to be in each of these towns respectively managed and improved toward the erecting and maintaining of a grammar school in each of them, and the management thereof to be in the hands of our assigns." "The assigns" for New Haven, subject to alteration by the trustee, were the town court of New Haven, and for Hadley, Rev. John Russell, Jr., and four others named, who were constituted "trustees for the ordering of the estate," "in choosing successors," with "full power to pursue and put in execution the pious end and intendment of the worthy donor; yet reserving to ourselves while we live, the full power of a negative vote for the hindering any thing that may cross that end."

The language quoted in the foregoing account of the distribution of Gov. Hopkins' bequest, is taken from the original documents preserved at Hadley, which contain more than the first instrument, executed by Mr. Goodwin. We add a literal transcript made by E. C. Herrick, Esq., Librarian of Yale College, from the "Records of the Hopkins' Grammar School of New Haven," of "The agreement between Mr. Davenport and Mr. Goodwin about disposing Mr. Hopkins his Legacy," which is as follows :

Whereas the Wor^{sh} Edward Hopkins, Esq^t. a faithfull servant of the Lord, and our worthily honoured friend hath in his last will and testament (proved according to law in England and Demonstration thereof made to the Generall Court att Hartford in New England) given and bequeathed all his estate in New England (his debts there and Legacies being paid out of y^e same) unto Theophilus Eaton, Esq^t. John Davenport Pastor to y^e Church of Christ att Newhaven, Capt. John Cullick and William Goodwin, sometye of Hartford, since of Boston and Hadley in y^e colony of y^e Massachusetts, confiding in their faithfullnes[se] for the Improvem^t of the same for y^e Educaton of youth in good Litterature to fit them for the service of Christ in these fforraign parts. Wee therefore y^e said John Davenport and Wm. Goodwin the only survivo^{rs} of y^e said Trustees that we may answe^r the s^d trust Reposed in us, Doe order and dispose of y^e s^d Estate, as ffolloweth, viz. : To y^e towne of Hartford we do give y^e sum of fflower hundred pounds of w^{ch} Hills ffarme shall be a part att y^e same price att w^{ch} it was sold by us and the pay Ready to be delivered, if there had ben noe Interruption, the Rest of the 400^{li} in such debts, and goods as we or o^r Agents shall see mett, provided that this part be Improved according to y^e ends of the Donor, viz., for the erecting and maintaining of a schoole at Hartford. Provided also y^t the Gen^l Court att Hartford doe graunt and give unto us a writing legally confirmed, engaging y^t neither themselves will, nor any by, from or under them shall disturbe or hinder us in o^r Dispose, or Execcuting o^r dispose of y^e Rest of the estate. Which don this giuft is in all Respects valid. We doe also desire and Request that the schoole house may be set upon y^e house lot w^{ch} was lately in the occupation of Jeremy Adams where o^r Worthy friend did much desire and endeavo^r y^t a schoole house might be set fforther, o^r desire is y^t the managem^t of y^e s^d estate

att Hartford may be in y^e hands of Deacon Edward Stebbing and Leu^t Thomas Bull and their Assigns. We doe further order and appoint the Rest of y^e estate of the said Edward Hopkins Esq., (the debts being paid) to be all of it equally divided between the townes of Newhaven and Hadley to be in both those townes managed and Improved for the erecting and maintaining of a schoole, in each of the s^d townes. And the managem^t thereof to be in the hands of o^r assignes, w^{ch} are the towne court of Newhaven, consisting of the magistrats or Deputyes together wth the officers of y^e church there in y^e behalfe of the said Mr. John Davenport, and John Russell, Jun^r. Leu^t. Samuel Smith, Andrew Bason and Peeter Tilton of Hadley, in the behalf of Mr. Wm. Goodwin. Only provided y^t one hundred pounds out of y^t halfe of y^e estate w^{ch} Hadley hath, shall be given and paid to Harvard College soe soone, as we the said John Davenport and Wm. Goodwin soe meet, and to be ordered as we or o^r assignes shall judge most conducing to the end of y^e Donor.

Hereunto as to o^r last order, dispose and Determinacon touching the said estate as we have set o^r hands and scales in severall instruments before witnesses, the far Distance of o^r habitators and o^r unfitnes for such a Jorney, denying us oportunity of a Joint acting otherwise than by writing. Therefore with mutual consent we thus Declare o^r agreem^t. I the s^d Wm. Goodwin, doe signe, and seale this Instrm^t as my true Agreem^t. for Mr. John Davenport of Newhaven.

The words (of Hadley) betweene y^e 25 and 27 line were Interlined before the subscribing and sealing.

WM. GOODWIN [Seale.]

The 13th day of y^e 4 month, 1664.

Signed, sealed, and recorded.

The sum realized out of that portion of the estate set out to New Haven was £412, and was by the "town court, consisting of nine magistrats and deputies, and the officers of the church at New Haven," applied to the support of a grammar school. Mr. Davenport had previously expressed his wishes as to the donation to the General Court, in the following communication :

The Reverend Mr. John Davenport's resignation of Governor Hopkins' donation to the general court of New Haven, May 4th, 1660.

Quod felix faustumque sit !

On the 4th day of the fourth month, 1660, John Davenport, pastor to the Church of Christ at New Haven, presented to the honorable general court at New Haven, as followeth :

MEMORANDUM,

I. That, sundry years past, it was concluded by the said general court, that a small college, such as the day of small things will permit, should be settled in New Haven, for the education of youth in good literature, to fit them for public services, in church and commonwealth, as it will appear in the public records.

II. Hereupon, the said John Davenport, wrote unto our honored friend Edward Hopkins, Esq., then living in London, the result of those consultations. In answer whereunto, the said Edward Hopkins wrote unto the said John Davenport, a letter, dated the 30th of the second month, called April, 1656, beginning with these words,

MOST DEAR SIR,

The long continued respects I have received from you, but especially, the speakings of the Lord to my heart, by you, have put me under deep obligations to love and a return of thanks beyond what I have or can express, &c. Then after other passages (which being secrets hinder me from shewing his letters) he added a declaration of his purpose in reference to the college about which I wrote unto him, That which the Lord hath given me in those parts, I ever designed, the greatest part of it, for the furtherance of the work of Christ in those ends of the earth, and if I understand that a college is begun and like to be carried on, at New Haven, for the good of posterity, I shall give some encouragement thereunto. These are the very words of his letter. But,

III. Before Mr. Hopkins could return an answer to my next letter it pleased God to finish his days in this world : Therefore, by his last will and testament

(as the copy thereof transcribed and attested, by Mr. Thomas Yale, doth shew) he committed the whole trust of disposing his estate in these countries (after some personal legacies were paid out) unto the public uses mentioned, and bequeathed it to our late honored governor, Theophilus Eaton, Esq., his father-in-law, and to the aforesaid John Davenport, and joined with them, in the same trust, captain John Cullick, and Mr. William Goodwin.

IV. It having pleased the most high to afflict this colony greatly by taking from it to himself, our former ever-honored governor, Mr. Eaton, the surviving trustees and legatees met together, to consider what course they should take for the discharge of their trust, and agreed that each of them should have an inventory of the aforesaid testator's estate in New England, in houses, and goods, and lands, (which were prized by some in Hartford intrusted by captain Cullick and Mr. Goodwin) and in debts, for the gathering in whereof some attorneys were constituted, empowered and employed by the three surviving trustees, as the writing in the magistrates' hand will shew.

V. Afterwards, at another meeting of the said trustees, they considering that by the will of the dead, they are joined together in one common trust, agreed to act together, with mutual consent, in performance thereof; and considering, that by the will of the testator, two of New Haven were joined with two of Hartford, and that Mr. Hopkins had declared his purpose to further the college intended at New Haven, they agreed that one half of that estate which should be gathered in, should be paid unto Mr. Davenport for New Haven, the other half to captain Cullick and Mr. Goodwin, to be improved for the uses and ends fore noted where they should have power to perform their trust, which, because they would not expect to have at Hartford, they concluded it would be best done by them in that new plantation unto which sundry of Hartford were to remove, and were now gone; yet they agreed that out of the whole 100l. should be given to the college at Cambridge, in the Bay; the estate being 1000l. as captain Cullick believed it would be, which we now see cause to doubt, by reason of the sequestrations laid upon that estate, and still continued by the general court at Hartford, whereupon some refuse to pay their debts, and others forsake the purchases they had made, to their great hindrance of performing the will of the deceased, according to the trust committed to them, and to the great endamage of the estate.

VI. The said John Davenport acquainted the other two trustees with his purpose, to interest the honored magistrates and elders of this colony in the disposal of that part of the estate, that was by their agreement to be paid thereunto, for the promoting the college work in a gradual way, for the education of youth in good literature, so far as he might, with reserving in himself, the power committed to him for the discharge of his trust: they consented thereunto. Accordingly on the election day, it being the 30th day of the third month, he delivered up into the hands of the honored governor and magistrates the writings that concern this business: (viz. the copy of Mr. Hopkins his last will and testament, and the inventory of his estate in New England, and the appraisement of his goods, and the writings signed by the surviving trustees for their attornies, and some letters between the other trustees and himself,) adding also his desire of some particulars for the well performing the trust as followeth:

1. He desireth of New Haven town,

First, That the rent of the oyster shell field, formerly separated and reserved for the use and benefit of a college, be paid from this time forward, towards the making of some stock for disbursements of necessary charges towards the college till it be set up, and afterwards to continue for a yearly rent as belonging to it, under the name and title of college land.

Secondly, That if no place can be found more convenient, Mrs. Eldred's lot be given for the use of the college, and of the colony grammar school, if it be in this town, else only for the college.

Thirdly, That parents will keep such of their sons constantly to learning in the schools, whom they intend to train up for public serviceableness, and that all their sons may learn, at least, to write, and cast up accounts competently, and may make some entrance into the Latin tongue.

Fourthly, That if the colony settle 40l. per annum, for a common school, and shall add 100l. to be paid towards the building or buying of a school house and library in this town, seeing thereby this town will be freed from the charges which

they have been at hitherto to maintain a town school, they would consider what part of their former salary may be still continued for future supplies towards a stock for necessary expenses about the college or school.

2. He humbly desireth the honored general court of the colony of New Haven.

First, That the 40l. per annum formerly agreed upon, to be paid by the several plantations, for a common grammar school, be now settled in one of the plantations which they shall judge fittest, and that a schoolmaster may forthwith be provided to teach the three languages, Latin, Greek, and Hebrew, so far as shall be necessary to prepare them for the college, and that if it can be accomplished, that such a schoolmaster be settled by the end of this summer, or the beginning of winter. The payments from the several plantations may begin from this time.

Secondly, That if the common school be settled in this town, the honored governor, magistrates, elders, and deputies, would solemnly and together visit the grammar school once every year, at the court for elections, to examine the scholars' proficiency in learning.

Thirdly, That for the payments to be made by the plantations, for the school, or out of Mr. Hopkins' estate, towards the college, one be chosen by themselves, under the name and title of steward, or receiver, for the school and college, to whom such payments may be made, with full power given him by the court to demand what is due, and to prosecute in case of neglect, and to give acquittances in case of due payments received, and to give his account yearly to the court, and to dispose of what he receiveth in such provisions as can not be well kept, in the best way for the aforesaid uses according to advice.

Fourthly, That unto that end a committee of church members be chosen to meet together and consult and advise, in emergent difficult cases, that may concern the school or college, and which can not be well delayed till the meeting of the general court, the governor being always the chief of that committee.

Fifthly, The said John Davenport desireth, that while it may please God to continue his life, and abode in this place, (to the end that he may the better perform his trust,) in reference to the college, that he be always consulted in difficult cases, and have the power of a negative vote, to hinder any thing from being acted which he shall prove by good reason to be prejudicial to the true intendment of the testator, and to the true end of this work.

Sixthly, That certain orders be speedily made for the school, and when the college shall proceed, for it also; that the education of youth may be carried on suitably to CHRIST'S ends, by the counsel of the teaching elders in this colony; and that what they shall conclude with consent, being approved by the honored magistrates, be ratified by the general court.

Seventhly, Because it is requisite that the writings which concern Mr. Hopkins his estate be safely kept; in order thereunto, the said John Davenport desireth that a convenient chest be made, with two locks and two keys, and be placed in the house of the governor, or of the steward, in some safe room, till a more public place (as a library or the like) may be prepared; and that one key be in the hands of the governor, the other in the steward's hands. That in this chest all the writings now delivered by him to the magistrates may be kept; and all other bills, bonds, acquittances, orders, or whatsoever writings that may concern this business be put and kept there; and that some place may be agreed on where the steward or receiver may lay up such provision as may be paid in, till they may be disposed of for the good of the school or college.

Eighthly, Because our sight is narrow and weak, in viewing and discerning the compass of things that are before us, much more in foreseeing future contingencies, he further craveth liberty for himself and other elders of this colony, to propound to the honored governor and magistrates what hereafter may be found to be conducive to the well carrying on of this trust, according to the ends proposed, and that such proposals may be added unto these, under the name and title of USEFUL ADDITIONALS; and confirmed by the general court.

Lastly, He hopeth he shall not need to add, what he expressed by word of mouth, that the honored general court will not suffer this gift to be lost from the colony, but as it becometh fathers of the commonwealth, will use all good endeavors to get it into their hands, and to assert their right in it for the common good; that posterity may reap the good fruit of their labors, and wisdom, and faithfulness; and that JESUS CHRIST may have the service and honor of such provision made for his people; in whom I rest.

JOHN DAVENPORT.

This document while it shows the deep conviction entertained by the author, of the value of general intelligence, especially in the view of the subject entertained by him, in common with all the prominent men among the first settlers of New England, as the means of diffusing sound religious instruction, also evinces his broad and liberal views as to the constituent features of a system of public education for the colony, viz.: common town schools, elementary and high, "that all their sons may learn, at least, to write and cast up accounts competently, and may make some entrance into the Latin tongue," a county common grammar school for such of their sons, "whom they intend to train up to public serviceableness," a town or county library, and a college for the colony. The views presented in this document, in respect to the grammar school, were reiterated before a town meeting, held February 7th, 1667.

"Mr. John Davenport, senior, came into the meeting, and desired to speak something concerning the school; and first propounded to the town, whether they would send their children to the school, to be taught for the fitting them for the service of God, in church and commonwealth. If they would, then, he said, that the grant of that part of Mr. Hopkins his estate, formerly made to this town, stands good; but if not, then it is void; because it attains not the end of the donor. Therefore, he desired they would express themselves. Upon which Roger Alling declared his purpose of bringing up one of his sons to learning; also Henry Glover one of Mr. William Russell's, John Winston, Mr. Hodshon, Thomas Trowbridge, David Atwater, Thomas Meeks [Mix]; and Mr. Augur said that he intended to send for a kinsman from England. Mr. Samuel Street declared, that there were eight at present in Latin, and three more would come in summer, and two more before next winter. Upon which Mr. Davenport seemed to be satisfied; but yet declared, that he must always reserve a negative voice, that nothing be done contrary to the true intent of the donor, and it [the donation] be improved only for that use, and therefore, while it can be so improved here, it shall be settled here. But if New Haven will neglect their own good herein, he must improve it otherwise, unto that end it may answer the will of the dead."

The declarations thus made meant something. Among the graduates of Harvard College from 1660 to 1700, when the population of the colony did not exceed five hundred, as many as one in thirty were from the town of New Haven, and among them are the names of many of the townsmen, who responded in the affirmative to Mr. Davenport's appeal—and these graduates became clergymen, teachers, magistrates, and useful and influential citizens. The Hopkins' Grammar School at New Haven has been maintained for nearly two centuries, not as a common town school for mere elementary instruction, nor yet as a local school, but as a classical school open alike to pupils from beyond, as well as from within the limits of New Haven, and as such, has helped to train up "many hopeful youths in a way of learning for the public service of the country."

The Hopkins fund at this time [1858] consists of a valuable lot on which the school house stands, a building lot in Grove street, valued

at \$2,000, and bank stock valued at \$2,500. The fund sustained a loss of \$5,000 by the failure of the Eagle Bank in 1823.

The amount received by the town of Hartford* was immediately improved, and the avails applied for at least forty years in maintaining, with the aid of the annual town grant, a "free grammar school" under the charge of Mr. Caleb Watson a graduate of Harvard College, in addition to the public schools of the town. By degrees the school came to be regarded, not as county school, or a high school, but as the main reliance of the town for the education of all its children, old and young, and thus its character as a public grammar, or Latin school, was well nigh lost. In this "declining state" of the school, a *select school* was established in 1764, to meet the higher educational wants of the community by thirty of the wealthy and educated families. This movement was at once the evidence of the low state of the public schools, and but for a disastrous accident in 1766, (by which the house built for its accommodation was destroyed, causing the death of some ten or twelve citizens,) would have helped to sink the public schools still lower, by withdrawing the children, and the parental and pecuniary interest of those families, who in every community provide most liberally for education. The select school on the scale proposed was postponed, and an effort was made in 1769, at the same time to increase the number and efficiency of the common schools, and to elevate the character of the grammar school. But the town had relied too long on the aid of educational funds, to enter at once and vigorously on a course of school improvement. New school houses in the several districts were built only after much delay, and angry controversies as to location, plans, and extent of accommodation; and so much of a bone of contention was the Hopkins fund, that at last on application of the town, through a committee consisting of Rev. Nathan Perkins and Ephraim Root, Esq., the General Assembly in 1798, incorporated Hon. Thomas Seymour, the Hon. Jeremiah Wadsworth, Rev. Nathan Strong, Rev. Nathan Perkins, Rev. Abel Flint, John Trumbull, and Thomas Y. Seymour, Esqrs., all of

* The town of Hartford voted, Dec. 3, 1664, "that Mr. Samuel Wyllys, Mr. John Richards, and Mr. William Wadsworth, have power as a committee for the town to receive four hundred pounds appointed by the trustees of the worshipful Mr. Edward Hopkins, to be delivered to this town by Mr. Edward Stebbins and Mr. Thomas Bull—to be employed in this town for the promoting of learning here, which was given by the said Mr. Edward Hopkins for this end, which said committee with Mr. Edward Stebbins, and Mr. Thomas Bull, are desired and empowered to employ said sum with whatsoever else is already given or shall be raised to that intent, for the end aforesaid, according to such instructions as shall be given them by this town, or for want of instructions, according to their own discretion." The language of the foregoing vote, apparently limiting the appropriation of the money to "the promoting of learning here" [in the town of Hartford.] would seem to narrow the broadly beneficent bequest of Gov. Hopkins, which was not confined to the settlement, where the college or grammar school must of necessity be located, but was "to give some encouragement in those foreign plantations for the breeding up of hopeful youth, for the public service of the country in future times."

Hartford, by the name of "*The Trustees of the Grammar School in the Town of Hartford,*" and to have perpetual succession, and resolved that "the grammar school in said town of Hartford, be, and the same is hereby constituted, and appropriated according to the original intent of the donor, for the education of youth in the rudiments of the higher branches of science, not taught in common schools, of the Latin, Greek, and other useful languages; of the grammar of the English tongue, of geography, navigation, book-keeping, surveying, and other similar studies preparatory to an education at the university or a life of active employment." Under the management of these trustees, the funds were increased and the school was taught from time to time for forty years, by some of the best scholars among the graduates of Yale College, and the charge for tuition was merely nominal. In 1828, the plan of the school was enlarged so as to embrace a wider range of studies, and a larger number of pupils, to meet the higher educational wants in the English as well as classical studies of the community and the age. The plan involved a large expense for building which diminished the annual income of the fund and increased the rates of tuition, and did not meet in all respects the public wants, while it endangered the peculiar character of the institution as a classical school. In 1838, a movement was commenced in the first school society in favor of a free public high school, which was consummated in 1847, by a vote of a large majority of one of the largest public meetings ever held in the society, to establish such a school; and \$12,000 were appropriated for the erection of a suitable building. On the completion of the building, the trustees of the grammar school entered into an arrangement with the committee of the high school, by which a classical school is maintained under the charge of a teacher paid out of the avails of the funds of the grammar school. This teacher is independent in his own school. Under this arrangement, with Mr. T. W. T. Curtis, as principal of the high school, and Mr. W. B. Capron, principal of the Hopkins' grammar school, the institution, while it affords to the children of the rich and poor belonging to the First School Society of Hartford the privileges of a good English education, and a preparatory training for college and business, is also conducted so as to answer "the true intent and purpose" of Edward Hopkins, by being open to young men from abroad.

The Hopkins' Grammar School Fund at Hartford, amounted, in 1857, to \$20,000, securely and profitably invested, and yielded in that year an income of \$1,500.

The portion of the bequest assigned to Hadley, was, by an arrangement proposed by Mr. Goodwin and adopted by the town in 1669,

committed to five trustees, with power of filling vacancies, who established a school under the name of the Hopkins' school, which, with the aid of the donations from individuals and the town, has been continued from that time to this as a grammar school, or academy, under a teacher capable of fitting young persons for college, and frequented by pupils from other towns than Hadley. In 1816, the trustees on application to the Legislature, in which the town united, were incorporated under the name of the trustees of the Hopkins' Academy. It appears from the report* of a case, "*The inhabitants of Hadley versus the Hopkins' Academy,*" argued and determined in the Supreme Judicial Court of Massachusetts, at the September term, 1833, that the inhabitants of the town have at various times, and particularly in instituting this suit, endeavored to convert this grammar school, or academy, into an exclusively local school. But Chief Justice Shaw, in rendering the judgment of the court, held that, while in point of fact, the school has enured principally to the use of the inhabitants, the legal estate in the property given by Gov. Hopkins, did not by his will, and the instrument made by his trustees in 1666, vest in the town of Hadley; and that the devise was not made for the purpose of founding a common town school, for the exclusive benefit of the inhabitants of that town, but was designed for the encouragement of all persons in that (then) newly settled part of the country, who should desire to avail themselves of the benefit of a grammar school adapted to instruct and qualify pupils for the university; and that subsequent donations to trustees created for a particular trust, are to be appropriated to the same purposes as the principal donation.

By the allotment of the trustees of Gov. Hopkins' will, the sum of £100 was paid to the college at Cambridge, out of the New England estate, and in 1714, the college came into possession of £800 out of the estate in England, that sum being the £500, devised to be paid on the death of Mr. Hopkins to "the trustees beforementioned" "in full assurance of their trust and faithfulness in disposing of it according to the true intent and purpose" of the testator, and the interest which had accrued from the time it was due, which was six months after the decease of Mrs. Hopkins, in 1699.

Mrs. Hopkins died on the 10th of December, 1699, having survived her husband forty-one years, and out lived all the original trustees of the New England estate, as well as the executor and residuary legatee of the estate in England. In consequence of the death of this residuary legatee, a suit in chancery was commenced against his exe

* Pickering's Report, Vol. 14, p. 240-267.

cutor. Either for want of application by the "assigns," named by Mr. Davenport and Goodwin 1664, in behalf of the grammar school at New Haven and Hadley, for whose support the above legacy was equally divided, or for some other reason which I have no way of determining at this time, a decree in chancery was given by Sir Simon Harcourt, Lord Keeper, in 1712, by which the amount of the legacy and interest from the death of Mrs. Hopkins, was paid to Governor Dudley, and twenty more of the principal persons, civil and ecclesiastical of the province of Massachusetts, in trust for the benefit of Harvard College and the Grammar School at Cambridge. By the decree in chancery, the money was to be invested in the purchase of land, which was accordingly done by the purchase of a large tract from the Natick Indians, mostly situated in the present town of Hopkinton, so-called to keep in daily and living remembrance the name of Hopkins, one of the earliest and most liberal of the benefactors of New England. The Hopkins' Fund at Cambridge in 1853, amounted to \$34,833.49, and the income for the year ending May, 1853, was \$1,992.62.

The name of Hopkins is held in deservedly high esteem at Cambridge. President Quincy, in his "History of Harvard University," after mentioning the benefactions of Sir Mathew Holworthy and William Stoughton, adds—"Next in order of time, the noble beneficence of Edward Hopkins, stands in bold relief; exceeded by that of none of his contemporaries in original value, (the above named benefactors alone excepted;) and, at the present day, greatly surpassing these of both, in amount and efficiency. Few, if any of the early emigrants to New England, have left a name surrounded by a purer or more unfading luster. In the parent State, as well as in the Colony, his talents and virtues received the reward of place, preferment, and authority. * * * His spirit was not only active, but elastic; since it seems neither to have been subdued by a grievous pulmonary affection, which pursued him during thirty years of his life, and finally brought it to a close; nor yet crushed under the weight of the severest of all domestic affliction, the irrecoverable derangement of a wife, who before her bereavement of reason, was distinguished for her virtues, her intelligence, and accomplishments. His last will is an interesting monument of private friendship and public spirit, and justifies the universal language of his contemporaries, who in eulogizing his character, never fail to celebrate his possession of those qualities, which make a man beloved. To numerous friends and domestics he bequeathed legacies amounting to four thousand pounds sterling, to institutions in Connecticut, for the promotion of religion, science, and charity, one

thousand pounds sterling. For the advancement of the same noble objects in Massachusetts, the bequest of five hundred pounds vested in trustees, was destined to find its sphere of usefulness in Harvard College, or its vicinity. After an increasing flow of annual benefits for more than a century, his bounty now exists on a foundation of productive and well secured capital, amounting to [over] thirty thousand dollars. Thus did his lofty and intellectual spirit devise and distribute blessings in his own age, and by his wisdom, prepare and make them perpetual for succeeding times."

The above paragraph, eminently just and eloquent in its estimate of Gov. Hopkins' character and beneficence, puts a construction on his will, which we can find nothing in that instrument to warrant—and especially as to the disposition of the five hundred pounds left to "be made over into New England after the decease of his dear distressed wife, and conveyed into the hands of the trustees," named by him to manage the portion of his estate in New England not left in bequests to his personal friends, "in full assurance of their trust and faithfulness in disposing of it according to the true intent and purpose of me the said Edward Hopkins." As we have already shown, the trustees did all in their power to dispose of this legacy,—they declared their intentions respecting it, named in a properly authenticated legal instrument the assigns who was to receive it, and specified the purposes to which it was to be applied when received by the legal representatives. In addition to the account already given of this bequest, we quote the following passages from an article by Prof. Kingsley of Yale College, in the American Biblical Repository, for July 1842, in a review of the above statements of President Quincy. These passages supply some omissions in our foregoing narrative.

It had been, from the first, a favorite object with Mr. Davenport, of which Governor Hopkins must have been fully apprised, to establish a college in New Haven; and within two or three years after Governor Hopkins left the country, the legislature of this colony voted to found such an institution, and appropriated certain lands for its encouragement and support. Upon this, Mr. Davenport wrote to Governor Hopkins what had been done; and aware without doubt of his intentions, if such an institution should be begun, solicited his patronage of the new seminary. To the communication of Mr. Davenport, Governor Hopkins replied, in a letter dated April 30th, 1656: "That which the Lord hath given me in those parts [New England,] I ever designed the greatest part of it, for the furtherance of the work of Christ in those ends of the earth; and if I understand that a college is begun and likely to be carried on in New Haven, for the good of posterity, I shall give some encouragement thereunto."

Intercourse with England, at this time, was at long intervals; and before there was opportunity for another communication from Mr. Davenport, Governor Hopkins died. His death took place in London, March, 1637. On the 7th of the same month, he had made a will, with all the requisite formalities.

* * * * *
Anne Hopkins, the widow of Governor Hopkins, died the tenth of December, 1699, having outlived nearly thirty years all the trustees under the will. John

Davenport, the last surviving trustee, died in 1670. But before the death of all the original trustees, a new board was instituted by the survivors, and authorized to receive all dues from the estate, particularly the five hundred pounds payable six months after the death of the widow. Every thing else was done, which was thought necessary in "disposing" of the bequests of Governor Hopkins. These arrangements were supposed to be legal; and their legality was never questioned in Connecticut.

On hearing of the death of Anne Hopkins, the trustees in New Haven took some measures to procure the five hundred pounds, to which they supposed themselves to have an undoubted claim. But in the meantime, Henry Dally, the executor and residuary legatee of Governor Hopkins had died, and his executor and the heirs at law alleged, that "after all the just allowances made, there were not assets sufficient to pay the five hundred pounds, etc." The new trustees seem to have been afraid to engage in a chancery suit, as they must have been at considerable expense, and the prospect of success was doubtful; and instead of taking prompt measures to ascertain the real state of their claim, suffered the time to pass in useless deliberation. In this state of things, in Michaelmas term, 1708, an information was filed by the attorney-general in behalf of the "Society for the Propagation of the Gospel in Foreign Parts," against the executor of Dally and others; as this society had been induced to make an attempt to obtain Governor Hopkins' bequest of five hundred pounds for themselves. The news of this movement probably reached Cambridge in the course of a few months as we are told by President Quincy, that in June 1709, the corporation took measures to secure the legacy of Edward Hopkins, by appointing Henry Newman, of London, their agent.

Mr. Newman was evidently an active and faithful agent, as, on the 9th of the following July, the cause came to a hearing; and reference was made to a master in chancery, without doubt at Mr. Newman's instance, "to take an account of the assets of the said Edward Hopkins' estate, liable to the said five hundred pounds, etc.;" "and in case the said five hundred pounds should be recovered, it was ordered and decreed, that the same should be paid and applied to the school or college in New England for the breeding up of scholars there in the study of divinity, according to the will of the said Edward Hopkins, and in order thereto, the master was to examine witnesses, or write to New England, to be informed, whether there was such school or college there; and if not, then what other school or college was there, and on what purposes founded, and to state to this court how he finds the same." On the 10th of February, 1710-11, the master reported that there were sufficient assets to pay the legacy, and "that there was about sixty or seventy years ago, and now is, a school and college at Cambridge in New England, and called Harvard College, and that about ten years since, there was, and is, a small building made contiguous to the same, and called Stoughton College." On the 7th of March following, his lordship, the Lord Keeper Harcourt, decreed, that the five hundred pounds, with interest from June 10th, 1700, to this date, being six months from the death of Anne Hopkins, should be "laid out in a purchase of lands in New England in the name of the corporation for the propagation of the gospel, but the trust is to be declared in the deeds to be for the benefit of the college and grammar school at Cambridge in New England."

The direction of the will is, that "five hundred pounds be made over into New England," "and conveyed into the hands of the trustees beforementioned, in further prosecution of the aforesaid public ends." If this sum of five hundred pounds was intended for Massachusetts, then, why was not the sum of one thousand pounds intended for Massachusetts also; since both were vested in the same trustees, and to be applied by them to the same "public ends?" and the trustees, therefore, by establishing grammar schools, as they did, in Connecticut, fell into a very grievous error. But if these legacies were intended for Massachusetts, it is difficult to be accounted for, that Governor Hopkins should have named all his trustees among his most intimate friends in New Haven and Hartford, and not a part of them at least in Boston or Cambridge; so that the interests of the college, the principal object of his beneficence, might be properly looked after. Governor Hopkins must have been aware, especially after his correspondence with Mr. Davenport, that the trustees named, being all in New Haven and Hartford, would understand the will, just as they in fact understood it. If the testator intended,

that a part of his bequest should be given to a college in New Haven, but that the trustees should have power to bestow a part of it also on other institutions, if they saw fit so to do, his selection of trustees is not so much to be wondered at; but if he intended that Harvard College should be the principal object of his bounty, the selection of trustees, such as it is, without any mention of that college, is wholly unaccountable. If the trustees had all been named in Boston and Cambridge, and the language of the will in other respects had been the same as it is, would any part of the bequest ever have come to Connecticut? The trustees of the legacy in Massachusetts, in their letter to Lord Chancellor Harcourt, speak of "Mr. Edward Hopkins's charity-legacy to *the* school and college in New England," as if much depended on the use, in the will, of the *definite article*; when it is very evident that the form of expression there used, was not adopted for the purpose of designating a particular grammar school, or a particular college, but to distinguish the grammar school and college from other schools and other places of instruction. But if the trustees are correct, then the whole of both bequests belong to Harvard College, and the grammar school in Cambridge; and this, with the inexplicable appointment of trustees, as mentioned above, solely in Connecticut and New Haven. We would ask in conclusion, whether the interpretation of Governor Hopkins's language, by trustees appointed by himself, considering the relation in which they stood to him, and their known character for honesty and integrity, ought not to be considered as evidence amounting to all but proof, of what was the testator's "true intent and purpose?"

Such are some of the reasons which favor the original construction of the will, and which without question would have prevailed in determining the disposition of the five hundred pounds, had the death of the widow preceded the death of the first trustees. Without deciding any thing on this point, we think that we are warranted in saying, that President Quincy, by using the words "beneficence" and "bequest" in such connections as he has done, will leave most readers to infer, that Governor Hopkins had the intention to make a direct donation to Harvard College, which does not appear from the will, or, as we believe, from any other source. His place of residence, family alliance, personal friendships, and his letter to Mr. Davenport, give to this subject a very different aspect. Mr. Savage, in his Notes on Winthrop's Journal, says, in strict accordance with the fact, that "Harvard College has enjoyed Governor Hopkins' legacy jointly with the grammar school in Cambridge, since 1714." If President Quincy had employed the same form of statement, we should have considered it wholly unnecessary to enter on this detail. It may be said, that in one instance the author, in speaking of this bequest, has used language entirely correct; where he says, that the "five hundred pounds vested in trustees, was destined to find its sphere of usefulness in Harvard College or the vicinity." This is true; but to most readers, without explanations, which the author has not made, this sentence, though undoubtedly introduced to meet the point we have insisted on, must appear very obscure, or rather enigmatical. With the long ellipses supplied, this passage will read as follows:—the parts understood being printed in *italics*. "Five hundred pounds vested in trustees *in New Haven and Connecticut, and to be by them disposed of*, was destined, *through a course of events never contemplated by the testator to be put into the hands of trustees in Massachusetts*, and to find its sphere of usefulness in Harvard College and the vicinity." This is a concise, but, as we believe, a true account of the final disposition of this legacy.

While we can not acquiesce in any construction of the language of the will which assigns the bequest of £500, as specially so intended by Governor Hopkins, to Massachusetts—while we can not see the right of directing a master in chancery to find the school or college in New England for the bringing up of scholars there in the study of divinity, and if found, of applying the funds exclusively to that particular school,—and while we can see the most obvious reasons for regarding the prior declarations, the former residence and

relations of the testator, and the actual residence and action of the trustees named in the will, as evidence of his "true intent and purpose," and especially for instituting an inquiry as to the destination of the bequest of £500 given by these trustees, to whom the whole of his educational bequests were left "in full assurance of their trust and faithfulness in disposing of the same,"—and when ascertained, as it would have been under seal properly authenticated, to have so applied the bequest,—we do not regret that a portion of the bounty of another* of the honored Governors of Connecticut was destined, not by express language of the will, or the action of trustees named in it, but by the construction of the Court of Chancery in England, to find its sphere of usefulness in Harvard College, and the Cambridge Grammar School. We agree cordially in the sentiments expressed by Prof. Kingsley at the close of his remarks on the above language of Pres. Quincy:—"We should feel that great injustice had been done us, if any one should infer from what has now been said, that we are at all disturbed, or indulge in any repining, at the direction which was given to any portion of the bequests of Governor Hopkins. So far is this from being true, that we could assign numerous substantial reasons, why we are especially satisfied with the destination of that part of them, which came into the possession of Harvard College. One will be sufficient. Among the causes which have operated to make Connecticut what it has been, and is, none was more efficient, through a large portion of the

* Governor Eaton of the Colony of New Haven, gave £40 to the school at Cambridge as early as 1642, and Gurdon Saltonstall, who was Governor of Connecticut in 1708, left by will £100. His widow Mrs. Mary Saltonstall, in 1730, left a bequest of £1000. The ancestor, Sir Richard Saltonstall, gave £104 in 1658, and his son, the father of Gov. Saltonstall, gave £320. The Colony of Connecticut voted £40 toward a fellowship for 1653, and the citizens there contributed during the first eight years of the existence of the college £39, of which £30.17 were collected in Hartford—more than a third as large as the contributions made by Boston, in the same time. The citizens of New Haven Colony contributed within the same period £35, of which £17 was collected in New Haven. It was a fortunate circumstance for the cause of higher education in Connecticut, that the college of Cambridge was not so liberally endowed by the General Court of Massachusetts, or by individuals, as to supersede the necessity of constant appeals to the great mass of the people for aid. These annual appeals kept alive a feeling and intelligence on the subject, which might otherwise have died out amid the chilling and depressing influences of pioneer life. There is great danger, in all new settlements, of the second generation, on account of not enjoying the same or equal educational advantages, falling below the first; and of the third, below the second, until the accumulation of wealth, and opportunities of leisure are improved by the few to establish schools, academies, libraries, and colleges. Connecticut and New England generally was saved from the operation of this law of colonization, by the wise forecast and peculiar character of the first settlers. But for the fact, that Eaton and Haynes, and Winthrop and Hopkins, were practically well educated men, and Hooker, and Stone, and Davenport, and others, had enjoyed the opportunities of a grammar school and university education, the first beginnings of our history would have been vastly different, and a night of barbarism had shut down on the third and fourth generation of children—from which only prodigious efforts on the part of good men and wise statesmen could have led them out.

first century after its colonization, than Harvard College. It was this early seminary, which kept alive the lamp of knowledge lighted by the first emigrants, and gave such a form and consistence to the institutions of this new commonwealth, that the benefits which flowed from this literary fountain must be experienced for ages to come. It was this seminary that enabled the people of Connecticut to deserve the high eulogy in the report of the commissioners of Charles II., in 1665, that they had "a scholar to their minister in every town or village." But it was not merely in furnishing a well informed clergy, that the influence of Harvard College was felt in Connecticut. Many of the principal magistrates, instructors of youth, and private citizens whose influence extended in various ways to every class of the community, came furnished to act their several parts from the same institution. Nor should it be forgotten that Yale College owes its existence entirely to the sons of Harvard. If Harvard College had not been established, Yale College would never have had a being. Not but that some institution for instruction in the liberal arts would, after a course of years, have arisen in Connecticut; but it would have been under very different auspices, and with quite another class of effects. In view of these facts, it can not but afford high satisfaction to every individual of Connecticut capable of forming a just opinion on this subject, that such decisive proof exists of the estimation in which Harvard College was held in this community by the first planters of Connecticut, and several succeeding generations. Their sense of its value is manifest in the small voluntary contributions of towns while the institution was in its infancy; and, for the time, liberal donations of individuals. Not that we would represent the assistance early afforded to Harvard College from Connecticut, as a compensation for the benefits received, for we do not suppose that such good is to be estimated in pounds sterling; but reference is made more particularly to the proof which exists of the early regard for literature in the two colonies, when there stand conspicuous among the early patrons of Harvard, Governor Eaton, of the colony of New Haven, Governor Hopkins, of the colony of Connecticut,—and with the explanations made, there is no objection to his being styled a patron,—and Governor Saltonstall of Connecticut after the two original colonies were united.'

We will close our protracted notice of the educational bequests of Governor Hopkins, with a brief but just and touching tribute to the life and character and services of the donor, by Hon. I. W. Stuart, in

his sketches of "*Hartford in the Olden Time*," over the signature of SCÆVA* in the Hartford Courant.

"Edward Hopkins was a man fervid in his religious feelings, and uncommonly exact in his religious observances both in public and in private. His last words, in a letter written from London, just before his death—"How often have I pleased myself with thoughts of a joyful visit with my father Eaton. I remember with what pleasure he came down the street, that he might meet me when I came from Hartford to New Haven; but with how much greater pleasure shall we shortly meet one another in heaven,"—breathe a spirit of love and resignation, and express a pleasing reminiscence of his life in Connecticut. To have aided in founding a Colony—not for conquest, our fathers thought not of that, nor for riches, they had no lust for gold, but for freedom and for faith—to have guided an infant State with watchfulness and with wisdom for many years—to have freely helped its necessities, and the wants of the poor, and the wants of the church, from the earnings of his own industry and the gifts of fortune—to have been ever active and faithful for good, though feeble in body from wasting disease—to have been hopeful and trustful, though sorely tried by domestic affliction—to have been prudent, generous, dutiful, and affectionate—to have looked ever in humility, and prayer, and gratitude, to the source of all human strength; such is the bea-roll of duties done, and virtues shown, which the Spirit of Hopkins had to tell over at the Bar of final account."

In the foregoing sketch of the history of the educational bequests of Governor Hopkins, we have briefly noticed the manner in which the requisitions of the law of 1668, requiring the head towns of the several counties to maintain a "grammar school," were complied with in Hartford and New Haven. We will now notice briefly the doings of the towns of New London and Fairfield in this particular.

In the first fifty years after the settlement of New London, there is very little on record in respect to schools.† In 1678, the law of the Assembly, requiring that every town of thirty families should maintain a school to teach children to read and write, was copied into the town book, and a committee of five men chosen "to consider

* These interesting and, where the subject and occasion demanded it, truly eloquent sketches, are now published in a volume of 316 pages, by F. A. Brown, Hartford, with the title of "SCÆVA'S HARTFORD IN THE OLDEN TIME: First Thirty Years;" with illustrations by W. M. B. Hartley.

† History of New London, from 1612 to 1852. By Francis Manwaring Caulkins. We are indebted to this interesting work for most of the information respecting the Grammar School of New London.

of some effectual means to procure a schoolmaster." In 1698, this school seems to have been merged in the county or free grammar school, required by the law of 1772, by the following vote of Dec. 14 :

"Voted that the Towne Grants one halfe penny in mony upon the Liste of Estate to be raised for the use of a free Schoole that shall teach Children to Reade Write and Cypher and ye Latin Tongue, which School shall be kept two-thirds of the yeare on the West side and one third part of the yeare on the East side of the river. By Reading is intended such Children as are in their psalters."

For the support of this school, the revenue of an estate bequeathed to the town in 1673, by Robert Bartlett,* in a nuncupative will made in presence of some of the selectmen and other respectable persons, to be improved for the support of a school where the poor of the town might be instructed. In 1698, the first Bartlett committee to look after the estate was appointed, and in 1701 the first regular Grammar and Latin School was established, to the support of which the sum allowed by law out of the country rate, (40s. in every £1000,) and the income of the Bartlett Estate were assigned—the latter for the benefit of the poor. The residue of the expense was assessed in the way of tuition, payable by the parents and masters of the scholars.

In 1702, the rents of the ferry (to Groton,) after 1705, were appropriated, "forever," as part of the yearly salary of "the master of a grammar school which shall be kept in this town."

In 1713, application was made to the General Assembly for permission to dispose of the Bartlett lands; this was granted. By a special act of May 14th, the Assembly vested the title of those lands in certain feoffees, to wit, "Richard Christopher, Jonathan Prentis, John Plumbe, John Richards, and James Rogers, Jun., and their heirs forever, for the use of a public Latin school in the town of New London."

The lands were accordingly sold to the immediate benefit, but to the ultimate depreciation of the fund. If it could have remained in landed estate for a century, and be improved as such, its sale and reinvestment would have constituted an ample endowment for a public school of the highest grade. The same reckless policy—of sacrificing the distant, but largest good, to the more pressing claims of a lower but present advantage, was pursued in reference to the grant by the General Court, in 1690, of six hundred acres of land toward the support of the county grammar school—as will

* Of Robert Bartlett, nothing is known except that he was a "lonely man," without wife, children, or near relatives; that he inherited the property of his brother, who died about 1658, without children—and that he remembered in making his extempore will, one Gabriel Harris, who had shown him kindness in his sickness. See Caulkins' History of New London.

be seen in the following vote, passed in town meeting, March 5, 1721-2 :

Whereas, the town by the settlement thereof doth in great part consist of farmers many of whom are not able to go through the charges of keeping their children to school in the town plot:—And whereas the school in the town plot hath been a very considerable charge, being a Grammar school, so that the town hath not been so well able to maintain two schools:—but whereas now Providence hath so ordered that we have got our 600 acres of school land settled, which was given by the country to the grammar school, which if sold with the interest of that money, and the interest of the money left by Mr. Bartlett to our school, which s^d Bartlett did desire that the estate left by him might be improved for the help of the learning of children that their parents was not well able to learn them, and this town considering the great necessity of education to children, both for the advantage of their future state and towards their comfortable subsistence in the world, and being satisfied that if the school land were sold, we may set up a school or schools among our farmers, doth appoint the deputies of the town to make application in the name and behalf of the town to the General Assembly in May next, that they would be pleased to grant this town liberty to appoint trustees of the school, who may have power to sell the land, and let the money upon interest for the use aforesaid.

This application to the General Assembly was refused, but in 1723, another petition was presented, in which the petitioners expressed an earnest desire that the children of the town should be taught “reading and other learning, and to know their duty toward God and man,” for the furtherance of which ends they had “settled another school in the remote part of the town, which goeth on with good success,” but which, they say, can not be kept up, and the peace of the town preserved, unless the land is sold. This petition was granted. The income of the purchase money amounted in 1725, to £120; one half of which sum was appropriated to the town grammar school, and the remainder among the district schools. In 1726, the inhabitants of the country districts made an effort to direct the avails of the Bartlett fund to their own schools. In 1733, the Legislature authorized the appointment of the committee to manage the school funds of the town. The management of the fund seems to have been a bone of contention in town meetings from the outset, and not being sufficient to maintain a good public school, a number of the wealthy and educated citizens associated themselves together in 1770, and were incorporated in 1774, to establish a Union School, to furnish facilities for a thorough English education, and the classical preparation necessary for entering college. To the mastership of this school, a succession of well educated teachers, nearly all of them college graduates, were appointed for nearly a half century; and, as might have been anticipated, the school was frequented by the children of the rich and educated, and the Public or Bartlett Grammar School dwindled away into a common school.

To give a finishing blow not only to the Public Grammar School, but to the common schools generally in New London, a female academy was established in 1799 by families of social influence and wealth, and around this new institution, and the union school, were gathered the best educational interest of the community, and the common schools became common, *very common*, in a sense not intended by the law. In this state they continued, until 1836, when Thomas S. Perkins, Esq., began to labor for their improvement. From that time there has been a gradual advance, until this date, (1853,) when there is a fair prospect that the Bartlett Grammar School will take its place as the crowning feature of a system of public schools,* made free by the income of public funds, and a tax on the property of the town.

Of the county grammar or Latin school, which the town of Fairfield was required, by the act of 1672, as well as the other "head towns," to set up, we can not give a detailed history. In 1677, the Supreme Court recommended the County Court to grant a portion of their county revenue, by customs, fines, &c., for the encouragement of the school. In 1709, the six hundred acres of land appropriated in 1672 for the benefit of this school, and to no other use whatever, were laid out on the north line of Fairfield, and in 1722 were sold and the avails applied according to law. What has become of the fund, neither record or tradition can now show—but that it helped for a time to maintain a county school in Fairfield, may be inferred from a memorial of the inhabitants to the General Assembly in 1752, in which it is stated, that "the school, that time out of mind among us, has been called the Grammar School" has so very small an interest for its support, that they ask for advice and encouragement in carrying it on for the benefit of themselves and their neighbors. The committee to whom the memorial was referred, recommended the appropriation of so much of the excise money, raised within the county of Fairfield from "retailing strong liquors" as may be necessary to maintain a school of the grade required by law. The proposition was not adopted by either house, and, as if the bare suggestion of an appropriation in a shape so questionable was enough to extinguish the school forever, this is its last appearance on the records of the Gen-

* In 1849, Leonard Bulkley, the last survivor of Capt. Charles Bulkley, and a descendant of Rev. Gersham Bulkley, second minister of the town, left the bulk of his estate to certain trustees, to found a free school for boys, with a limitation, that the income is to be allowed to accumulate with the principal, until the whole amounts to \$50,000. Here will soon be an opportunity to carry the free education of boys higher than can now be done in any existing public school in New London. An institution can be established which shall rival the Putnam Free School in Newburyport, Massachusetts.

eral Assembly. Possibly, the establishment of the "Staples' Free School," within what was then the town of Fairfield, on the foundation of "a large estate left in 1781 by Samuel Staples in trust, "for the instruction of children and youth in useful knowledge, and learning;" and especially such as are sober, studious, and poor, may have superseded the county grammar school; or more probably, the reputation of the academy started by Dr. Dwight, on his settlement as minister at Green Farms, or Greenfield Hill, in 1783, and maintained by him until his removal to New Haven, in 1796, to enter on the duties of president of Yale College,—for the time absorbed the higher educational interest and influence of the whole neighborhood. Dr. Dwights' school soon attained a high reputation, not only in Connecticut, but throughout the country, and was attended by persons of both sexes; and to him is the female sex and society, indebted for one of the earliest, if not the earliest effort to give a broad, thorough, and liberal culture to young ladies, as well as to young men, in the same institution. The present academy in Fairfield was incorporated in 1804.

For some cause or reason the county grammar school did not, near the commencement of the present century, meet the higher educational wants of the towns; and academies were established and incorporated for this purpose, which were sustained by the tuition of the scholars.

We have thus traced with some care, the history of the county grammar schools established in 1672, because they constituted a part of the common school system down to 1798, when they, together with the town grammar school, were superseded in the law by a provision authorizing, not obliging, each school society to establish a school of a higher order.

We now resume our history of common schools from 1665 to 1700.

In 1677, it is ordered, "if any county town shall neglect to keep a Latin school according to order, there shall be paid a fine of ten pounds by the said county town to the next town in the county that will keep a Latin school in it." And this fine is to be paid annually until the fine is complied with; and the grand-jury are to make presentments to the county court of all breaches of the order.

In 1678, "every town, when the Lord shall have increased their families to thirty in number, shall have and maintain a school to teach children to read and write," on the penalty expressed in the former law.

In 1690, it was enacted as follows:

This court observing that notwithstanding the former orders made for the edu-

education of children and servants, there are many persons unable to read the English tongue, and thereby unable to read the Holy Word of God, and the good laws of this colony, and *it is hereby ordained*, that all parents and masters shall cause their children and servants as they are capable, to read distinctly the English tongue, and that the grand-jury men in each town do once in the year, at least, visit each family they suspect to neglect this order, and satisfy themselves that all children under age, and servants in such suspected families, can read well the English tongue, or in good procedure to learn the same or not, and if they find any such children or servants not taught as their years are capable of, they shall return the names of the parents or masters of the said children to the next county court, when the said parents or masters shall be fined twenty shillings for each child or servant whose teaching is thus neglected according to this order. After the order of 1690—unless it shall appear to the satisfaction of the court that the said neglect is not voluntary, but necessitated by the incapacity of the parents, or masters, or their neighbors to cause them to be taught as aforesaid, or the incapacity of the said children or servants to learn.

In the revised edition of the laws completed* in 1700, and printed in 1702, the "Act for Educating Children" remains as in the code of 1650, with the following provision regarding stubborn or rebellious children :

And be it further enacted, &c., That whatsoever child or servant within this colony, upon complaint, shall be convicted of any stubborn or rebellious carriage against their parents or governors, any two assistants or justices are hereby authorized and empowered to commit such person or persons to the house of correction, there to remain under hard labor and severe punishment so long as they shall judge meet.

The act concerning "Schools," is modified so as to read as follows :

An Act for Appointing Schools, and for the Encouragement of Schoolmasters.

Be it enacted by the Governor, Council and Representatives, convened in General Court or Assembly, and it is enacted and ordained by the authority of the same, That every town within this colony, having the number of seventy householders or upwards, shall be constantly provided of a sufficient schoolmaster to teach children and youth to read and write ; and every town having a less number of householders than seventy, shall yearly from year to year, be provided of a sufficient schoolmaster, to teach children and youth to write and read for one half of the year. And also there shall be a grammar school set up in every head town, of the several counties in this colony, viz., in Hartford, New Haven, New London, and Fairfield, and some discreet person of good conversation, well instructed in the tongues, procured to keep such school.

And for the Encouragement and Maintenance of such Schoolmasters.

It is further enacted by the authority aforesaid, That the inhabitants of each town in this colony, shall annually pay forty shillings for every thousand pounds in their respective county lists, and proportionably for lesser sums, toward the maintenance of the schoolmaster in the town where the same is levied ; and in such towns where the said levy shall not be sufficient for the maintenance of a suitable schoolmaster, and there is not any estate given by any charitable persons, or not sufficient together with the levy aforesaid for that use, in every such place a sufficient maintenance shall be made up, the one half thereof by the inhabitants of such town, and the other half thereof by the parents or masters of the chil-

* The work was commenced in 1696, by appointing John Allyn, James Fitch, and Eleazer Kimberly, the two latter assistants, and the former secretary, a committee to revise all the laws of the colony, "and to consider what alterations were necessary to render them more effectual in maintaining righteousness, and promoting the weal and prosperity of the people." The work was completed in 1700, and owing to some delay in procuring a printer for the colony, it was not printed till 1702, when it was executed by Samuel Green, in Boston. In 1717, this revision, with the acts then in force which had been passed since 1700, was reprinted by Timothy Green, at New London, a son of the printer of the first edition.

dren that go to school: unless any town agree otherwise. And when, and so often as the treasurer sends forth his warrants for levying the country rates, he shall also together with the country rate, assess the inhabitants of the several towns in this colony, the said sum of forty shillings upon every thousand pounds, and proportionably for lesser sums in their country lists, adding the same to their respective proportions of the country rate, and requiring the constables to levy the said assessments upon the inhabitants of each town within their several precincts, and to make payment thereof to the schoolmaster of the town (if any there be) where the same is levied: and in such town or towns where there is no schoolmaster provided according to law, to levy the said assessment, and to pay the same into the county treasury, as a fine imposed upon such town for their defect.

Always provided, That no town shall be fined for want of a schoolmaster for one month only in one year.

In this brief law was contained the essential features of a broad and efficient system of public schools.

PERIOD III.

FROM 1701 TO 1800.

From the account already given, it will be seen, that in the year 1701, the legal provision for the education of children, or the system of public instruction in Connecticut, embraced the following important particulars:

1. An obligation on every parent and guardian of children, "not to suffer so much barbarism in any of their families as to have a single child or apprentice unable to read the holy word of God, and the good laws of the colony," and also "to bring them up to some lawful calling or employment," under a penalty for each offense.

2. A tax of forty shillings on every thousand pounds of the lists of estates, was collected in every town with the annual State tax, and payable proportionably to those towns only which should keep their schools according to law.

3. A common school in every town having over seventy families, kept throughout the year, and in every town with less than seventy families, kept for at least six months in the year.

4. A grammar school in each of the four head county towns to fit youth for college, two of which grammar schools must be free.

5. A collegiate school, toward which the General Court made an annual appropriation of £120.

6. Provision for the religious instruction of the Indians.

The school therefore embraced every family and town, all classes of children and youth, and all the then recognized grades of schools. There were no select or sectarian schools to classify society at the roots, but all children were regarded with equal favor, and all brought under the assimilating influence of early school associa-

tions, and similar school privileges. Here was the foundation laid, not only for universal education, but for a practical, political, and social equality, which has never been surpassed in the history of any other State.

In 1708, it is enacted that "when the constables in the several towns have levied the sum of 40s. upon the £1000 of the list, they shall deliver the same to the committee for the school in such towns where committees are, or in defect of such officers, to the selectmen of the town, on their order," provided such committee or selectmen give certificate to improve said money according to law. This is the first mention of the appointment of a school committee, distinct from the regular officers of the town. The provision requiring the money collected to be paid as above, was repealed in May 1726; re-enacted in 1728, and repealed again in 1750.

In 1711, the General Assembly, "upon consideration of the great backwardness and neglect among the people of this colony in paying the 40s. upon every £1000 in the lists of estate allowed by law for the supporting and keeping of schools, do order and enact that, for the year last past, and also for the future, until this Assembly shall order otherwise, the s^d sum of 40s. (recovered and to be recovered as county pay) upon the £1000, and at that rate upon the lists of estate of the several towns, villages, and places within this colony, shall be paid by the treasurer out of the public treasury of this colony, to the committee for the schools respectively, or their order, for the support of the schools in the said towns, villages, and places, and to be paid in the bills of credit, two-thirds that sum as money."

In 1712, by an "Act for the Encouragement of Learning," it is provided, "that all the parishes which are already made, or shall hereafter be made by this Assembly, shall have to the bringing up of their children and maintenance of a school in some fixed place within the bounds of their parish, the *forty shillings* in every *thousand pounds* arising in the list of estates within said parish." This is the first recognition of parishes, or ecclesiastical societies in the management of schools, and was the first departure from the New England organization of common or public schools. By this act, however, the parishes were simply made school districts, and were still subordinate to the town. By degrees they came to occupy the place of the towns in the system.

In 1714, by an "*Act for the Encouragement and better Improvement of Town Schools*," it is provided, lest a neglect "of the schools erected in towns by order of this Assembly, and partly maintained out of the public treasury," should be "the occasion of moral ignorance,

disorder, and profaneness," "that the civil authority and selectmen in every town, or major part of them, shall inspect, and they are hereby directed and empowered as visitors, to inspect the schools from time to time, and particularly each quarter of the year, at such time as they shall think proper, to inquire into the qualifications of the masters of such schools, and their diligence in attending to the services of the said schools; together with the proficiency of the children under their care; and they are hereby further required to give such directions as they shall find needful to render such schools most serviceable to the increase of that knowledge, civility, and religion which is designed in erecting of them." They are further directed to report to the Assembly concerning any disorders or misapplication of the public money.

At the October session of the General Assembly, 1715, an Act was passed which, among other objects, was designed to effect the due execution of the law for the education of children. As the whole act throws light on the state of society, and the sphere occupied by legislation at that period, it is given entire.

An Act for the more effectual suppressing of Immorality and Irreligion, and for putting in due Execution sundry Laws already made against Vice and Profaneness.

Whereas, in May, Anno Domini, one thousand seven hundred and fourteen, it was by the Governor, Council, and Representatives in General Court assembled, recommended to the General Association of the Churches in this Colony, to inquire into the state of religion in this Government.

In compliance wherewith, the said association upon due inquiry made, reported to this Assembly at this time, the several following heads, viz. :

- I. *A want of Bibles in particular families.*
- II. *Remissness and great neglect of attendance on the public worship of God, upon Sabbath days, and other seasons.*
- III. *Catechising being too much neglected in sundry places.*
- IV. *Great deficiency in domestical or family government.*
- V. *Irregularity in commutative justice upon several accounts.*
- VI. *Tale-bearing and defamation.*
- VII. *Calumniating and contempt of authority and order, both civil and ecclesiastical.*
- VIII. *And intemperance, with several other things therein mentioned.*

The which particular heads this Assembly hath now considered, and are fearful that there hath been too great a neglect of a due execution of those good laws already enacted amongst us, for the prevention of such decays in religion.

It is therefore enacted by the Governor, Council, and Representatives in General Court assembled, and by the authority of the same, that all judges and justices of the peace, in the respective counties in this colony, be diligent and strict in putting in execution all those laws and acts of this Assembly, made for the suppressing and punishing all or any of the above-mentioned immoralities and irreligious practices, that thereby the good end proposed in such acts and laws may be attained.

That the selectmen, constables, and grand-jurors, in the respective towns in this colony, shall from time to time strictly observe the following directions :

To a due execution of the law of this colony, entitled *An Act for Educating of Children*; in all and every the several parts and paragraphs of the said act.

That the selectmen make diligent inquiry of all householders, within their respective towns, how they are stored with bibles; and upon such inquiry, if any

such householders be found without one bible at least; that then the said selectmen shall warn the said householders forthwith to procure one bible at least, for the use and benefit of the said family; and if the same be neglected, then the said selectmen shall make return thereof to the next authority; and that all those families which are numerous, and whose circumstances will allow thereof, shall be supplied with a considerable number of bibles, according to the number of persons in such families; and that they see that all such families be furnished with suitable numbers of orthodox catechisms, and other good books of practical godliness, viz., such especially as treat on, encourage, and duly prepare for the right attendance on that duty of the *Lord's Supper*.

That the constables and grand-jurymen in the respective towns in this colony, shall make diligent search after, and presentment of all breaches of the following Laws of this colony:

1. The Law, entitled *An Act for Educating of Children*.
2. The two last paragraphs of the Law, entitled *An Act relating to Ecclesiastical Affairs*.
3. The first paragraph of the Law, entitled *An Act for the better Detecting, and more Effectual Punishing Profaneness and Immorality*.
4. The Law, entitled *An Act for the better Observation and Keeping the Sabbath or Lord's Day*.
5. The Law, entitled *An Act for the Punishment of Lying*.
6. The Law, entitled *An Act against Profane Swearing, &c.*
7. The Law, entitled *An Act to prevent unseasonable Meetings of Young People, in the Evenings after the Sabbath Days, and at other Times*.

And to the end that all branches of the said Law may be duly put in execution:

It is now resolved, that the constables and grand-jurymen in the respective towns, shall on the evenings mentioned in the said Law, walk the streets, and search all places suspected for harboring or entertaining any people or persons assembling contrary to the said Act.

8. The Law, entitled *An Act for preventing Tipling and Drunkenness*.
9. The Law, entitled *An Act for suppressing Unlicensed Houses, and due Regulating such as are or shall be Licensed*, in the several paragraphs thereof.

10. The Law, entitled *An Act for Suppressing certain Meetings in Licensed Houses*; and this Law shall be understood and extended to, to prohibit heads of families; and all other persons as well as young persons (strangers and travellers only excepted) under the same penalties in the said Law, as well to tavern-keepers, as to others so convening.

11. And that the several constables in the respective towns shall strictly observe, and duly execute the several paragraphs of the Law, entitled *An Act relating to Constables*; by making due presentment and information of all breaches of the said Law, and warning all persons in their respective towns, who spend their time idly, or are tiplers and tavern haunters.

12. That the constables and grand-jurymen in their respective precincts, shall take due care that the Lord's Day be sanctified according to Law, by inquiring after, and making presentment of all such who shall profane the said day.

And it is further enacted by the authority aforesaid, that this Act, together with a Proclamation enforcing it, be forthwith printed, and published throughout this colony; and that they shall be publicly read annually in the several towns in this colony, at their public meeting for choice of town officers. And that the said meeting be careful in the choice of their said constables and grand-jurymen, that they choose men of known abilities, integrity and good resolution.

In May, 1717, the obligation heretofore imposed on towns of seventy families to maintain a school for eleven months was extended to parishes or societies having that number; and societies having less than seventy families were obliged to keep school for half the year; and the majority of householders in any parish were authorized to lay taxes for the support of the school, to appoint a

collector and make regulations for the management of the same. The powers thus given were extended in October following, by authorizing the settled and approved inhabitants in each parish to meet annually in December to choose a clerk, and three discreet, able inhabitants to be a committee to order the affairs of the society. In 1721, a collector refusing to serve is subjected to the same penalty as town officers refusing to act.

As the settlement of the lands granted by royal charter was an object constantly kept in view by the legislature, and which they were anxiously engaged to effect, from time to time they selected convenient tracts of lands, and laid them out into townships, and gave all proper encouragements to those who were willing to encounter the dangers and hardships of new settlements. While many settlements were making in the north-eastern part of the colony, a number of gentlemen from Hartford and Windsor, in 1720, begun the settlement of Litchfield, on the lands held in dispute by the Governor and company, and the towns of Hartford and Windsor. The town was laid out in sixty-four allotments, three of them reserved for public uses, two for a clergyman, and the third reserved for the benefit of a school.

The origin of the controversy between the legislature and the towns of Hartford and Windsor, was as follows. After the accession of James I., the colonies perceived that their liberties and chartered rights were in danger, and to preserve from the grasp of Sir Edmund Andros, the lands unappropriated, the legislature on the 26th of January, 1686, made a grant to the above-named towns in the following words: "This court grants to the plantations of Hartford and Windsor, those lands on the north of Woodbury and Mattatuck, and on the west of Farmington and Simsbury, to the Massachusetts line north, to run west to Housatonic or Stratford river: provided it be not, or part of it, formerly granted to any particular person to make a plantation or village."

The design of this conveyance, as stated by Dr. Trumbull in his History of Connecticut, was, that these towns should hold the lands for the Governor and company; and as they had given no valuable consideration for them, after the danger from Andros was past, the Governor and company claimed the lands as fully as though no grant had been made. Hartford and Windsor, however, on the strength of the grant by the Assembly and of their settlement under it, determined to persist in their claim, and oppose the legislature. Great disturbances ensued. Finally, however, in 1726, the dispute was settled, and the legislature resolved that the lands

in controversy should be divided between the colony and the towns of Hartford and Windsor, that the colony should have the western division, comprising the towns of Norfolk, Goshen, Canaan, Cornwall, Kent, Salisbury, and Sharon, and Hartford and Windsor the eastern, comprising Torrington, Barkhamsted, Colebrook, Harwinton, Hartland, Winchester, and New Hartford; and that Litchfield should not come into the division.

The legislature appointed a committee to view the seven townships belonging to the colony, who reported in May, 1733, as their opinion, "that an Act be made and passed at this Assembly, granting all the monies which shall arise from the sale of the seven townships, to the towns in this colony which are now settled, to be divided to them in proportion to the list of polls and ratable estate in the year last past, to be secured and improved forever to the use of the schools kept in the several towns according to law, and that one of the fifty-three shares in each township be sequestered for the use of the school or schools in such town forever."

Three or four years, however, elapsed before the Assembly were able to allot the townships and take measures for their sale to advantage. A report, made in 1737, recommended that in case any town had already sufficiently provided for schools, the avails might go for the support of the ministry.

A committee was appointed in each county in October, 1737, to make sale of the lands. But owing to the fact that most of the Treasurer's books, prior to 1769, have long since disappeared, it is difficult to ascertain the amount realized. Norfolk was sold for £6824 10, and Kent for £1225 19, as appears from the reports of the committees who sold them. The monies thus realized and distributed, constitute a portion of the local school funds of the different towns and societies.

At the October session of the General Court, 1742, the following act was passed :

An Act Relating to, and for the better Regulating Schools of Learning.

Whereas, by sundry acts and laws of this Assembly, they have founded, erected, endowed, and provided for the maintenance of a College at New Haven, and inferior schools of learning in every town or parish, for the education and instruction of the youth of this Colony, which have (by the blessing of God) been very serviceable to promote useful learning and Christian knowledge, and more especially to train up a learned and orthodox ministry for the supply of our churches, and inasmuch as the well-ordering of such public schools is of great importance to the public weal, this Assembly, by one act entitled, "An Act for the Encouragement and better Improvement of Town Schools," did order and provide that the civil authority and selectmen in every town should be visitors to inspect the state of such schools, and to inquire into the qualifications of the masters of them, and the proficiency of the children, to give such directions as they shall think needful to render such schools more serviceable to increase that knowledge, civility and reli-

gion which is designed in the erecting of them. And in case those visitors shall apprehend that any such schools are so ordered as not to be likely to attain those good ends proposed, they shall lay the state thereof before this Assembly, who shall give such orders thereupon as they shall think proper; as by the said act may more fully appear; and *whereas*, the erecting of any other schools which are not under the establishment and inspection aforesaid, may tend to train up youth in ill principles and practices, and introduce such disorders as may be of fatal consequences to the public peace and weal of this Colony, which to prevent,

Be it enacted, &c., That no particular persons whatsoever shall presume, of themselves, to erect, establish, set up, keep or maintain any college, seminary of learning, or any public school whatsoever, for the instruction of young persons, other than such as are erected and established, or allowed by the laws of this Colony without special license, or liberty first had and obtained of this Assembly; and *be it enacted by the authority aforesaid*, that if any person shall presume to act as a master, tutor, teacher, or instructor in any unlawful school or seminary of learning, erected as aforesaid, he shall suffer the penalty of £5, lawful money, per month, for every month he shall continue to act as aforesaid, and every grand-jury within any county, where such school or seminary of learning is erected, shall make presentment of all breaches of this act, to the next assistant, justice of the peace, or county court; and *be it further enacted, &c.*, that the civil authority and selectmen in each town, or the major part of them, shall inspect and visit all such unlawful schools or seminaries of learning erected as aforesaid, and shall proceed with all such scholars, students, or residents in such school, and all such as harbor, board, or entertain them, according to the laws of this colony respecting transient persons or inmates residing in any town without the approbation of the selectmen; and *be it further enacted, &c.*, that if any student or resident in such school shall pretend that he is bound as by indenture an apprentice to learn any manual art or trade, and the said civil authority or selectmen shall suspect that such indenture was given only as a color to reside in said town contrary to law, that then it shall be in the power of the said civil authority to examine all the parties to such indenture, under oath, in all such questions which they shall think proper, relating to the true intention of such indenture and their practice thereon, and if it shall appear to the said authority or selectmen, or the major part of them, that such indenture was given upon a fraudulent design, as aforesaid, that then such authority shall proceed as if no such indenture had been made; and *be it further enacted, &c.*, that no person that has not been educated or graduated in Yale College or Harvard College, in Cambridge, or some other allowed foreign Protestant College or University, shall take the benefit of the laws of this government respecting the settlement and support of ministers; *always provided*, that nothing in this act be construed to forbid or prevent any society, allowed by law in this Colony, to keep a school, by a major vote in such society, to order more parish schools than one to be kept therein, and appoint the school or schools to be kept in more places than one in such society. This act to continue in force for four years.

The act expired by its own limitations.

In the revised Statutes published* in 1750, the "Act for Educating and Governing Children," remains with a slight alteration as it was originally enacted in 1650, and enlarged in 1670. The "Act for Appointing, Encouraging, and Supporting Schools," provides that—

1. Every town, where there is but one ecclesiastical society, and having seventy householders and upwards, and every ecclesiastical society having that number of families, shall maintain at least one

* The revision for 1750, was made by a committee appointed in 1742, and consisting of Roger Wolcott, Thomas Fitch, Jonathan Trumbull, and John Bulkley, the three former of whom were successively Governors of the Colony, and the latter, a Judge of the Superior Court. In the labor of compilation and alteration, Governor Fitch was principally employed.

good school for eleven months in the year, by a master sufficiently and suitably qualified.

2. Every town and society with less than seventy families, shall maintain a school and schoolmaster for one half of each year.

3. Every head county town shall maintain a grammar school to be steadily kept by "some discreet person of good conversation, well skilled in and acquainted with the learned languages, especially Greek and Latin."

4. In the encouragement and maintenance of these schools, the treasurer of the colony shall deliver annually the sum of 40s. upon every £1000 in the lists of each town, or the same shall be paid into the treasury to the school committee of the town or parish, or for want of such committee, to the selectmen, to be by them applied for the benefit of schools in said town or parish; provided the schools have been kept for the year previous according to law.

5. The local school funds, created out of the avails of the sale of the seven western townships, according to the Act of 1733, and distributed among the several towns and societies, are to remain a perpetual fund for the support of schools, and for any application of the interest to other purposes, the principal was to be paid back into the treasury of the colony, and the town was to lose the benefit thereof afterwards.

6. In the case of any deficiency, in the means of supporting a school according to law, derived from the general tax, or local funds, the sum required shall be made up, one half by a tax on the property of the town or society, and the other half by a tuition or rate-bill to be paid by the parents or guardians of the children at school—unless the town or society agree on some other mode.

7. The majority of the legal voters of every town and society are clothed with full power to lay taxes, and make all lawful agreements for the support and management of the school.

8. The civil authority and selectmen are constituted inspectors or visitors, and directed to visit and inspect all schools established under this act, at least once a quarter, and inquire particularly into the qualifications of the masters, the proficiency of the pupils, and give such directions as they shall judge needful to render such schools most serviceable for the increase of knowledge, religion, and good manners. They were also instructed to report to the General Assembly any disorders, or misapplication of public monies.

9. The selectmen of each town, when there was but one ecclesiastical society, and a committee for each society, when there

were more than one, are empowered to manage all lands and funds belonging to the town or society, for the benefit of schools.

In 1754, the treasurer was ordered to deliver to each town and society 10s. in place of 20s. in every £1,000 of the list of such town; and in 1766, the rate was restored to 20s.; and in 1767, to 40s.; where it remained till 1800.

In May, 1766, the selectmen in each town are authorized to collect any sums which remain unpaid at that date, for excise on liquors, tea, &c., and pay the same to the school committee in the several towns, to be set apart as a fund to be improved for the encouragement of schools; and at the October session, 1774, the treasurer of the colony, is directed to pay out to the several towns the principal sums paid in by them as excise money, together with the interest due at the time of payment, "which monies shall be appropriated to the use of schools."

In 1766, at the October session of the General Assembly, a law was passed,—with the express aim, as set forth in the preamble, to make the laws for the appointing and supporting schools, and the education of children more efficient,—which, with the operation of other acts transferring to school societies the direction and control of schools, which should have been confined to the towns, has resulted in distributing the means of education most unequally over the State, and lowering the standard of education, not only in the small and sparsely populated districts, but in the villages and cities. By this act, after increasing the amount to be paid to each town and society from 10s. to 20s. in £1000, each town and society was authorized "to divide themselves into proper and necessary districts for keeping their schools, and to alter and regulate the same, from time to time, as they shall have occasion; which districts shall draw their equal proportion of all public monies, belonging to such towns or societies, according to the list of each respective district therein."

By the practical operation of this act, the school system of Connecticut, instead of embracing schools of different grades, was gradually narrowed down to a single district school, taught by one teacher in the summer, and a different teacher in the winter, for children of all ages, and in every variety of study, residing within certain territorial limits.

In the revised edition of the statutes, published in 1784,* the "*Act*

* The revision was made by Roger Sherman and Richard Law, who were appointed in May, 1783. At an adjourned session in January, 1784, the revision was carefully considered and an edition ordered to be printed, as containing all the Statute Laws of the State.

for the Education and Governing of Children," remains the same as in the edition of 1702; and the "*Act for the Appointing, Encouraging, and Supporting Schools,*" embodies the various provisions which had been enacted since the revision of 1750, and which have been mentioned in the order of their enactment. In this revision, towns and societies having seventy families, are still required "to maintain schools at least eleven months in each year, constantly taught by a master suitably qualified, and those with less than forty families, for at least six months." County towns are required to keep up a grammar school; and the treasurer of the colony is directed to pay over 40s. in every £1,000 in the list, of the respective towns, as the same shall be paid in by the constables, to the selectmen, a committee of each town who shall deliver a certificate that the schools have been kept according to law. The inspection of the schools is still intrusted to the civil authority and selectmen; and the financial affairs of the schools are managed by the selectmen in towns where there is but one ecclesiastical society, and a committee appointed for this purpose in other towns and societies.

In 1794, school districts were authorized by a vote of two-thirds of all the qualified voters, passed at a meeting called for that purpose, to lay a tax to build a school-house, and to locate the same, and to choose a collector.

In 1795, at the May session, the General Assembly authorized a committee of eight persons, of which John Treadwell was Chairman, to sell the lands belonging to Connecticut west of Pennsylvania, which had been reserved by the State in its deed of cession to the United States in 1782; and appropriated the avails of the sale as a perpetual fund, the interest of which was to be divided annually among the several "Societies constituted, or which might be constituted by law within certain limits" in their capacity as school societies, according to the list of polls and ratable estate in each. Each society was authorized, by a vote of two-thirds of a legal meeting, warned exclusively for that purpose, to apply to the Assembly for permission "to improve its proportion of the interest for the support of the Christian ministry, or the public worship of God; and on such permission being granted to pay over the interest to the different religious societies, churches, or congregations, of all denominations of Christians within its limits."

By this act "all the inhabitants living within the limits of the located societies, who by law have or may have a right to vote in town meetings," were authorized to meet in the month of October annually, in the way and manner prescribed in an act "*for forming,*

ordering, and regulating societies," and then organize themselves into societies, and "transact any other business on the subject of schooling in general, and touching the monies hereby appropriated to their use, in particular, according to law."

Societies, or parishes for religious purposes, were first established within the limits of incorporated towns to accommodate settlers too far removed from the old place of worship, about 1700,—were authorized to choose a clerk in 1716, a committee in 1717, a collector in 1721, a moderator in 1726, and a treasurer in 1764. In 1726, a general law was passed providing for the organization of new societies, and directing the time and manner of holding meetings. In 1717, the right of taxation for support of the ministry was extended to schools, and by the above act of 1795, the inhabitants were authorized to meet and organize in a new capacity, and in 1798, this organization was perfected and substituted in the place of towns and ecclesiastical societies in our school system.

In 1795, the statutes were again revised,* and published in 1796. In this revision the acts respecting the education of children, and the supporting of schools, remain as in the revision of 1784, with the addition of the act already described, of 1794 and 1795.

In 1797, the law relating to school districts was modified so as to require, that before a tax could be laid, to provide a site, build a school-house, or furnish the same with accommodations and appendages, all the inhabitants must be notified of the time and place of meeting by the committee man appointed by the society.

In 1798, at the May session, an act was passed in addition to and in alteration of the acts relating to schools, by which the organization and administration of our school system was materially modified.

In this act, for the first time *THE TOWN*—the old recognized agency through which the regularly settled and approved inhabitants first commenced the system of common schools, and had for a century and a half maintained a teacher for a period in each year in no case less than six months, and in a majority of instances for eleven months,—and in addition to paying in the general State or county tax, a rate equal to 20s. or 40s. in every £1000 of their lists, (which on the list of 1852 would have amounted in 1853, for the whole State, to \$110,000, at only \$2 on every \$1000 of the

* The committee to revise the laws, appointed in May, 1795, were Chauncey Goodrich, Jonathan Brace, and Thomas Day.

grand list,) when the sum thus raised was not sufficient, were required to make up the deficiency, one half by the inhabitants in the way of tax, and the other half by the parents or masters of the children attending school—disappears from the school system, and its place is supplied by a corporate body, provided for in the act of May 1795, and from this date (1798) known in the law on the subject of schools as a SCHOOL SOCIETY—with territorial limits sometimes coextensive with a town, in some cases embracing part of a town, and in other parts of two or more towns. For a time the effect of this change was not apparent, but coupled with a change in the mode of supporting schools, provided for about this time by public funds, and dispensing with the obligation of raising money by tax, the results were disastrous.

Each society was required to “appoint a suitable number of persons, not exceeding nine, of competent skill and letters to be overseers, or visitors of schools,” with power “to examine, and at their discretion to approve schoolmasters, and to displace such as may be found deficient in any requisite qualification; to appoint public exercises, at their discretion, for the youth, and to give honorary marks of distinction to such as are found to excel.”

The head or county towns were no longer required to maintain a Latin, or Grammar school, but in place of them every society might “by a vote of two-thirds of the inhabitants present in any legal meeting warned for that purpose, institute a school of a higher order for the common benefit of all the inhabitants, “the object of which shall be to perfect the youth admitted therein in reading and penmanship, to instruct them in the rudiments of English grammar, in composition, in arithmetic and geography, or, on particular desire, in the Latin and Greek languages, also in the first principles of religion and morality, and in general to form them for usefulness and happiness in the various relations of social life.” No pupil could be admitted into the school, “except such as have passed through the ordinary course of instruction in the common schools and shall have attained to such maturity in years and understanding, as to be capable of improvement in said school in the judgment of the overseers, and shall by them or any three of them be admitted therein: and if at any time, it shall so happen that more pupils are admitted than can be accommodated or instructed in said school together, they shall be instructed in such course and order as to give all an equal opportunity.” A committee was to be appointed to manage the general concerns of the school, and to

draw a proportionate part of the public money accruing to each district, according to the number of pupils admitted from each.

The act was again revised in 1799, with a few additional provisions defining the powers of school districts, and enlarging the power of school societies over the whole matter of erecting, altering, and abolishing the same. This revision remained, except in one important particular, unchanged until 1838. Before giving the law as it was left in 1799, we will refer to the regulations of the schools in the town or school society of Farmington, from which most of the above alterations were introduced.

The revision was made by Governor Treadwell, who was also the author of the following regulations for the schools in Farmington, which were adopted at a meeting held April 4th, A. D. 1796.

Voted, The following regulations for schools in the first society in Farmington.

1. There shall be appointed in the meeting of the school society, a suitable number, not exceeding nine, of discrete persons of competent skill in letters and science, to the overseers of all the schools in said society, during the pleasure of the society, and to exercise the powers and perform the duties herein after described, which overseers shall meet the first Monday of October, November, and December annually, and oftener if they think proper.

2. The district committee in the several school districts, shall in no case contract with any person to keep a school within any such district, without the consent and approbation of the overseers, or the major part of them, in a regular meeting of the said overseers, first had or obtained.

3. The overseers will take care that no persons be employed as schoolmasters in the society, except such as have a thorough acquaintance with the best mode of instructing children in spelling and reading the English language, in the principles of English grammar, and in a good handwriting, and who are persons of reputation and a good moral character.

4. It is expected that the overseers will introduce into the schools, besides Webster's Institute in all its parts, as great a variety of reading, both in prose and verse, as the circumstances of the people will admit; among these Dwight's Geography, by question and answer, for its cheapness and simplicity, would be highly proper, as an easy introduction to that branch of science; and common newspapers would be of great use; also see that the Bible is stately read by those forms who are capable of it, at least as the closing exercise in the afternoon, and with marks of reverence and respect as the word of God, and that the master of the respective schools close the whole at night with prayer.

5. It shall be the duty of the overseers, at least two of them together, to visit all the schools in the society, quarterly, or oftener, if they think proper; to take notice of the proficiency of the scholars, and to excite in them a laudable emulation; and they will from time to time give such general or special rules or directions, not inconsistent with these regulations, as they shall think proper, with regard to the mode of instructing and governing the schools, so as best to improve the children in letters, in morals, and in manners; and if they judge fit, they may at the expense of the society distribute small premiums of trifling value, to such as they shall find, by their own observations or by information from the masters, to excel in either of the aforesaid respects, or to enable the master himself to do it, as they shall think best; and the said overseers will, at their discretion, from time to time, appoint public exercises for such of the children in the several schools, as may have made the best proficiency, either in reading, spelling, speaking, rehearsing, composing, or such like exercises, either in the schools separately, or in a general meeting; and confer on such as most deserve it, some honorary mark of distinction.

6. In addition to the separate districts which are or may be made, the society

shall be one entire district, for the purpose of maintaining and supporting a school for the further instruction of those children and youth of both sexes who have passed through the ordinary course of learning in the common schools, to be kept near the center of the society, which school shall be under the superintendency and direction of the aforesaid overseers, in the same manner as the common schools are. The object of the said school shall be, to perfect the youth admitted therein in reading and in the grammar of the English tongue, and to instruct them in geography, arithmetic, composition, and speaking, or any of them; also, in the whole course of instruction to impress their minds with a just sense of their duty to God, to their parents and instructors, to one another and to society, and in general to prepare them to act well in the various relations of social life. The directions for reading the Bible and prayer, in the common schools, shall equally apply to this.

7. No youth shall be admitted as a pupil in the said school, unless such youth is accurate, in a good degree, in spelling and reading the English tongue, and has acquired a good handwriting, and has attained to such maturity in years and understanding as to be able with profit to pursue the course of learning taught in said school, and upon examination before the major part of said overseers shall be by them judged qualified for admission. And if a greater number of pupils shall be admitted than can well be accommodated or instructed, in the judgment of the overseers, in such case they shall limit the number who shall attend at a time, and direct all the pupils, in a certain order of rotation by them appointed to attend the school, so as all may have an equal benefit.

8. That the powers and duties of the overseers with respect to said school, relative to the appointment of the master, relative to the instruction and government thereof, relative to its visitation, encouragement and public exercises, shall be the same as in respect to common schools.

9. The said school shall from time to time draw its share of all the public monies appropriated to the use of schools within the society, to be made up out of the shares of the respective districts, according to the number of pupils in such school from such districts, when compared with the number of children; such districts computing from four to fourteen years of age.

These regulations seem to have been adopted under the impulse given to the cause of education by the discussions which had grown up out of the sale, and the appropriation of the avails of the sale of the Western Reserve. Other sections of the State felt the impulse. In Middlesex County an "Association for the Improvement of Common Schools," was formed in May 1799, of which the Rev. William Woodbridge, at that time instructor of a female school in Middletown, was president. It was composed principally of teachers, but membership was not confined to those who belonged to the profession, but was extended to all who wished to promote the same objects. These objects were declared to be, to promote a systematic course of school education, to secure the inculcation of moral and religious principles in the schools, and to endeavor to elevate the character and qualifications of teachers. The first circular issued in May 1799, contains the act of the Legislature just then passed on the subject of schools, and a code of regulations drawn up by the president, and submitted by the Association to the consideration of the visitors and overseers of schools in the county. This code contains many valuable regulations, and school visitors of the present day might profit by its hints.

The code enjoins upon teachers punctuality in opening and attending school ; exclusive devotion to its duties ; a regular order of exercises ; the keeping of a register of the attendance and proficiency of each pupil, and particular attention to their manners and morals. One half day in each week must be devoted to a review of the studies for the week previous. Parents must see that scholars are furnished with all necessary books ; and to this end, it is recommended that the district purchase a supply of books to be loaned or sold to the pupils. Parents should aid and encourage their children in studying their lessons at home, especially in winter evenings.

In closing this important period of our school history, it may be well to repeat that up to 1798, the law enforced the keeping of school in towns or societies of more than seventy families, for eleven months of the year, and in those of less than seventy, for at least one half the year. It also enforced the keeping of a grammar school in the head town of the several counties. It imposed a tax, collectable with the other public taxes, for the support of schools, and limited its benefits to such towns or societies as kept their schools according to law. There are no official documents respecting the condition of the schools themselves, but from the testimony of men who were educated in the common schools prior to 1800, it appears that the course of instruction was limited to spelling, reading, writing, and the elements of arithmetic ; but that these studies were attended to by all the people of the State ; so that it was rare to find a native of Connecticut "who could not read the holy word of God and the good laws of the State." These schools such as they were, were the main reliance of the whole community for the above studies. There were but few private schools, except to fit young men for college, or carry them forward in the higher branches of an English education. The books used were few and imperfect, but uniform. The supervision of the schools by the selectmen was considered a part of their town office, and by the clergy as a regular part of their parochial duty.

NOTE.—The following *Code of Regulations*, drawn up for the government of the *New Haven Hopkins Grammar School* in 1684, is printed from a copy carefully transcribed from the Records of the School, by Mr. Lyman Baird.

“Orders of y^e Committee of trustees for the Grammer Schoole at Newhaven to be observed & attended in y^e said Schoole, made, agreed upon & published in y^o s^d Schoole in y^e yeare 1684.

“1st. The Erection of y^e s^d Schoole being principally for y^e Institucion of hopeful youth in y^e Latin tongue, & other learned Languages soe far as to prepare such youths for y^e Colledge & publiq^e service of y^e Country in Church, & Comonwealth. The Chiefe work of y^e Schoole-M^r is to Instruct all such youth as are or may be by their parents or Friends sent, or Comitted unto him to y^e end wth all diligence faithfullnes and Constancy out of any of y^e townes of this County of Newhaven upon his salary accompt only, otherwise Gratis. And if any Boyes are sent to y^e M^r of y^e said Schoole from any other part of y^e Colony, or Country. Each such boy or youth to pay ten shillings to y^e Mast^r at or upon his entrance into y^e said Schoole.

“2. That noe Boyes be admitted into y^e s^d Schoole for y^e learning of English Books, but such as have ben before taught to spell y^r letters well & begin to Read, thereby to perfect their right Spelling, & Reading, or to learne to write, & Cypher for numeracion, & addicion, & noc further, & y^t all others either too young & not instructed in letters & spelling, & all Girles be excluded as Improper & inconsistent wth such a Grammer Schoole as y^e law injoines, and is y^e Designe of this Settlem^t, And y^t noe Boyes be admitted from other townes for y^e learning of English, wthout liberty & specially licence from y^e Committee.

“3. That the Master & Schollars duly attend the Schoole Houres viz. from 6 in y^e morning to 11 a Clock in y^e forenoone, And from 1 a Clock in the afternoone to 5 a Clock in the afternoone in Summer & 4 in Winter.

“4. That the M^r shall make a list or Catalogue of his Schollars names And appoint a Monitor in his turne for one week or longer tyme as the M^r shall see Cause, who shall every morning & noone at least once a day at y^e set tyme Call over y^e names of y^e Schollars, and Note down the late Commers, or Absent. And in fit season Call such to an accompt That the faulty, & truants may be Corrected or improved as their fault shall deserve.

“5. That the Schollars being Called together the M^r shall every morning begin his work wth a short Prayer for a blessing on his laboures & their Learning.

“6. That prayer being ended the Master shall Assigne to every of his Schollars their places of Sitting according to their degrees of learning. And that (having their Parts, or Lessons appointed them) they Keepe their Seats, & stir not out of Dores, with[out] Leave of the Master, And not above two at one tyme, & soe successively: unless in Cases of necessity.

“7. That y^e Schollars behave themselvs at all tymes, especially in Schoole tyme with due Reverence to their Master, & with Sobriety & quietnes among themselvs, without fighting, Quarrelling or calling one anothe^r or any others, bad names, or using bad words in Cursing, takinge the name of God in vaine, or other prophane, obscene, or Corrupt speeches which if any doe, That y^e M^r forthwith give them due Correccion. And if any prove incorrigible in such bad manners & wicked Corrupting language & speeches, notwithstanding form^r warnings admonishious & Correccion that such be expelled y^e Schoole as pernicious & daungerous examples to y^e Rest.

“8. That if any of y^e Schoole Boyes be observed to play, sleep, or behave themselves rudely, or irreverently, or be any way disorderly att Meeting on y^e Saboath dayes or any other tymes of y^e Publiq^e worships of God That upon informacion or Complaint thereof to y^e due Conviccion of the offender or offenders, The Master shall give them due Correccion to y^e degree of y^e Offence. And y^t all Correccions be wth Moderacion.

“9. That noc Lattine Boyes be allowed upon any p^rtence (sicknes, and disability excepted) to withdraw, or absent themselvs from the Schoole, without liberty granted by the Master, And y^t noe such liberty be graunted but upon ticket from y^e Parents or friends, & on grounds sufficient as in Cases extraordinary or of absolute necessity.

“10. That all the Lattin Schollars, & all other of y^e Boyes of Competent age and Capacity give the M^r an accompt of one passage or sentence at least of y^e sermons the foregoing Saboath on y^e 2^d day morning. And that from 1 to 3 in y^e afternoone of every last day of y^e week be Improved by y^e M^r in Catechizing of his Schollars y^t are Capable.”

VIII. HENRY TODD.*

HENRY TODD, a liberal benefactor to the Massachusetts Board of Education in behalf of Normal Schools, was born in Boston, November 1st, 1786, and was the son of William Todd, a most respectable gentleman of that time. He received his education in the public schools of the town, where he gained the particular friendship of his instructors, made rapid progress in his studies, and reached the acme of his young ambition, by becoming one of the "*Medal Scholars.*" At a suitable age he was apprenticed to one of the largest importing firms of the day, and so faithfully and so intelligently did he acquit himself in all situations, and in the performance of every duty, that when he attained his majority, his masters proposed to him to go to Europe, to have under his control their whole foreign business—their funds—their credit—and all their various interests. He accepted their propositions, and continued his connection with Messrs. Gore, Miller & Parker, to their entire and perfect satisfaction, till after the peace of 1815, when those gentlemen dissolved their firm, and retired altogether from the importing trade. He then formed a connection with a house in Philadelphia, which continued till 1822. He subsequently became a partner in an extensive importing establishment in New York, in which he remained till 1833. Owing to many circumstances beyond his control, his business thus far had not been successful, and he had accumulated—nothing. In 1834 he entered as a partner into one of the largest and most respectable commission houses in Great Britain. Here, in seven years, he found himself possessed of a property ample enough to enable him to gratify his tastes, and all his rational desires, and he bade adieu to the cares and the labors of an active merchant's life. From 1841 to 1848 he traveled much, both in the United States and in Europe. In the *former*, he visited nearly every State in the Union. He penetrated to the "far West"—he admired the enterprise and the indomitable, persevering energy with which the Anglo Saxons overcame all obstacles, and converted the dark forests—the growth of unknown cen-

* From a communication to the Massachusetts Board of Education, by Thomas P. Cushing, published in the *Sixteenth Annual Report*, 1852.

turies—filled with the wild sons of the woods—into well cultivated, fruitful farms, occupied by a civilized, intelligent and happy population—an example, important and beautiful for all the other races of mankind. In the *latter*, he made tours in all directions, which brought under his observation such objects as are most worthy of a sensible and thinking traveler's attention. He studied men, as well as things, and no one was better acquainted than he, with the talents, the influences, and the peculiar characteristics of the leading men of the age, whether of the United States, or of the Eastern Continent. Mr. Todd, in the last years of his life, was troubled with a cough, though by no means of a threatening, or of a serious nature; but in traveling through Greece to Constantinople, and thence to Vienna, by way of Venice, and through the Tyrol, the weather was inclement, and he was much exposed to it. He took a series of colds, by which his cough was aggravated, and a confirmed bronchitis ensued, which eventually proved fatal. He returned to America, but his health and his strength were gone. He survived a few months, but he gradually sunk under his disease, till death came to his relief. He breathed his last in the evening of the 2d of March, 1849, in the city of New York, leaving many strongly attached and deeply mourning friends to lament his loss.

Mr. Todd was remarkable for industrious habits, uncompromising integrity, liberal feelings, and a sound judgment, combined with a delicate, yet a sportive imagination. The former insured to him the respect and confidence, and the latter, the delight of his numerous friends. By nature he was endowed with a superior mind, which he cultivated with assiduity and success. He never *lost* an hour. He was an uncommonly "well-read" man. He was a good belles-lettres scholar, and he had a refined taste in literature generally. To subjects connected with the "Fine Arts" he had devoted much time and attention, and in that department of civilization—especially of paintings and of statuary—of their merits and of their demerits, of their beauties and of their defects—his opinions were highly respected, if not considered as conclusive.

In Mr. Todd's travels, he was strongly impressed with the great *truth*—which his observation everywhere confirmed—that of all the races which inhabit the earth, there was not one so industrious, so sober, so enterprising, so intelligent, and in every respect so effective—and which exercised such a preponderating influence, in proportion to its numbers, as that which occupied the bleak and sterile rock-bound borders of New England. What was the cause of this phenomenon, so important, under every consideration? Reflection told him that it

was our system of Universal Education, which banished ignorance from the land, and raised up men and women who could not only read, write and cipher, but whose minds were trained to think, to reason, and to develop plans for the elevation of themselves and their families in the ranks of humanity.

Having established this important fact, to the satisfaction of his own judgment, he, with the feelings of a true patriot, sought for the means of improving the common schools, and rendering them more efficient and still more useful, the effect of which would be to diffuse through the masses a greater amount of useful knowledge. "Knowledge is Power," said Lord Bacon,—therefore, the more knowledge a people possess, the more powerful will they become, as compared with, and as brought into competition with, *other* people. What means, then, should be adopted to secure this desirable improvement in education, in Massachusetts? Instructors can never teach more than they themselves know. The *way*, therefore, is clear. If the pupils are to be well and thoroughly taught, their teachers must be taught more *highly*—their knowledge must be increased, and their qualifications enlarged, improved and elevated.

The great, the important conclusions to which Mr. Todd arrived by such reflections, were according to his reasonings, the elements of a fixed principle, which he was rejoiced to learn had already been adopted, and permanently established by our Legislature, when it instituted the Normal schools. These institutions realized the grand desideratum for which he had so long and so fervently hoped. He doubted not, but their influence through all coming time would be greater for good than the present generation could now anticipate, any more than a man of the past generation could foresee the immense, progress which has been made in the arts and sciences within a few years, the stupendous results of which are every day displayed before us.

With these views, Mr. Todd, in the disposition of his estate, after making adequate provision for his family connections, bequeathing \$5,000 to the Massachusetts General Hospital for free beds for the poor—\$3,000 to the Boston Farm School for indigent boys—and \$2,000 to the Children's Friend Society—gave all the rest of his property to the "Massachusetts Board of Education"†—the *Income* of which to be applied forever "*in aid of the Normal Schools*;"—not to reduce the appropriations of the government, but rather to stimulate the rulers of this Commonwealth to a greater liberality in fostering and in increasing those truly admirable seminaries.

* A silver medal, paid for out of a fund left by Benjamin Franklin to the city of Boston, is given to the three best scholars among the boys in each of the Grammar and High Schools at the annual exhibition.

† The Todd fund amounted in 1853, to \$11,800.

IX. EMINENT TEACHERS IN THE NETHERLANDS,

PRIOR TO 1500.

FROM THE GERMAN OF KARL VON RAUMER.

JOHN WESSEL.

JOHN WESSEL was a baker's son, and was born in 1420, at Groningen. Here he received his early education, after which he went to Zwoll, to the school of the Hieronymians, where Thomas-à-Kempis exerted a powerful influence upon him. He then studied in Cologne,—and about the year 1452 went to Paris, where he made the acquaintance of Bessarion and Francis de Novera, afterward Pope Sixtus IV. In 1470 he made a journey to Italy. Already won over to Platonism by Bessarion, his stay in Florence wedded him more closely to it. When in Rome, Pope Sixtus IV. bade him ask a favor of him, and Wessel accordingly besought him for a Greek and a Hebrew Bible from the Vatican Library. Returning to Paris in 1473, Reuchlin, then 18 years old, made his acquaintance, and he appears to have given a great impetus to the philosophical and humanistic studies of Reuchlin. His fellow-countryman, Agricola, was likewise with him at Paris; and was persuaded by Wessel to the study of the Hebrew.

In his later years he returned to his native country, and lived at times in the Mount St. Agnes Monastery, at Zwoll, where Thomas-à-Kempis also passed his long and peaceful life. He spent likewise much time in the monastery Edward, or Edouard, two hours distance from Groningen, and in a convent at Groningen. He died a peaceful death on the 4th of October, 1489, in his 69th year, and was buried in that Groningen convent.

His contemporaries called him "*Lux mundi*," also "*Magister controversiarum*," the last epithet he owed to his many philosophical and theological discussions. His philosophy was originally realism; but later he became a nominalist, as were all the reformers with the exception of Huss. *

His theological abilities were recognized by Luther. "Had I known Wessel or read his books earlier," says Luther, "my adversaries would have fancied that I had obtained this thing or that from Wessel; so much do our sentiments harmonize. It gives me peculiar joy and strength, and removes every doubt that I might have had of the soundness of my doctrine, to find that he agrees everywhere with me,

both in thought and opinion, expressing himself frequently even in the same words, though at a different era, when another air was over us, and another wind blew, and he too was accustomed to another fashion and to other junctures." In another place Luther says: "Wessel manages matters with great moderation and truth." On this account it was that Erasmus, who so dearly loved and prized peace, thus writes: "Wessel has much in common with Luther; but in how much more modest and christian a manner he conducts himself than do they, or most of them!"

Besides Latin, Wessel understood both Greek and Hebrew. The narrow limits of learning, as we find them laid down by the earlier Hieronymians, Wessel far exceeded. His long residence at Paris, and the journey to Italy, had widened his intellectual horizon; for it was only after a busy, active life in foreign lands, that a longing was created in his breast for his own land, and for the contemplative quiet that could be alone secured by a return among his kindred.

Greek he learned from Bessarion and other Greek scholars in Italy; but who taught him Hebrew we are nowhere informed.

His clearness of thought especially qualified him to teach. "The scholar," he says, "is known by his ability to teach."

His instructive intercourse appears to have had a very marked influence on many, as we have seen that it did on Reuchlin and Agricola. Especially must the frequent converse of many distinguished men with the aged Wessel, as in the monastery of Edward, have been very edifying, both in a literary and in a religious aspect.

Goswin of Halen, earlier, Wessel's scholar, and, at the close of the 15th and the commencement of the 16th century, head of the brotherly union at Groningen, writes of this converse to a friend as follows: "I have known Edward for more than forty years; but then it was less a monastery than a college. Of this, could Rudolph Agricola and Wessel bear me witness, if they were now living, as also Rudolph Lange, of Munster, Alexander Hegius, and others, who all have passed whole weeks, yea, whole months at Edward, to hear and to learn, and to become daily more learned and better." "To become better," says Goswin, for the earnestness of a christian morality animated all the studies of Wessel, a depth of thought which was radically opposed to the æsthetic pleasurable of so many Italians. And this was why he studied, as well as he was able to do, the Old Testament in the original.

We can not better present to our view the love and the well-directed labors of Wessel, than in these words of his own: "Knowledge is not our highest aim, for he who only knows how to know, is a fool;

for he has no taste of the fruit of knowledge, nor does he understand how to order his knowledge with wisdom. The knowledge of truth is its own glorious fruit, when it meets with a wise husbandman; for by this truth he may, out of his clear knowledge, come to God, and become God's friend; since through knowledge he unites himself to God, and progresses step by step in this union, until he tastes how gracious the Lord is, and through this taste becomes more desirous, yea, burns with desire, and amid this glow God loves him and lives in him, until he becomes wholly one with God. This is the true, pure, earnest fruit of an earnest knowledge, which in very truth all men by nature do rather desire to possess than mere memory, that is to say, than knowledge, in and for itself. For, as unsettled and wavering opinions are empty without knowledge, so knowledge is unfruitful without love."

To this brief sketch of Wessel I add a passage from Goswin. It gives us a view of the nature of the studies that men and youth in Wessel's vicinity were accustomed to pursue at Zwoell, Edward, and other famous schools of that period, and likewise what writings people, molded by such influences, would chiefly read and prize. "You may read Ovid," Goswin remarks, "and writers of that stamp through, once; but Virgil, Horace, and Terence are to be studied with more attention, and oftener, because in our profession we need to bestow especial study upon the poets. But, above all, I will that you read the Bible constantly. And, since one ought not to remain in ignorance of history, I counsel you to take up Josephus, and for church history to read the *Tripartita*.* Of the profane writers, Plutarch, Sallust, Thucydides, Herodotus, and Justin, will especially profit you. Then it will do you no harm to go through with the writings of Plato and Aristotle. But with Cicero we must remain longer, in order that we may acquire a truly Roman style. Next to our Bible it is well to give thorough and earnest study to Augustine. Him you may follow up by Jerome, Ambrose, Chrysostom, Gregory, Bernard, and Hugo St. Victor, a man full of rich instruction."

This passage shows how much the circle of study of the Hieronymians had become enlarged during the 15th century. This we owe to the influence which the Italians had over Wessel, Agricola, Rudolph Lange, and others, who again in their turn shaped with such power both German and Netherland culture. But the Bible remained to these thoughtful men the book of books; neither were the Fathers thrust aside.

* This was a sketch of the history of the church taken from Socrates, Theodoret, and Sozomenes, translated into Latin by Cassiodore.

RUDOLF AGRICOLA.

RUDOLF AGRICOLA was born at Baflo, near Groningen, in West Friesland, in 1443. His proper name was Husmann. It is not known, where he received his earliest instruction. He studied at the University of Louvain, where he read Cicero and Quintilian chiefly, and after an honorable career, became a *Magister artium*. His intercourse with Frenchmen while at Louvain, was the means of teaching him the French language.

From Louvain, he proceeded to Paris, where he had John Wessel, among others, for a teacher. In 1576, he went to Ferrara. There he studied the ancients under Theodore Gaza and Guarini, copied with great diligence manuscripts, Quintilian among the rest, and won the applause of the Italians by his Latin speeches and poems, as well as by his accomplished singing to the guitar. He delivered an oration there in the praise of philosophy, before Hercules de'Este. There too commenced his friendship for Dalberg, afterward Bishop of Worms, and Diedrich Plenningen, whom he was wont to call his Pliny.

Returning to Germany, he tarried six months of the year 1481 in Brussels, at the court of the then arch-duke, afterward emperor, Maximilian I., on the behalf of the city Groningen. But it was in vain that he was urged to remain at Maximilian's court; for his repugnance to all manner of constraint was too great to admit of his accepting the proposal. In the following year, 1482, his friend Barbrianus, invited him to Antwerp, to superintend a school, and likewise to give lectures to amateurs. Agricola replied; "that his friend Plenningen, had, in Dalberg's name, urged him in a most polite letter to go to Heidelberg, and he had accordingly made the long journey from Holland thither. Dalberg, who was soon after chosen bishop of Worms, and other friends, had pressed him to *stay* at Heidelberg, saying, that he would exercise an advantageous influence upon the studies there, and would have many hearers. Philip, the count Palatine, had also overloaded him with kindness. And Dalberg had offered him his house, to regard as his own, to come and go at his pleasure. In view of all this, he had as good as pledged himself, but had taken a journey home first to make the needful arrangements. And now on his return he had received this invitation (of Barbarianus) at Bacharach; and it had caused him much perplexity, to relieve which, he had consulted with friends at Cologne. The result of their joint deliberations was, that he could not go to Antwerp,

because he was already as good as pledged to Heidelberg." In reference to the nature of the Antwerp offer, he expresses himself thus:—

A school to be given to him? That would be a hard and an irksome office. A school was like a prison, where scourging, weeping and howling alternated with each other forever. If there is any thing in the world, whose name is directly opposite to its nature, it is a school. The Greeks called it *schola*, leisure; the Latins, *ludus literarius*, the game of letters;—when nothing is further from leisure, nothing harsher and more antagonistic to all playfulness. A far more appropriate name was given to it by Aristophanes; viz., "*φροντιστήριον*," the place of cares.

I conduct a school? What time would be left me for study; what repose, for invention and production? Where should I find one or two hours daily for the interpretation of an author? The boys would claim the larger portion of my time, besides wearing my patience to that degree, that whatever leisure time I could secure would be required, not for study, but rather to catch my breath and to compose my thoughts. You say "that with a less rigid discharge of my duties, I might lead a more agreeable life." I might indeed; but, were I neglectful, which of my colleagues would be assiduous, which of them would not rather, after my example, take his ease? I think, that a wise man should first carefully consider; whether he should undertake a thing or no; but when once he does undertake it, then he ought to exert every effort to perform it conscientiously. You say, that I can devote one or two hours a day to lecturing on some classical author before the nobility; but I would have no leisure for this, since the freshest and best part of every day must be given to the boys, even to weariness. And such lectures meet with discouragements and drawbacks, as I know from experience. In the first glow of zeal many take hold of them; later, when the zeal is cold, some plead off on the pretext of business, others from the re-action of enthusiasm become disgusted, and others again are led to stay away, if for no other reason, because their neighbors do. One finds it too much trouble, another, too great an expense. So it comes about, that of a large audience, scarce four or five shall remain with you through the course.

It might appear, that a man who had not the smallest inclination to teach either old or young, would not deserve mention in a history of education. But it would be appearance merely. For if Agricola took no pleasure in teaching, himself, yet the prosperity of schools was a matter of deep interest to him. This is evident from parts of this very letter to Barbirianus. He begs him, to persuade the Antwerpens to subject the man, with whom they purposed to intrust the schools, to a conscientious examination beforehand.

They should not select a theologian, neither any one of those hair splitting doctors, who imagine that they are competent to speak upon any subject whatever, while they know nothing, in the first place, of the very art of speaking itself. Such people are as much out of their element in schools, as, according to the Greek proverb, a dog would be in a bath. Much rather ought they to choose a man after the style of Phoenix, the preceptor of Achilles, who should be able both to teach, to speak and to act; if they could find such an one, they should make sure of him at any price. For their decision was no unimportant matter, since the destiny of their children depended on it. It was no small thing that they were about to do; for it pertained to their children, for whose future welfare they themselves in other respects were now toiling and struggling. Their utmost care should be bestowed on that tender age, which, even with the best talents, takes the stamp of good or evil indifferently, according to the influence brought to bear upon it.

In a subsequent letter to Barbirianus, Agricola praises the friendly reception that Dalberg had given him. But on the other hand he

writes to his brother of his complete unhappiness in the midst of all the prosperity that he enjoyed at Heidelberg.

It is hard for me, in advancing age, to learn to serve. And though no service is required of me, yet I know not whether I am not more greatly burdened, in feeling constrained to impose those duties on myself, which others have released me from. Thus freedom itself exacts a heavy service of me.

His love of freedom dissuaded him from wedlock; or, as he wrote to Reuchlin, it was a shrinking from care, and a dislike to be tied down to an establishment.

Of great importance to us are Agricola's letters to his friend, Alexander Hegius, the famous Rector of Deventer, of whom also we are soon to speak.

One of these letters dates from Worms, whither Agricola had gone in the retinue of the Bishop Dalberg. He commences by commending Hegius; for, as he perceives by his writing, he has improved in his Latinity, (*politiorem te, limatioremque fieri.*) He showed his letter to Dalberg, who joined with himself in wishing Germany joy of such a teacher, exclaiming, "*Macte virtute, sic itur ad astra.*" Farther on, he laments that studying with the bishop, and public lectures, consume too much of his time. His pupils, with the best inclination, shewed scarce any capacity for study: they were mostly masters, or "*Scholastici artium*" so called, who squandered all their time upon the sophistical nonsense of the schools, (*cavillationes,*) and hence found no room for attention to classical studies. "For this reason,"* he adds, "I have undertaken the Hebrew, which is a new and a very difficult labor to me, and which (I could scarce have believed it) gives me much more trouble than did Greek, earlier in life. Yet I am determined to persevere. I have assigned the study of the Holy Scriptures to my later years, provided that my life is spared."

In a previous letter to Hegius, in 1480, he accuses himself for intermitting his studies, and mentions, as the chief cause of his neglect, the fact, that he has no one in Groningen, with whom he can labor in common. Among other matters, he answers some philological questions, which Hegius had submitted to him. He defines the words, *mimus, histrio, persona, scurra, parasitus, nebulo, nepos, vesper, aurora, tignum, trabs, asser, contignatio.* He expresses a doubt whether *bonum sero* is as good Latin as *bonum mane.* "As it regards the derivation and formation of new words after the analogies of the language;" he says, "I should hardly venture to form a word for which I could not shew classical authority; yet I might haply have said, '*Socratitas,*' '*Platonitas,*' and '*entitas,*' although our Laurentius Valla disapproves of such words." Farther on Agricola explains

* For lack of encouragement.

διοίκησις, marks the precise difference between ἡ διαλεκτικὴ and τὰ διαλεκτικά, and suggests a correction in what Hegius has written, viz., that he should use 'intra' or 'post quantum temporis' instead of 'quanto tempore'. The above will serve to characterize the condition of philological science at that time, and to indicate its gradual advance. In the same letter he writes to Hegius; that he will send his brother to him to school, provided private instruction in the elements can be given to him out of school hours. "I am very desirous," he writes, "that my brother should learn the elements as speedily as possible. For I think that boys only lose time when they remain too long at these; and that, in the way that these are ordinarily taught, the scholar is filled with disgust for learning, and with 'barbarism' at the same time, so that later in his career he learns what is better and more important not only more slowly, but with greater trouble."

In the year 1484, Agricola wrote a long letter to Barbirianus on the method of studying (*de formando studio*.)

The question arises, what we shall study, and then, in what method? Determined either by taste or inclination, or by circumstances, some choose civil law, others canon law, others again medicine. But the most direct their attention to the verbose but unfruitful 'arts,' so called, and waste away their time in frivolous and out of the way discussions,—in riddles, which, in all these many centuries have found no Œdipus to solve them; nor will they ever. Still he advises Barbirianus to apply himself to philosophy, though to a philosophy widely different from the scholastic; that, namely, which inculcates just modes of thought, and teaches how to express with propriety that which has been first rightly apprehended.

Philosophy is divided into moral and natural. The first is, to be drawn, not merely from Aristotle, Cicero, and Seneca, but likewise from the facts and examples of history. Thence, we come to the Holy Scriptures, after whose divine, unerring precepts we are to pattern our lives. For all other writers have not clearly perceived the true aim of life, and hence their doctrines are not free from error.

Researches into the natural world are not of such importance as ethical inquiries, and are to be viewed only as a means of culture."

Agricola recommends the study of geography, of the botany of Theophrastus, the zoölogy of Aristotle, and likewise advises attention to medicine, architecture and painting.

Both moral and natural science are to be drawn from the classics, with the view of acquiring at the same time the art of rhetoric and expression. He should also translate the classics with as much exactness as may be, into the vernacular; for through such exercise in translating, the Latin words will soon spontaneously occur at the same time with the thought. Whatever he designed to write in Latin, he must first think out with thoroughness and care in the vernacular; for any errors of expression are less liable to pass unobserved, if in the mother tongue. Before he proceeds to the ornaments of rhetoric, he should learn to write with purity and correctness. "Who-

ever would study to advantage, must observe three things: first, to apprehend aright; then, to hold the matters so apprehended fast in the memory; and lastly, to cultivate the faculty of producing something ones' self.

As regards apprehending aright the sense of what is read, he advises to apply the understanding closely to the subject in hand with reference both to the scope of the whole and the meaning of the parts; yet not with such rigor as to puzzle ourselves over an obscure passage, not passing on until we have mastered that. But we ought rather to read farther, trusting that afterwards, through the explanations of a friend or otherwise, the difficulty will be cleared up. One day teaches another.

He then gives directions for strengthening the memory.

'We must, with unpreoccupied, attentive spirit, grasp the object, and again from time to time call it up before the mind.' Then follow rules for composition. "If we create nothing," says Agricola, "all our learning remains dead within us, and will not be like the living seed, which, when cast into the ground, springs up and bears rich fruit. But there are two things indispensable to us: one, that we should not merely store up that which we have learned, in our memory, but should rather always have it at hand, and be able to bring it forth; then, in addition to what we have derived from others, we should invent something ourselves. It will materially aid us in invention, if we arrange a set of general notions, *capita*, under which we may sketch what we already know; some such heads for instance, as *virtue, vice, life, death*, etc. Then it will prove a great help, should we analyze every thought thoroughly and contemplate it under many different lights." This point he had discussed more at length in his six books, "*de inventione dialectica*." "Whoever conforms to both the above precepts, will at last attain to the readiness of the Greek sophists, who could speak at will, and without preparation, upon any theme that should be given to them."

After this methodology, Agricola comes in the same letter to his Hebrew studies.

"Think of my presumption, or rather of my folly; I have decided to learn Hebrew, as if I had not already wasted time and trouble enough hitherto on my Greek. I have hunted up a teacher, a Jew, who was some years since converted, and who, previously, on account of his learning and knowledge of the doctrines of the Jews, had been chosen as their champion, when they contended for their faith with Christians. The bishop has, for my sake, taken this man into his house, and is providing for his maintenance. I will try what I can do; I hope to bring something to pass; and perhaps I shall succeed, because I hope."^{*}

He translated the Psalms.

Melancthon, in his preface to Agricola's 'dialectics,' relates what Pallas, professor of theology at Heidelberg, and Reuchlin, related to him from their personal acquaintance with Agricola. Said Pallas; "at Heidelberg, as earlier at Louvain, he led an exemplary life. From his extensive learning, Agricola has often thrown a definite light

^{*} Erhard has given a short extract from this work, in his history of the revival of Classical Learning. Melancthon in his preface to Agricola's dialectics, says: "There are no modern works on the Topics and on the use of Logic, so good and so rich as these books of Rudolf." Agricola himself is very pointed in his condemnation of the scholastic logic.

upon subjects under dispute, not alone in the department of philosophy, but in law and theology; and has displayed herein no contentious and dogmatical spirit, but friendliness and a spirit of peace. For the elector Philip, who always took delight in listening to him, Agricola wrote a compend of history."

In the year 1485, Dalberg was sent by the Elector just named, to Rome to present his congratulations to Pope Innocent VIII, on his coronation, and Agricola accompanied him on this journey.* Returning to Heidelberg, he was attacked by a fever. But before the physician arrived, he had tranquilly breathed his last. He died on the 28th Oct. 1485, aged only forty-two years.

Erasmus testifies of him as follows:

Agricola has surpassed in culture every one on this side the Alps. There was no scientific attainment in which he did not compete with the greatest masters. Among the Grecians, he was a pattern Greek, (*græcissimus*;) among the Latins, a pattern Latinist; as a poet, he was a second Maro, as an orator, he recalled Politian's grace, but he excelled him in majesty. Also when he spoke *extempore*, his speech was so pure and unadulterated, that you would have deemed yourself listening, not to a Frieslander, but to a Roman. To his perfect eloquence he united an equal degree of learning; all the mysteries of philosophy he had fully investigated. Nor was there any part of music, which he did not fully understand. In the last years of his life he applied himself with his whole soul to the study of Hebrew and the Holy Scriptures. He thought little of fame.†

Agricola broke a path for classical philology in Germany. Saxo in his eulogy on Agricola says:

At an epoch when the most corrupt Latin prevailed in Germany, together with that uncertainty that no one knew what good Latin was, and when admiration was lavished on insipidity, it was Agricola, and he alone, who first with ear and mind detected our blunders, and reached out after better forms of speech. Yet he did not undervalue the mother tongue, but regarded it as natural to every one, as the native vehicle of thought. Thence, as we have seen, he gave his counsel that whatever we would write in Latin, we should first compose in the vernacular, transferring it into Latin afterwards. He himself wrote songs in the mother tongue, and sang them to the guitar. He understood both French and Italian. Wessel appears to have had much influence upon Agricola. It was Wessel as we have seen, who directed his attention when at Paris to the study of Hebrew; and they both subsequently enjoyed much mutual intercourse in the monastery of Edouard. "There," Goswin von Halen tells us, "he listened, when a boy, to the conversations of Agricola and

* Dalberg's speech is given in Agricola's works, as the production of the latter. It was delivered on the 6th of July, 1485. 'I think,' so the speech reads, 'that grace of oratory and excellence and splendor of diction are not much to be expected from a German, nor indeed ought they to be.'

† That this panegyric might not be accounted partial, Cis-Alpine, or patriotic merely, Erasmus quotes the well-known epitaph, which Hermolaus Barbarus wrote. "The envious fates have enclosed within this marble tomb, Rudolf Agricola, the hope and the glory of Friesland. While he lived, Germany, without doubt, deserved all the renown that either Latium or Greece ever obtained."

Invida clausurunt hoc marmore fata Rudolphum
Agricolam, Frisii spemque decusque soli,
Scilicet hoc vivo meruit Germania laudis,
Quidquid habet Latium, Græcia quidquid habet.

Wessel, when they bewailed the obscuration of the church, the desecration of the mass, and the abuses of celibacy; also when they spoke of the apostle Paul's doctrine of "justification by faith without the deeds of the law."

Such conversations,—the earnestness with which Agricola in his 41st year, applied himself to the study of the Hebrew,—his expressed determination to devote his old age to the study of the Holy Scriptures;* all this indicates that he was not merely through his classical learning, a forerunner of the dawn of classical culture in Germany, but that he also, in this holy earnestness in the study of the sacred writings, heralded the coming Reformation. At his death Luther was two years old.†

ALEXANDER HEGIUS.

ALEXANDER HEGIUS, so beloved and honored by his contemporaries, was born in 1420, or, according to some, in 1433, at Heek, in Westphalia. He was frequently, as we have seen, in the society of Wessel, Agricola, and others in the monastery of Edouard; and from letters of the latter, we may perceive how the modest Hegius suffered himself to learn from Agricola, his junior.

Boitzbach, one of his later scholars, informs us, that he died in advanced age at Deventer in 1498, and was buried on the day of St. John the Evangelist, (Dec. 27,) in the Church of St. Lebuin. There too sleeps Florentius Radewin. At first Hegius was gymnasiarch‡ in Wessel, then in Emmerich, but later and for a much longer period at Deventer. Agricola writes to him at the opening of the school at Deventer, wishing him all manner of success, and the more cordially as the place had been recently decimated by a frightful pestilence. Since he remained at the head of this school for thirty years, and until his death, as we gather from three several authorities, he must have entered upon his office in the year 1468. Erasmus entered the school in 1476, in his ninth year.

The character, attainments, and educational significance of Hegius, we are compelled to derive in part from a few of his posthumous writings, and in part from cursory expressions of others, chiefly his contemporaries and scholars. Those writings,§ consisting almost entirely of dialogues, were not given to the public until 1503, five years after his death. These dialogues are in the form of short and clear

* "*Statui enim senectutis requiem (si modo ea me manet, in sacrarum literarum perquisitione collocare.*"—Agricola to Reuchlin.

† The fullest edition of Agricola's works is, "*Rudolphi Agricolae Lucubrationes aliquot lecta dignissimæ in hunc usque diem nusquam prius editæ, cæteraque ejusdem viri plane divini omnia quæ extare creduntur opuscula—per Alardum Amstelredamum. Ocloniae apud Gymnicum, 1539. 2 vols. 4 to.*"

‡ Principal, head-master—of a gymnasium.

§ "*Alexandri Hegii artium magistri, Gymnasiarchæ quondam Daventriensis, philosophi, presbyteri, utriusque lingue docti, Dialogi.*" At the end of the book the printer's name is

question and answer.* He treats abundantly of geometry and astronomy; refers to Euclid, gives geometrical definitions and formulas for obtaining the contents of figures. He gives frequent definitions of Greek words. In the 'Farrago,' we find numerous philological remarks. The Greek language he can not commend too highly. 'Whoever desires to understand grammar, rhetoric, mathematics, history, the Holy Scriptures, etc.,' so he told his scholars, 'must learn Greek. For to the Greeks we are indebted for every thing.' In a letter to John Wessel, he tells him that he has paid a visit to the library founded by Cardinal Nicholas Cusanus, in Cuss on the Moselle, the native place of the latter, and likewise what books he brought away with him. He sent Wessel the homilies of Chrysostom. "I found," he writes, "many Hebrew books, which were *entirely new* to me. I have brought away St. Basil on the Creation and his homilies on the Psalms; the Epistles of St. Paul, and the Acts of the Apostles; the Lives of some of the Greeks and Romans by Plutarch, as likewise his Symposium; some treatises upon grammar and mathematics; some poems of deep significance upon the Christian religion, which, if I mistake not, were composed by Gregory Nazianzen; and also a few speeches and prayers. If you can now spare, without inconvenience to yourself your copy of the Greek gospels, I beg you to lend them to me for a while." At the conclusion he writes; "you wish to have a more particular description of my method of instruction. I have followed your counsel. *All learning is futile which is acquired at the expense of piety.* Dated at Deventer."

In the light of all that we have now cited, and of the letters of Agricola to Hegius also,—Hegius appears to have been a man, who was animated by an enthusiastic love for classical studies, and who yet, with the humility of the true scholar, suffered himself to learn, even in his age, from Agricola. In his dialogues we detect the practiced and clear headed logician. He gives much attention therein to mathematics and natural philosophy. And with a far higher degree of learning than was common in the times in which he lived, he nevertheless ranked all knowledge, without exception, below godliness.

His estimable character, by which he was especially fitted for the

given as follows: "*Impressum Daventriae per me Richardum Pafret, 1503.*" The subjects of the Dialogues are: (1.) *de scientia et eo quod scitur.* (2.) *De tribus animae generibus.* (3.) *De incarnationis mysterio.* (4.) *Dialogus physicus.* (5.) *De sensu et sensili.* (6.) *De arte et inertia.* (7.) *De Rhetorica.* (8.) *De moribus.* (9.) *Farrago cui addita Invectiva in modos significandi.* Two letters are given after the Dialogues, thus completing the work.

* We give an example. Q. What is the difference between knowledge and opinion? A. Knowledge is assent unalloyed by fear. For he who knows does not fear that he may be deceived. Opinion, on the contrary, is assent mingled with fear. He who opines or thinks fears that he may be in the wrong. Q. What is error? A. Deflection of the intellect from the truth, or of the will from righteousness.

post of *rector*, elicited a deserved tribute of praise from many quarters. "Westphalia," says Erasmus, "has given us Alexander Hegius, a learned, saintly, and eloquent man; though from his contempt for fame, he has produced nothing great." "Hegius," he says elsewhere, "was quite similar in character to Agricola; he was a man of guileless life and singular learning, one in whom even Momus could have discovered but a single fault; namely, that he undervalued fame beyond what was reasonable, and troubled himself but very little for the opinions of posterity. If he wrote any thing, he did it more in sport, as it were, than with a sober purpose; yet his writings are of that sort, that in the judgment of scholars, they are deserving of immortality." Murmellius tells us, that Hegius was as learned in Greek as in Latin. But Hegius' name has come down to the present day, not so much through his works, which are scarcely known to us, as through his distinguished pupils. I will mention a few of the more famous of these.

ERASMUS. In his ninth year, in 1476, he entered the school of Hegius.

HERMANN BUSCH, who was born in 1468, was placed under Hegius when quite young, since he learned the first rudiments of grammar in the Deventer school. Of him and Erasmus likewise we shall say more, farther on.

JOHN MURMELLIUS, of Roermond; first a soldier, then a scholar of Hegius. Driven from Cologne in 1498, because he made war upon the barbarous Latin of the Colognese, he betook himself for aid and counsel to his teacher, who sent him to Rudolf Lange, at Munster, where he taught for fourteen years: in 1514 he was appointed over a school in Alenaar. Impoverished by a fire, he returned to Deventer, where he died in 1517. He wrote much; both for the promotion of classical learning, and the overthrow of "barbarism."

JOHN CAESARIUS, of Juliers. Driven away by the Colognese in 1504, because he attacked their old school books, then sent by Hegius to Lange at Munster, where he became teacher of Greek. He was induced later by the solicitations of Count Nuenaar, to return to Cologne. There he died in 1551, at the age of ninety years. He edited, among other works, Pliny's natural history.

CONRAD COCLENIVS, born in 1485, at Paderborn, became a Professor at Louvain, and was the teacher of John Sturm. Erasmus commends him as a distinguished philologist.

JOSEPH HORNLENIUS, rector of a school in Herford, was the teacher of Peter Mosellanus.

TIMANN CAMENER, rector in Munster, from 1500 to 1530.

The characteristic, which was common to all the above-named scholars of Hegius, as well as to the most renowned pupils of these scholars, was a passionate love of classical culture, which did not shrink even from martyrdom. Only two of those, who came forth from the school at Deventer, bore no traces of the general stamp. These were Pope Adrian VI., who was there when a boy; and Ortuin Gratus, whom the "*Epistolæ obscurorum virorum*" erected into a very unenviable notoriety.

RUDOLF LANGE AND HERMANN BUSCH.

AGRICOLA and Hegius had many friends, who labored with zeal for the spread of classical study. Among these RUDOLF LANGE has been already mentioned. He was born about the year 1439 at Munster. Sent by his uncle to the school at Deventer, he afterward went to the university of Erfurt, where he was made master of philosophy; then he journeyed to Italy, where he enjoyed the teachings of Philephus, Theodore Gaza and others. Returning to Munster, he devoted his life to the cause of school education. Sent by the college in that place, in the year 1480, to Pope Sixtus IV., he delivered in his presence an admirable Latin speech, and was heartily recommended by him and Lorenzo de Medici to the bishop of Munster. Thereby he acquired so much consequence that he was emboldened to oppose the Colognese Academy, when it maintained an adherence to the old school-books, the Doctrinal of Alexander* and the like. Lange appealed to the arbitration of the Italian scholars. After these had decided in his favor, the school at Munster was completely re-arranged after his directions; and at his instance, Camener and Murnellius, scholars of Hegius, were appointed teachers therein. The teachers took counsel with Lange upon the authors to be read in the school, and they made a diligent use of Lange's library, which was very rich in both Greek and Latin classics. Lange was a poet likewise. There is an epic from his pen, upon the destruction of Jerusalem by Titus; a second, upon the siege of Nyon on the Rhine; and a third, in honor of the Apostle Paul. Hegius sung of Lange's poetical talents; †

* ALEXANDER DE VILLA DEI, a Minorite of Dole, a grammarian and a poet, who lived at the beginning of the 13th century, composed a doctrinal for boys, (*doctrinale puerorum*), or a Latin grammar in verse. He was the author, likewise, of a poetical summary of the subjects of all the chapters of both the Old and New Testament.

† The epigram of Hegius upon Lange reads as follows:

*"Nil est quod fieri nequeat, jam ferre poetas
Barbarie in media, Westphalis ora potest.
Langius hanc decorat, majorum sanguine clarus
Monasteriaci, lausque decusque soli
Primus Melpomenen qui rura in Westphala duxit
Cum caneret laudes maxime Paule tuas."*

and Agricola reposed the highest confidence in his philological researches.

Luther's Theses appeared when Lange was well advanced in years, and as he read them, he said, "the time is at hand, when the darkness shall be removed from church and from school, when purity shall return to the churches, and a pure Latinity to the schools." This latter expression is significant of the ideal of the more earnest German scholars of that day.

After an extremely active and devoted life, Lange died in 1519, two years subsequent to the dawn of the Reformation, in his eightieth year. He was provost of Munster at his death. His nephew, whose troubled life extended far into the epoch of the Reformation, was the before-mentioned

HERMANN BUSCH, who was born in 1468, of a noble family of Westphalia. Sent by Lange to the school of Hegius at Deventer, he was there noticed by Agricola, who said to him, "you have a poetical head; you are destined to be a poet." From Deventer, Busch went to Heidelberg, there attended the lectures of Agricola, and, on his advice, studied Cicero with great diligence. Then he visited Tubingen, where he formed a friendship with Simler, who was afterward Melancthon's teacher. In the year 1480 he accompanied Lange to Italy; in 1486 he took a second journey thither, when he made the acquaintance of Picus, Politian and other Italian scholars. On his return to Germany, he fell into a strife at Cologne with the notorious Hochstraten, and was compelled to leave the city. And from this time he traveled during many years through Germany, England and France, giving his time principally to the universities, and delivering longer or shorter courses of lectures upon the classics at various places; among others, at Hamm, Munster, Osnabruck, Bremen, Hamburg, Lubeck and Wismar.

His lectures at Gripswald, (about 1505,) the reformer Bugenhagen attended, while a student there. At Rostock he attacked a certain Heverling, who read lectures *in German*, upon Juvenal. This one took his revenge by putting in train a series of machinations, which resulted in Busch's expulsion from the place; Busch in his turn retorted by a collection of epigrams, in which among other things he reproached Heverling with reading lectures in the vulgar tongue,*

* Here is a specimen :

*"Quidquid Heverlingus legit auditoribus, illud
Vulgari lingua, Teutoniceque docet.
Ergo ad Heverlingum perget, meliore relicto,
Discere qui sordes, barbariemque velit."*

namely the German; a censure, by the way, which was but too characteristic.

At Erfurt, Busch effected a formal banishment of the mediæval school books; in Leipzig in 1506 Helt and Spalatin were among his auditors. Magdeburg denied him admittance; and on his second establishment in Leipzig, in 1510, he was expelled by Duke George.

After much journeying to and fro, he came a second time to Cologne, and was a second time driven from thence, at the instigation chiefly of Ortuin Gratius, because he wrote against that old grammatical text-book, the *Doctrinal*. Hereupon he became rector of a school in Wesel, where he gave to the world a defense of the recently revived classical studies against the boorish attacks of the monks.*

When the Reformation began, Busch read with avidity the writings of Luther and Melancthon, and in 1522 resigned his office at Wesel, and went to Wittenberg, and there applied himself with ardor to the study of the Bible and the Fathers. At the recommendation of the reformers, he was invited by Philip of Hesse to Marburg, to take the historical professorship. Here he read lectures on Livy and Augustine; in 1529 he wrote upon the authority of the Bible. At the Marburg Eucharist controversy, which he attended, he declared for Luther and against Zwingle.

About the time when the Anabaptist disturbances began at Munster, Busch retired from Marburg to Dulmen, where he had a small estate, left him by his mother. Invited to Munster by the magistracy, he went thither on the 7th of August, 1533, to hold a disputation in German with the Anabaptists,—the notorious Rothman especially. Busch endeavored to prove the validity of infant baptism by an appeal to the Scriptures; but Rothman only retorted with insolent scorn. After a long dispute Busch was seized with a sudden indisposition, which compelled him to leave the hall, and on the way the fanatical populace jeered at him, as one whom God was punishing for his blasphemy. Troubled in mind, he returned to Dulmen, and soon after died of grief, in 1534, in the sixty-sixth year of his age.

Busch was a man of eminent talents. Erasmus thus describes him: "He would have been a successful poet; in his prose he shewed himself a man of strong intellect, extensive reading, keen judgment, and no little energy; his style was more after the pattern of Quintilian, than that of Cicero."

A traveling teacher and apostle of classical culture, he endured much persecution for the cause.

* The treatise was entitled *Vallum humanitatis*. The Dominicans of Cologne in their sermons called poets "knaves," orators "swine," and their works "the husks of the devil."

V. EDUCATIONAL VIEWS OF ERASMUS.

FROM THE GERMAN OF KARL VON RAUMER.

“THE CICERONIAN” of Erasmus merits special attention in a history of education, since it advocates in a clear and pointed manner that ideal of culture which began to prevail in the time of Erasmus. This ideal, it is true, concerned itself rather with *methods* of culture than with culture itself, and rather with *forms* of instruction than with the knowledge to be imparted. But any regular and distinct path to knowledge will finally bring us to our goal, although through by-places it may be, and by long and needless windings. In the dedication of the “Ciceronian,” Erasmus briefly unfolds to Blattenius his design. “A school has arisen,” says he, “self-styled ‘Ciceronian,’ that in its insufferable arrogance rejects all writings which do not wear the features of Cicero; that deters youth from the perusal of other authors, and inculcates upon them a superstitious imitation of Cicero alone, while, at the same time, it does not itself display one particle of Cicero’s spirit.” He then intimates his belief that a sinister design lurks behind these teachings of the Ciceronians, viz.: to convert Christians into Pagans. In this connection, he alludes to certain German youths, who, on returning from Italy, and from Rome in particular, had proved to have become strongly tinctured with Paganism; and he closes by indicating his purpose to show the true way in which Cicero should be imitated, so that his surpassing eloquence may be engrafted on the spirit of Christian piety.

The speakers in the dialogue are *Bulephorus*, (in whom we recognize Erasmus himself,) and *Hypologus*, his fellow-partizan. Both unite in the endeavor to reclaim *Nosoponus*, an ultra-Ciceronian, from his misdirected studies, and they are at last successful.

Nosoponus begins with the emphatic declaration, that he abominates whatever is un-Ciceronian, and that he indulges no higher wish than to be himself called a Ciceronian by the Italians; but he laments that as yet of all the Cis-Alpines, *Longolius* alone enjoys that honor. Then he goes on to narrate the manner in which he is prosecuting his purpose.

For seven years he has read Cicero alone,—not a single other author,—with the view to purge himself thoroughly of every un-Ciceronian phrase. And he has stored nearly the whole of Cicero in his memory. Now he intends to spend another seven years upon the imitation of his model. All the words used by Cicero he has arranged alphabetically in a huge lexicon; all his phrases, in another; and, in a third, all the feet which commence and terminate his periods. In addition to these labors, he has prepared comparative tables of all those words which Cicero has used in two or more different senses in different passages. He is not content with a reference to the paradigms of the grammars, but perplexes himself over Cicero's use of *amo*, *amas*, *amat*, instead of *amamus*, *amatis*, *amant*, of *amabam*, instead of *amabamus*; or, in compound words, with his use of one form instead of another, as *perspicio* instead of *dispicio*. *Nosoponus* overrides all grammatical rules, ignores every other author received as classical, and attaches no weight even to analogy. He thinks that a genuine Ciceronian should never employ even the most insignificant particle, unless he can show his master's authority for it. He then goes on to describe, without appearing to realize its absurdity in the least, the plan which he himself pursues in writing Latin. If, for instance, he wishes to pen a note to Titius, on the occasion of returning a borrowed book, perhaps, he first rummages all the letters of Cicero, together with each of those special lexicons, that he himself has compiled with so much labor, and selects appropriate words, phrases, etc. Six whole nights he is thus accustomed to spend in composing an epistle of only as many sentences; then he revises it ten times; then lays it aside for a future perusal. And, after all these repeated revisions, possibly not a single word of the original draft will remain. *Bulephorus* thereupon suggests, that haply thus the letter might be delayed so long that it would be of no use. "No matter for that!" says *Nosoponus*, "provided that it is only Ciceronian at last." "But," rejoins *Bulephorus*, "how is it in speaking Latin, where such delay is impracticable?" "In such case," *Nosoponus* replies, "I avoid speaking, if possible; or, for ordinary purposes, I make use of Dutch or French; when, however, I must use Latin, I resort to my memory, in which I have carefully stored up for such emergencies a full stock of Ciceronian phrases upon various subjects.

After *Nosoponus* has thus unfolded the full extent of his folly, *Bulephorus* begins the attack; gently at first, but soon he exerts more rigorous efforts, and steadily progresses to the overpowering completeness of the argument. "Quintilian," says he, "recommends the

perusal not of one author alone, but of many. Only he singles out Cicero, as the most worthy of attention." "For this very reason," rejoins *Nosoponus*, "Quintilian could not have been a Ciceronian." "But," *Bulephorus* asks, "when subjects are to be treated which do not occur in Cicero, what are we to do? To seek the Elysian fields, and consult with the orator himself in person?"

To this *Nosoponus* responds: "I would discard all subjects that do not admit of being discussed in Cicero's recorded words."

Bulephorus now proceeds to criticise the aim of the Ciceronians; which is, to assimilate themselves as far as possible to Cicero. "Apart from the fact," says he, "that many of the writings of this exemplar have perished, those which are extant, through the carelessness of copyists, abound in errors and interpolations. Here then, to what perils do the Ciceronians expose themselves! Time would fail us to reckon up the number of pseudo-Ciceronians, which they have thus received and lauded as the genuine words of their master. But, again, in Cicero himself, some grammatical blunders have been detected; and also, verses, which he has translated from the Greek, are not always faithful to the original. Yet all these defects likewise have been praised and copied by these worshipers of his. But their imitation is mainly of the most superficial nature. Particles, special phrases, modes of ending sentences, and the like,—to such things they pay exclusive attention, applying them in a quite arbitrary manner, and often inappropriately. Because their master has so frequently commenced his periods with *etsi*, *quanquam*, *quum*, etc., they conclude that they themselves must be perfect Ciceros, if they only commence their sentences in like manner. Such men would accredit the 'Books to Herennius' to Cicero, for the sole reason that they commence with *etsi*. And again, since Cicero did not date his letters, they likewise must needs omit the year of our Lord in their correspondence; nor do they affix titles to their works, for they find none in Cicero. Those Christian greetings, with which we commence our letters, such as 'Gratia, pax, et misericordia a Deo Patre et Domino Jesu Christo,' the Ciceronian holds in derision, as similar phrases at their close; and yet they are far more appropriate to the Christian character than 'Salutem dicit,' or 'Bene vale.' Cicero, it is true, made no use of them; but this is not to be wondered at; for he knew nothing of the things signified by them. And in fact, how many thousand subjects are there, upon which we have frequent occasion to speak, that Cicero possibly never even dreamed of.

"And he himself, I doubt not, were he now living, would implore these narrow-minded imitators to spare his good name. A lifeless

imitation is cold and passionless; and by no mere affectation can we ever hope to appropriate the higher excellencies of the orator whom we have taken for our pattern. We look in vain among these Ciceronians for Cicero's happy invention, his clear arrangement, the skill with which he treats his subject, his power over the passions, and, his large experience; for, instead of a just and appreciative reproduction of his spirit, they present us only with a ghastly and hollow mask of his form."

"Every age," continues *Bulephorus*, "has its special characteristics, and on this account, demands its particular style of eloquence. Cicero's speeches would not have suited the sterner times of Ennius, and Cato the censor, to say nothing of the present day. Since the age of Cicero every thing has changed,—religion, government, authority, manners and laws. Should it be required of us at the present day to speak and write as Cicero spoke and wrote, we must have consuls, tribunes, prætors and ediles again; in short, the institutions of ancient Rome must all be restored. Whoever, therefore, desires to conform to the present age, and to adapt himself to the circumstances in which he is placed, (and without such desire and aim it is impossible for any one ever to become an orator,) must differ widely from Cicero. Of what service can Cicero's style of eloquence prove to the Christian orator, addressing Christian men and women upon repentance, prayer, or alms-giving,—subjects in regard to which Cicero was entirely uninformed?" To illustrate this point, *Bulephorus*, (speaking for Erasmus,) brings up the case of a Ciceronian, whom, on a certain Easter-Eve, he had heard preach before Pope Julius II. "The sermon," said he, "consisted mainly of a panegyric upon the Pope, whom the orator called 'Jupiter Optimus Maximus,' in the plenitude of his power wielding the forked thunder-bolt, and guiding the universe by his nod. Then he spoke of the Decii, and of Q. Curtius, who, for their country's sake, had sacrificed themselves to the *Di Manes*, and of Iphigenia, Cærops and others, to whom their country was dearer even than life. To such persons the ancients erected statues in commemoration of their deeds; but Christ, in return for all the good which he accomplished among the Jews, was crucified. In short," said *Bulephorus*, "the Roman spoke so like a Roman, that the speech contained no mention of Christ's death at all. And yet the Ciceronians at Rome pronounced his sermon a marvelous effort, worthy of a Roman, and worthy even of Cicero himself. Had a school-boy addressed his mates in such a speech, it might have passed muster as a tolerably good thesis; but what had it to do with such a day, with such an audience, and with

such an occasion? Surely these men, who have Cicero ever in their mouths, only slander his fair fame. And," he continues, "it is astonishing with what arrogance they look down upon what they style the barbarism of Thomas Aquinas, Scotus, Durandus and others; and yet, if we scan the merits of these authors critically, although they laid no claim either to eloquence, or yet to Ciceronianism, we shall perceive that in both these respects they far outstrip their detractors, this blustering crew, who all the while deem themselves not merely Ciceronians, but veritable Ciceros."

As *Nosoponus* appears astonished at this emphatic declaration, *Bulephorus* proceeds to explain more minutely, in what an orator should resemble Cicero. "He should speak upon every subject in that clear and perfect manner that only a thorough knowledge of the subject can give, and he ought moreover always to speak from the heart. Hence, it follows that the Christian orator must understand the mysteries of the Christian religion, and must study the sacred writings with no less diligence than did Cicero the works of philosophers, poets, jurists and historians. Through his intimacy with these it was," continues *Bulephorus*, "that Cicero became so great. But if we, who claim to be called spiritual teachers, are familiar neither with the law nor the prophets, neither with sacred history nor exegesis, and what is more, if we despise and abominate them all, what title have we or can we have to the name of genuine Ciceronians? Must not every one of our addresses bear the Christian stamp, if we would pass not only for good orators, but even for good men? And, how is this possible, if we use only those words and phrases which we can find in Cicero? Are we to substitute the language of Cicero for that of the church? Instead of God the Father, are we to say 'Jupiter Optimus Maximus?' instead of Jesus Christ, Apollo? and, instead of Mary, Diana? Are we to say sacred republic instead of church, and Christian persuasion instead of Christian faith? Shall we style the Pope, (Flamen Dialis,) the priest of Jupiter, and call the prophecies oracles of the gods? Be it so then, and let us see whither it will lead us. Take, for instance, the following brief summation of our faith:—'Jesus Christ, the Word and the Son of the Eternal Father, according to prophecy, came into the world, and, having become a man, voluntarily surrendered himself to death, and so redeemed his church, and delivered us from the penalty of the law, and reconciled us to God, in order that, justified by grace through faith, and freed from the bondage of sin, we might be received into his church, and persevering in its communion, might, after this life, be admitted into the kingdom of heaven.' And how would a Ciceronian

express it? Somewhat in this manner, viz.: 'The interpreter and son of Jupiter Optimus Maximus, our saviour and our sovereign, according to the responses of the oracles, came down to the earth from Olympus, and, having assumed the human shape, of his own free will sacrificed himself for the safety of the republic to the Dii Manes, and so restored to it its lost liberty, and, having turned aside from us the angry thunder-bolts of Jupiter, won for us his favor, in order that, through our acknowledgement of his bounty, having recovered our innocence, and having been released from the servitude of flattery, we might be made citizens of his republic, and having sustained our parts with honor, might, when the fates should summon us away from this life, enjoy supreme felicity in the friendship of the immortal gods.'

Nosoponus now asks *Bulephorus* whether he would commend the style of Thomas Aquinas and Scotus; to which he replies: "If you will admit that he who conforms his language to his subject is to be admired, then I prefer the manner in which Thomas and Scotus handle sacred things far before that of the Ciceronians. Yet there is a medium between Scotus and these apes of Cicero. Latin words not to be found in Cicero are not on that account to be rejected; words relating to agriculture we can adopt from Cato and Varro; words relating to the church, from Tertullian and Augustine. Every art, science, or institution has, too, its peculiar technical terms; grammarians, for instance, use *gerund* and *supine*; mathematicians, *fraction* and *equation*; the church, *amen* and *apostle*, etc. Were Cicero now living, and were he a Christian, he certainly would not affect indifference to the language of the church; he would say 'faith in Christ,' 'the Comforter,' etc. And why then should we not cite the authority of Holy Writ, as Cicero quotes from Ennius and others? Is Solomon inferior to Plato? are the psalms of less account than Pindar? or does Holy Writ any where rank below the writings of uninspired men? Certainly not. How comes it then, that Hannibal, the Carthaginian general, sounds more agreeable to our ears than Paul the Apostle of the Gentiles?" *Hypologus* imputes this state of things to the extensive use which is made of the classics in education, through which the language in which they are written, becoming familiar to us, captivates our imaginations in a degree disproportionate to its true merits; while, on the other hand, the language of the Bible, receiving but little attention, appears not only unattractive in our eyes, but even barbarous. To this *Bulephorus* adds: Our heathenish proclivities, (*nostra paganitas*.) pervert both our taste and our understanding. We are Christians only in name; we confess Jesus with

our mouths, but Jupiter Optimus Maximus and Romulus are in our hearts. Were it not so, what name could sound sweeter in our ears than the name of Jesus? Should we extirpate these pagan notions of ours, as we ought to do, then a far different style of oratory would prevail. Yet even now, no one will acknowledge himself to be a pagan, although so many glory in being called Ciceronians.

At this point, the conversation is directed to the inquiry, "How far is Cicero to be imitated?" "It is foolish," says *Bulephorus*, "to endeavor to write another man's sentiments, to labor that our works should be the echo, for instance, of Cicero's thoughts. Thou must properly digest all thy manifold reading, not merely storing it in thy memory or in an index, but by reflection assimilating it to thy soul. So thy spirit, nourished by all kinds of spiritual food, shall pour forth an eloquence all its own, and there shall be no savor therein of this or that flower, leaf, or herb, but it shall partake throughout of the very essence and bent of thine own spirit; and thus the reader will not find thy writings to be fragments from Cicero, cunningly joined together, but the reflection of a mind filled with all knowledge. The bees," he added, "gather their honey, not from a single flower alone, but with marvellous diligence they visit every flower and shrub; and even then they have not gathered pure honey, but they so prepare and refine it afterward in their stomachs, that we can perceive neither the taste nor the odor of any of the various flowers from which it comes."

Bulephorus now asks further: "On what occasion can we make use of this Ciceronian eloquence? Is it in the court-room? There, causes are handled by attorneys and advocates, people who are any thing but Ciceronians. As little can we use it in the senate-chamber, where French is employed, or else German. Can we then use it in preaching? But the hearers do not understand Latin; hence it is not adapted to the pulpit. Where then *shall* we use this species of eloquence? At best, in embassies to Rome, to deliver, according to custom, an elaborate but useless harangue, which often has need to be interpreted for the benefit of those to whom it is addressed. All important business is there, as well as elsewhere, transacted either by writing, or orally, through the medium of the French language. What purpose, then, can this accomplishment of the Ciceronian subserve? That of writing letters to the learned? But no one of these insists that Latin should be altogether Ciceronian, with the exception of four Italians, who boast themselves, of late, to have become perfect copyists of Cicero."

And now *Bulephorus* calls over, one by one, the names of a number

of Latin authors, both ancient and modern, and asks *Nosoponus*, at the mention of the successive names, whether he considers this or that man a Ciceronian; but none of them all is acknowledged by him. "Pliny, the younger," says he, "is so little of a Ciceronian, that we have forbidden our youths to peruse any of his letters, lest they should become Plinians, instead of Ciceronians. Among the moderns likewise, we reckon none as Ciceronians, neither Valla, nor Politian, nor Budæus; Peter Mosellanus, however, would undoubtedly have gained this distinction, had he not died too soon." "How is it with Erasmus?" asks *Bulephorus*. "Him," replies *Nosoponus*, "I do not even style a writer, much less a Ciceronian. A polygraphist truly he is, who blots much paper with his ink. He hurries through with every thing; he will write you a whole volume, *stans pede in uno*; he can never prevail upon himself even to look over what he has once written; and, besides being no Ciceronian, he employs theological and even vulgar expressions." In like manner he disposes of *Agriicola*, *Hegius*, *Busch*, *Wimpheling*, *Reuchlin*, *Melancthon*, *Hutten*, *Pirkheimer*, and others. At last *Bulephorus* exclaims; "So many lands have you diligently searched through, and there is no Ciceronian anywhere to be found!" "*Longolius* alone," rejoins *Nosoponus*, "forms an exception: although he is a Brabanter, and was educated at Paris, yet he has been recommended by the Italians as a pure Ciceronian." "*Longolius*," says *Bulephorus*, "paid for his renown with his life; and the speeches, which he made in Rome, had, it is true, an air of elaborate refinement about them, but they were based upon an artificial reproduction of a long vanished age, and not upon the living relations of the present time. Such speeches are forced and unnatural, and weary the listener; they are in no wise fitted for any thing but the declamations of school-boys."

Thereupon, *Bulephorus* again defines a genuine imitation, as opposed to servile copying. "The one," says he, "consists in a living, spiritual assimilation of the classics, while the other calls out merely the external adornments of words and phrases. The writer, or the orator, who would not deceive us by acting out of character, must not attempt to personate another individual's mind. The language of the Christian, at least, should not be perverted, nor his character disgraced by such a preposterous imitation of Cicero." In such an independent manner, unmoved and unbiased by the false notions of his contemporaries, did Erasmus render his verdict against their misuse of Cicero; a verdict which applies with equal propriety in the case of all the classics. How justly, too, does he express himself upon the only true method of studying authors, that method which exerts so immediate

and so marked an influence upon our own productive faculties. "While thus the reader grows spiritually, his own creative powers are strengthened and matured."

In the like fearless and perspicuous manner, did Erasmus give his opinion upon the necessity of practical knowledge in order to a correct interpretation of the classical authors. We will single out a passage on this point from his "Dialogue on Pronunciation." The speakers are the Lion and the Bear.

Bear.—Do you style that man a grammarian, who, when he is addressed in Latin, is able to reply without making any blunder?

Lion.—In our day, such a person is commonly esteemed a grammarian.

Bear.—But Quintilian requires of the grammarian, facility in explaining the poets, acquaintance with history, knowledge of antiquity, etc. Should he possess no thorough knowledge of these things, yet he must not be entirely unfamiliar with them, if he wishes to be deemed capable of instructing youth. Because the grammarian is expected to comment on the "Arma virumque," we must not on that account expect him to be a Pyrrhus, or a Hannibal; nor, because he is to interpret Virgil's Georgics, should we require him to be an experienced agriculturist. If again he is to expatiate upon the voyage of Æneas, we ought not to demand that he be a thorough-bred sea-captain; nor that he be an Apicius, when he is about to treat of a passage upon cookery. But, on the other hand, what dependence is to be placed upon the grammarian, who is entirely ignorant both of the construction and the use of fire-arms and tools, or who knows no more even of the disposition and organization of an army? Could he learn these things by experience, it would profit him not a little, but, where this is out of the question, he should inform himself from books, or from conversation with men, who have been personally connected with such matters, or, so far as may be necessary, from accurate drawings. And the same method is applicable to every other art to which he may have occasion to refer.

Lion.—Such grammarians, as you have described, there may have been formerly, but they are now out of fashion.

Bear.—That is very true; and hence our children, after they have grown old almost, under the present race of teachers, return to their homes, without being able to call a single tree, fish, or plant, by its right name."

Similar demands, likewise, Erasmus urged in his essay, "On the correct method of pursuing study." In this, he inculcates upon teachers the necessity of attending to many branches of science, such

as geography, natural history, etc. "It is incredible," says he, "how profoundly ignorant in respect to such matters the generality of teachers are at the present day." Yet Erasmus himself regarded the natural sciences merely as indispensable means to a correct interpretation of the classics, nor did he appear to have had the remotest idea of their importance in themselves. How far in advance of him, in this respect, was Luther, whose keen-sighted intellect, in spite of the numbing influence of school and cloister, remained ever vigorous and active! "We are now," said Luther on a certain occasion, "in the morning-dawn of a better life; for we are beginning again to recover that knowledge of the creation, which we lost through Adam's fall. By God's grace, we are beginning to recognize, even in the structure of the humblest floweret, his wondrous glory, his goodness, and his omnipotence. In the creation we can appreciate in some measure the power of Him, who spake and it was done, who commanded and it stood fast. Consider the peach-stone: although it is very hard, yet, in its due season, it is burst asunder by the force of the very tender germ, which is inclosed within the shell. But all this, Erasmus passes by, not regarding it for a moment; and views this new knowledge of the creature, only as cows look upon a new gate."

His treatise upon "Study," by reason of its succinctness, gives us no exhaustive methodology, but only single rules for the direction of teachers. Some of these rules are worthy of careful attention; especially those relating to the improvement of the scholar's style. For this end, Erasmus commends, above all other means, frequent exercise in translating from Greek into Latin; as this not only assists in the understanding Greek authors, but also gives an insight into the peculiarities of both languages. This counsel applies with equal force in our day to translating from foreign languages into our mother-tongue. Then too, while any particular author is being read, the teacher should comment and explain only so far as may be necessary to a thorough understanding of the sense; but he must scrupulously refrain from an ostentatious and inappropriate display of his own erudition at every passage.

Erasmus was moreover directly instrumental in promoting a knowledge of the Greek language, through his translation of the Greek grammar of Theodore Gaza.

But no one of all his works has played so important a part in the school-world, as the Dialogues, (*Colloquia*.) The first edition of these, Erasmus himself was dissatisfied with: the second, published in the year 1522, he dedicated to the son of Frobenius, then but six years of age, as also the third, published in 1524. In the dedication to the

last, he says, "the book was so much liked, met with such a rapid sale, and was so generally used by youth, that he was induced at once to prepare another and an enlarged edition. Many have become such superior Latinists, and likewise so much better, (*Latiniore et meliores,*) by the use of this book, that he, (the boy,) would not be put to the blush in their society."

But this book, designed to make boys both better and better Latinists, was condemned by the Sorbonne, prohibited in France, burned in Spain, and at Rome interdicted to all Christendom.

And whoever peruses these dialogues, will not be at all astonished at this. For they abound in most insidious attacks and sharp satires upon monks, cloister-life, fasts, pilgrimages, and other matters pertaining to the church. And this fact is enough of itself to have occasioned the condemnation of the book, without any reference to the many frivolous and improper expressions which it contains.

We are astonished that such a book should ever have been introduced into so great a number of schools as it was. What have boys to do with those satires? Reformation is the work of mature men alone. What have boys to do with conversations upon so many subjects, of which they know absolutely nothing? with conversations where teachers are made sport of, where two women discuss the respective merits of their husbands, where a lover is urging his suit with a maiden, or, above all, with a conversation like the "*Colloquium adolescentis et scorti?*" This latter reminds us of Schiller's distich, entitled "Artifice:"

Would you at once delight both the men of the world and the godly,
Paint for us pleasure, but paint ye the devil therewith.

Erasmus here depicts the vilest of pleasures, but adds his censure, for edification. And such a book this learned theologian gravely recommends to a boy of eight years of age, as one whose perusal will make him better, though at the same time, as one which will perfect him in Latin; and to this end it is admirably adapted. For the various personages of Erasmus here express themselves with astonishing facility upon subjects, which we would scarcely have believed capable of being handled in the Latin tongue, such as horse-dealing, the chase, taverns, and the like.

Teachers, who were wont to give the plays of Terence to their scholars to commit to memory and to act, took no offense at the nature of these Dialogues, so long as they secured what they considered the highest aim of all culture, viz.: a readiness in speaking and in writing Latin.

Terence is not responsible for the misuse that was made of him

after the lapse of fifteen hundred years: but Erasmus, the theologian, is responsible for his frivolous book, nay doubly so, inasmuch as he designed it for youth, even though they should become thereby Latinists of the first eminence.

In Luther's Table-talk, there are some expressions in regard to these Dialogues, which teachers would do well to lay to heart. "Erasmus," says he, "lurks behinds the fence, does nothing openly, and never comes boldly into our presence,—and for this reason are his books very pernicious. When I die, I will forbid my children to read his Dialogues; for in them he utters and teaches many a wicked sentiment by the mouths of his fictitious characters, with the deliberate design to injure the church and the Christian faith. Erasmus is a crafty knave; that, one sees in all his books, but especially in his Dialogues, in which he is particular to say; 'I myself speak not here, but my personages.' To Lucian I give some praise, for he comes out boldly, and indulges in open mockery; but Erasmus sophisticates every thing which is from God, and every thing holy, and does it all in the name of holiness; for this reason he is much more mischievous and corrupting than Lucian."

The Dialogues at least, can not but have an injurious effect upon the moral sentiments of youth. Cold, unloving satire, frivolity and shuffling, act as poison upon the simplicity and artlessness of the young. Erasmus is wonderfully clear and eloquent, when he treats of any thing purely scientific; but he was not the man to write books of instruction, to address children from a fatherly heart, and to care for the good of their souls.

The unhappy man had no father's house, no country, and no church; in short, he had no object to which he could devote his powers in self-sacrifice; therefore did he become selfish, timid, and double-minded, for love was a stranger to his breast. We do not wonder then that he dissolved all connection with the upright, outspoken Luther, that true-hearted and affectionate pastor of his beloved Germans.

XI. LIFE AND EDUCATIONAL SERVICES OF PHILIP MELANCTHON.

FROM THE GERMAN OF KARL VON RAUMER.

I. MELANCTHON'S CHILDHOOD.

HISTORIANS called Melancthon the fellow-soldier (*παραστάτης*) of Luther. "God joined together these two instruments of his purpose," said Winshemius, in his Eulogy upon Melancthon, "these two great men, whose dispositions were so admirably blended, that if to Erasmus and others Luther appeared to be too harsh a physician for the disease that had infected the church, Philip, on the contrary, though pursuing the same course without deflection, seemed too tender and mild." In this we may perceive the secret counsels of Him, who calls men by name, while as yet they have not come into being.

Both these men were fully sensible that they were, so to speak, the complements one of the other, and that in the labors of their life they could not be separated. Hence the uncontrollable delight of Luther at Melancthon's first entrance into Wittenberg; hence too his agonizing and answered prayer for the recovery of his fellow-laborer, when, in 1540, the latter lay dangerously sick at Weimar.* How forlorn too was Melancthon's condition while Luther was on the Wartburg; how consolatory and cheering must Luther's letters to him from Coburg have been during the Augsburg Diet; and how unhappy was he in the closing years of his life after the death of Luther!

PHILIP MELANCTHON was born the 16th of February, 1497, fourteen years after Luther; he likewise survived him fourteen years, and they both died at the age of sixty-three. They yet show in Bretten, a small town in the Duchy of Baden, the humble mansion where he first saw the light. His father was a skillful armorer, and a devout and upright man. His maternal grandfather, John Reuther, took charge of the boy, and put him under the instruction of John Hungarus. Of the latter Melancthon wrote: "I had a teacher, who was an excellent grammarian, and who kept me constantly at the grammar.†

* Melancthon thus writes of his convalescence: "*Ego fuissem extinctus, nisi adventu Lutheri ex media morte revocatus essem.*"

† "*Ille adegit me ad Grammaticam, et ita adegit, ut constructiones facerem: cogebar redere regulas constructionis per versus Mantuani.*"

Whenever I made a slip, he whipped me, but with mildness and forbearance. Thus he made me a grammarian too. He was a good-hearted man; he loved me as a son, I him as a father."

His grandfather died in the year 1507, and, eleven days afterward, his father. The latter, on his death-bed, exhorted his son to the fear of God: "I have witnessed many commotions, but there are far greater to come. I pray God that he would guide you safely through them. Fear God and do right."

Melancthon was now taken, with his brother, into the family of his grandmother, who was Reuchlin's sister, and lived in Pforzheim. George Simler, of Wimpfen, whom we have met with as a pupil of Dringenberg's, instructed him there in Greek. Reuchlin, who was a frequent visitant at his sister's, in Pforzheim, was delighted with the progress of the boy, and gave him books,—among the rest a Greek grammar and a Greek dictionary. He brought him also, for sport's sake, a little red doctor's-cap. And after the fashion, then so prevalent, he translated his original name, "*Schwarzerd*," (black earth,) into the Greek, Melancthon.

II. MELANCTHON AT HEIDELBERG.

After remaining toward two years at Pforzheim, he was sent in 1509, at the age of twelve,* to the university of Heidelberg. This institution, at the close of the 15th century and the commencement of the 16th, was the rallying ground of the most eminent men of Germany, those especially who were laboring in the cause of a reformation in the church as well as in the schools. The Elector-Palatine Philip, who entered upon his government in 1476, shewed the utmost concern for the prosperity of this university. He confided the execution of his generous plans principally to John Kammerer, of Worms, the Baron of Dalberg, who invited learned men to Heidelberg, and accorded them his favor and protection. Dalberg was born in 1445, at Oppenheim. He studied at Erfurt, and then went to Italy, where in 1476 he lived in Ferrara with his friend Pleninger, and with Agricola. In 1482 he was appointed by the Elector Philip his chancellor, and shortly afterward obtained the rank of Prince Bishop of Worms. Dalberg, as we have before seen, induced Rudolf Agricola to come to Heidelberg; he it was too who, when John Reuchlin suffered persecution in his own country, threw around him his most cordial protection; and he moreover secured the

* In view of Melancthon's extreme youth, this event would surprise us, did we not consider that at that time much was taught in the universities, which at the present day is assigned to the upper classes in the gymnasia; so that then the school-curriculum was completed at the university.

installation of Reuchlin's brother, Dionysius, as professor of the Greek language at the university. About the same time Wimpfeling, that ardent scholar of Dringenberg's, taught at Heidelberg. Conrad Celtes too, the first German poet who was honored with a crown,* came thither while on his travels through Germany and Italy; and at his suggestion Dalberg founded the Rhenish literary association.† But, when Melancthon came to Heidelberg, most of these above-named excellent men had, it is true, either removed or died. Agricola died in 1485, Dalberg in 1503, Celtes in 1508, while professor of the art of poetry at Vienna: in 1498 John Reuchlin had returned to Wurtemberg, and Wimpfeling too had left Heidelberg nearly at the same time.

Melancthon was received into the family of the aged theological professor, Pallas Spangel, who had taught here for thirty-three years; and he recounted to the young lad many incidents of the past, in which Agricola and others were actors.

"At the university," says Melancthon, "nothing was placed before us but their babbling dialectics and meagre physics. As I, however, had learned the art of versifying, I applied myself to the poets, and likewise to history and mythology. I read, too, all the moderns of Politian's school whom I could lay hands on; and this was not without its influence upon my style."

In his 14th year, (1511,) the university gave Melancthon the Baccalaureate degree. He then took charge of the studies of two sons of Count Lowenstein, and sketched, for their use probably, the first outlines of a grammar of the Greek language.

By reason of his extreme youth, the degree of Master was not conferred upon him; this fact, taken in connection with an attack of fever, determined him in 1512 to leave Heidelberg and go to Tubingen.

III. MELANCTHON AT TUBINGEN.

At that time the Tubingen university had been in existence for thirty-five years only, since it was founded in 1477 by the excellent Eberhard the Elder, the first Duke of Wurtemberg. The early history of this university reminds one of the Middle Ages; for nominalism and realism here renewed their old battles, and it often happened that of two students occupying the same room one was a nominalist and the other a realist. Gabriel Biel, who was the last

* He was crowned for his Latin poems upon the Emperor Frederick III. The coronation took place in 1491, at Nuremberg.

† *Societas literaria Rhenana*. Dalberg was its president, and it numbered among its members Pirkheimer, Sebastian Brandt, and many other distinguished men.

of the distinguished scholastics, and a nominalist, was a professor here.

But it was not long before the elements of the new era began to bestir themselves. Paul Scriptoris, a Franciscan, though he read lectures upon Scotus, nevertheless deviated here and there from the teachings of the church, and Summenhart sought to base theology upon the Bible. Both of these men had learned Hebrew; Hildebrand too, full of pious zeal, taught Hebrew and Greek for the sake exclusively of the Old and New Testaments.

While these men, led by their earnest religious tendencies, were thus advancing in the right direction, there came to Tübingen in 1496 a man who was enthusiastically devoted to the classics. This man was Henry Bebel, professor of poetry and eloquence. Polite literature, (*politiores literae*), as it was called, was first represented at the university in him; for before his coming there had not been even a place assigned to it. He opened a path for classical studies in a bold and fearless manner, doing battle with the monks, who regarded these studies as anti-Christian. Brassicanus, of Constance, co-operated with him also. Among the professors of law were George Simler, already mentioned as Melancthon's teacher, and Naucler, who was the author of a history of the world. John Stoffler, a noteworthy man, became professor of mathematics and astronomy in 1516.

When the youthful Melancthon came to Tübingen, he was involved in the struggle between the old and the new eras. Bebel, Brassicanus, and others, whose courses he attended, were decided Reuchlinists; and to these he united himself, since he was akin to Reuchlin in two senses,—as well by mental affinities as by the ties of nature.

He now strove with the energy and ardor of youth to compass all branches of knowledge, both by learning and teaching. When, in 1514, in his 17th year, he was made a Master, he lectured on Virgil and Terence. Two years later, in 1516, he published an edition of Terence, in which the verses were disposed according to the metre.* In the dedication of the same, (to Geraeander,) he commends the poet to youth particularly as a teacher both of morals and of style.

At the same time he went eagerly into Greek, read Hesiod with Oecolampadius, and translated much of Plutarch and Lucian, and the whole of Aratus. In 1518 he brought out his Greek grammar: thus early, in his 21st year, did he give indications that he was marked out to be the "*Praeceptor Germaniae*," as he was afterward familiarly called. On the death of Bebel, which took place in 1516,

* *Comoediae P. Terentii metro numerisque restitutae.* Tub., 1516. It passed through several editions.

Melancthon, the mere stripling of nineteen, was invited to fill his chair and teach rhetoric; whereupon, he read lectures on some works of Cicero and six books of Livy. During this period the logic of Rudolf Agricola made its appearance, and Melancthon was incited by it to undertake a critical examination into the course of argument in the speeches of Demosthenes and Cicero. He likewise cultivated the acquaintance of Francis Stadian, professor of logic. At the close of his Greek grammar, he announced "that he intended, in conjunction with a number of his friends, Stadian especially, to edit the works of Aristotle." "If Aristotle, even in the original, is somewhat obscure," said Melancthon in one of his orations, "in the Latin versions he has become horribly mutilated and wholly unintelligible." We have seen that the Italians likewise, Politian, for example, went back to the original text of Aristotle, and were thus enabled to lay the axe at the root of the pseudo-Aristotelism of the scholastics. Heyd, a clear-sighted author, thus justly observes in this connection: "Melancthon and Stadian, in editing and translating Aristotle, sought to bring about a reformation in the sphere of philosophy, similar to that which Luther's translation of the Bible was designed to effect in the sphere of theology. Men had become sick of turbid streams, and longed to quench their thirst at the pure fountains. The Bible truly was a perennial fountain, but a century later Francis Bacon directed inquiry from Aristotle, the teacher of physics back to nature, (φύσις,) the true original and source of physics."

Melancthon attended the mathematical lectures of Stoffer for three years, and entertained the highest respect for his character. He dedicated to him an oration, "*de artibus liberalibus*," that he delivered in 1517, in Tübingen; and it was at Stoffer's request that he translated Aratus.

He cultivated the science of law likewise, and it would appear that he gave private instruction in jurisprudence. He also heard medical lectures, and studied Galen quite as much with reference to the matter as to the style. And he was moreover led into close historical researches, by remodeling Naucler's history of the world for a new edition. In theology there was not much to be learned from the professors at Tübingen; and for that reason Melancthon soon applied his own linguistic attainments to Biblical exegesis; and he was much rejoiced at the appearance of the New Testament of Erasmus.

Thus were his studies, yet in his early youth, throughout universal,—no branch of knowledge remaining wholly unfamiliar to him; and by virtue of this universality, for which his remarkable talents fitted him, he won for himself the appellation "*Præceptor Germaniæ*."

IV. MELANCTHON CALLED TO WITTENBERG.

Melancthon had spent six years at Tübingen, when Frederick the Wise, in the year 1518, applied to Reuchlin to provide him a teacher of Greek, and one of Hebrew also, for the university of Wittenberg. Reuchlin, in his reply to the Elector, assured him that Germany, hitherto called, and not without reason, in other countries, "barbarian" and "brutish," needed these studies. For Hebrew he named, by way of eminence, Oecolampadius; "where baptized Jews are not well-versed in Latin they are not fit persons to teach Hebrew, as their knowledge has been derived more from use than from study." For Greek, Reuchlin recommended in the most decided terms "Master Philip Schwarzerd," whom "from his youth up he himself had indoctrinated in this language."

On the 12th of July, Melancthon wrote an impatient letter to Reuchlin, signifying his longing to be delivered from his "house of bondage," where, occupied in unimportant labors with boys, he himself was fast becoming a boy again himself. He was willing to go whither Reuchlin should send him.

Reuchlin was not long in answering the letter. The Elector had written him to have Melancthon come to Wittenberg. "Not figuratively," Reuchlin continued, "but in their literal sense I address you in the words of the command of God to the faithful Abraham: 'Get thee out of thy country, and from thy kindred, and from thy father's house, unto a land that I will show thee. And I will make of thee a great nation, and I will bless thee, and make thy name great; and thou shalt be a blessing.' Thus my spirit prophecies to thee, and I hope that these things will be fulfilled in thee, my Philip, my pupil, and my consolation." To the Elector, Reuchlin wrote: "Melancthon will come, and he will be an honor to the university. For I know no one among the Germans who excels him, save Erasmus, of Rotterdam, and he is more properly a Hollander. He, (Erasmus,) surpasses all of us in Latin."

Melancthon now left Tübingen. Simler, his old teacher, thus spoke of his departure: "As many learned men as the university can boast of, they are nevertheless none of them learned enough to form a suitable estimate of the learning of him who is about to leave us." From Augsburg and Nuremberg, where Melancthon made friends of Pirkheimer and Scheurl, he went to Leipzig. Here he spent much time in the society of the excellent Peter Mosellanus. On the 25th of August, 1518, he entered Wittenberg, there to remain until the close of his life. There, for eight and twenty years, he labored in connection with Luther. And his labors bore fruit in an abundant

harvest of blessings ; for the ecclesiastical movement set on foot by these two men in a small German university assumed an ever wider sphere, till at last it encircled the globe, and thus Reuchlin's presentiments were realized.

Luther could not find words to depict the joy that he felt at Melancthon's coming. In a letter to Spalatin, he expresses his admiration of the inaugural speech which Melancthon delivered four days after his arrival. He only fears that Melancthon's delicate constitution may not bear the North-German climate and mode of life. In another letter of this period, he styles him "profoundly learned, thoroughly grounded in Greek, (Graecanicissimus,) and not unfamiliar with Hebrew." To Reuchlin he writes: "Our Melancthon is a wonderful man; yea, in every quality of mind almost above humanity, and, withal, very confiding and friendly in his demeanor toward me."

Thus did Luther, on his first acquaintance with Melancthon, recognize him as the man who was to prove the complement of his own being, and to make possible the realization of the great purpose of his life.

V. MELANCTHON'S ACTIVITY IN WITTENBERG.

The activity of Melancthon from this time on was extraordinary.

What he did directly for the church I omit, as not coming within the scope of this work. The universality displayed in his youthful studies accompanied him throughout the whole of his life, as we see in the wide range of subjects which he taught, or on which he wrote.

a. *His Lectures.*

His lectures embraced the most diverse subjects. He read on the exegesis of the New Testament; a while also on that of the Old, besides dogmatics. At the same time he gave critical interpretations of many of the Greek and Latin classics. To these were added lectures on ethics, logic, and physics. From his writings we may perceive what a union of depth and clearness he displayed in the treatment of his subjects; and this accounts for the homage and the admiration of his hearers. Their number reached at times as high as two thousand. They were composed of all ranks, and not Germans alone, but also Frenchmen, Englishmen, Poles, Hungarians, Danes, yea, even Italians and Greeks flocked to hear him. And what distinguished men too were formed under his teachings! Among them we may include those highly renowned schoolmasters, Joachim Camerarius, Valentine Trotzendorf, and Michael Neander. All three loved him to their dying day with a depth of devotedness that they could not express; and his doctrines they held sacred and worthy of lasting remembrance.

b. His Personal Relations to the Students.

But that devotedness was not merely the fruit of Melancthon's lectures; it proceeded rather from the affectionate manner that he displayed toward the students individually. "It was a part," so Camerarius tells us, "of Melancthon's household arrangements, never to deny himself to any one. Many came to him for letters of recommendation; many for him to revise their essays. Some sought his counsel in their embarrassments; others told him of incidents that had befallen them, either in private or in public, provided they were such as merited his attention; others again brought this or that complaint before him." "I can assure you, of a truth," said Melancthon in an academical oration, "that I embrace all the students with the love and the interest of a father, and am deeply affected by every thing that menaces them with danger."

c. What he did for the School-System.

Another phase of Melancthon's educational activity may be seen in his relation to schools. For he was often and in various ways appealed to for counsel in school matters. Especially noteworthy in this connection is his correspondence with Hieronymus Baumgartner, of Nuremberg. The occasion was as follows: The Nurembergers had resolved to establish a gymnasium, induced thereto chiefly by the solicitations of the excellent Lazarus Spengler. And Melancthon was formally invited through Baumgartner to become its rector. In his reply to Baumgartner he declines, because in the first place he can not leave Wittenberg without being ungrateful to the Elector; and again, he is not adapted by his previous training for such a position. It requires a man who is a practiced rhetorician, and therefore able with a master's hand to mold the young to rhetorical perfection. To this he is in no wise adapted, for his style is bare and dry, with no elegance in it, in fact altogether scant and devoid of sap; whereas the diction of a teacher of a gymnasium should be rich and full of grace. Reuchlin had sent him, when on the threshold of manhood, to Saxony, where he first set about a thorough cultivation of many branches, self-impelled and self-directed thereto, for his previous school-education had been but poor.

The Nurembergers, as might have been anticipated, did not take Melancthon's estimate of himself in earnest, but, believing it to be the result of an overweening modesty, repeated their invitation through Baumgartner again. Melancthon now replied decidedly that he could not come. But, on his suggestion, Hessus and Camerarius were applied to. Sigismund Gelenius likewise, a learned Bohemian, then living at Basle, was invited by Melancthon himself to become one of

the teachers. In the letter of invitation Melancthon tells him "that the new institution was designed to furnish a full course of instruction from the elements up to rhetoric. Mathematics too was to receive attention." Subsequently Melancthon was urged by the civic authorities of Nuremberg to take part in the inauguration of the gymnasium. (His letter of acceptance was dated on the 10th of March, 1526, and he went to Nuremberg on the 6th of May.) He there delivered a speech, in which he praised the Nurembergers for the spirit they displayed in providing means of education for the young, and he compared their city to Florence. In the year 1826, on the third centennial anniversary of the opening of the gymnasium, a statue of Melancthon was erected in front of the building.

And as by the Nurembergers, so from many other quarters was Melancthon's advice solicited, in the affairs both of schools and universities. But the event of his life that was attended with the most important consequences upon the school-system was his visitation, in 1527, of churches and schools, undertaken by order of the Elector John the Constant, and through the influence of Luther. The field assigned him was Thuringia, and, in company with Myconius and Justus Jonas, he traveled over the whole of it; and, in 1528, likewise by order of the Elector, he published his "Report," or "Book of Visitation," a work of great significance alike to church and to schools. Through its means an evangelical church-system was established for the first time independent of the Pope, and asserting its own authority both in the matter of doctrine and of government. Soon other states followed the example of Saxony.

From the "Book of Visitation" we extract the following

SCHOOL-PLAN.*

Preachers also should exhort the people of their charge to send their children to school, so that they may be trained up to teach sound doctrine in the church, and to serve the state in a wise and able manner. Some imagine that it is enough for a teacher to understand German. But this is a misguided fancy. For he, who is to teach others, must have great practice and special aptitude; to gain this, he must have studied much, and from his youth up. For St. Paul tells us, in 1 Tim., 3: 2, that a bishop must be "apt to teach." And herein he would have us infer that bishops must possess this quality in greater measure than laymen. So also he commends Timothy, (1 Tim., 4: 6,) in that he has learned from his youth up, having been "nourished up in the words of faith, and of good doctrine." For this is no small art, namely, to teach and direct others in a clear and correct manner, and it is impossible that unlearned men should attain to it. Nor do we need able and skillful persons for the church alone, but for the government of the world too; and God requires it at our hands. Hence parents should place their children at school, in order there to arm and equip them for God's service, so that God can use them for the good of others.

But in our day there are many abuses in children's schools. And it is that these abuses may be corrected, and that the young may have good instruction, that we have prepared this plan. In the first place, the teachers must be careful

* This plan appears likewise in Luther's works.

to teach the children Latin only, not German, nor Greek, nor Hebrew, as some have heretofore done, burdening the poor children with such a multiplicity of pursuits, that are not only unproductive, but positively injurious. Such schoolmasters, we plainly see, do not think of the improvement of the children at all, but undertake so many languages solely to increase their own reputation. In the second place, teachers should not burden the children with too many books, but should rather avoid a needless variety. Thirdly, it is indispensable that the children be classified into distinct groups.

THE FIRST GROUP.—The first group should consist of those children who are learning to read. With these the following method is to be adopted: They are first to be taught the child's-manual, containing the alphabet, the creed, the Lord's prayer, and other prayers. When they have learned this, Donatus and Cato may both be given them; Donatus for a reading-book, and Cato they may explain after the following manner: the schoolmaster must give them the explanation of a verse or two, and then in a few hours call upon them to repeat what he has thus said; and in this way they will learn a great number of Latin words, and lay up a full store of phrases to use in speech. In this they should be exercised until they can read well. Neither do we consider it time lost, if the feebler children, who are not especially quick-witted, should read Cato and Donatus not once only, but a second time. With this they should be taught to write, and be required to shew their writing to the schoolmaster every day. Another mode of enlarging their knowledge of Latin words is to give them every afternoon some words to commit to memory, as has been the custom in schools hitherto. These children must likewise be kept at music, and be made to sing with the others, as we shall show, God willing, further on.

THE SECOND GROUP.—The second group consists of children who have learned to read, and are now ready to go into grammar. With these the following regulations should be observed: The first hour after noon every day all the children, large and small, should be practiced in music. Then the schoolmaster must interpret to the second group the fables of Æsop. After vespers, he should explain to them the Paedology of Mosellanus; and, when this is finished, he should select from the Colloquies of Erasmus some that may conduce to their improvement and discipline. This should be repeated on the next evening also. When the children are about to go home for the night, some short sentence may be given them, taken perhaps from a poet, which they are to repeat the next morning, such as "*Amicus certus in re incerta cernitur.*"—A true friend becomes manifest in adversity. Or "*Fortuna, quem nimium foret, stultum facit.*"—Fortune, if she fondles a man too much, makes him a fool. Or this from Ovid: "*Vulgus amicitias utilitate probat.*"—The rabble value friendships by the profit they yield.

In the morning the children are again to explain Æsop's fables. With this the teacher should decline some nouns or verbs, many or few, easy or difficult, according to the progress of the children, and then ask them the rules and the reasons for such inflection. And at the same time when they shall have learned the rules of construction, they should be required to *construe*, (parse,) as it is called; this is a very useful exercise, and yet there are not many who employ it. After the children have thus learned Æsop, Terence is to be given to them; and this they must commit to memory, for they will now be older, and able to work harder. Still the master must be cautious, lest he overtask them. Next after Terence, the children may take hold of such of the comedies of Plautus as are harmless in their tendency, as the *Aulularia*, the *Trinummus*, the *Pseudolus*, etc.

The hour before mid-day must be invariably and exclusively devoted to instruction in grammar: first etymology, then syntax, and lastly prosody. And when the teacher has gone thus far through with the grammar, he should begin it again, and so on continually, that the children may understand it to perfection. For if there is negligence here, there is neither certainty nor stability in whatever is learned beside. And the children should learn by heart and repeat all the rules, so that they may be driven and forced, as it were, to learn the grammar well.

If such labor is irksome to the schoolmaster, as we often see, then we should dismiss him, and get another in his place,—one who will not shrink from the duty of keeping his pupils constantly in the grammar. For no greater injury can befall learning and the arts, than for youth to grow up in ignorance of grammar.

This course should be repeated daily, by the week together; nor should we by any means give children a different book to study each day. However, one day, for instance, Sunday or Wednesday, should be set apart, in which the children may receive Christian instruction. For some are suffered to learn nothing in the Holy Scriptures; and some masters there are who teach children nothing but the Scriptures; both of which extremes must be avoided. For it is essential that children be taught the rudiments of the Christian and divine life. So likewise there are many reasons why, with the Scriptures, other books too should be laid before them, out of which they may learn to read. And in this matter we propose the following method: Let the schoolmaster hear the whole group, making them, one after the other, repeat the Lord's prayer, the creed, and the ten commandments. But if the group is too large, it may be divided, so that one week one part may recite, and the remaining part the next.

After one recitation, the master should explain in a simple and correct manner the Lord's prayer, after the next the creed, and at another time the ten commandments. And he should impress upon the children the essentials, such as the fear of God, faith, and good works. He must not touch upon polemics, nor must he accustom the children to scoff at monks or any other persons, as many unskillful teachers use to do.

With this the schoolmaster may give the boys some plain psalms to commit to memory, which comprehend the sum and substance of the Christian life, which inculcate the fear of the Lord, faith, and good works. As the 112th Psalm, "Blessed is the man that feareth the Lord;" the 34th, "I will bless the Lord at all times;" the 128th, "Blessed is every one that feareth the Lord, that walketh in his ways;" the 125th, "They that trust in the Lord shall be as Mount Zion, which can not be removed, but abideth forever;" the 127th, "Except the Lord build the house, they labor in vain that build it;" the 133d, "Behold how good and how pleasant it is for brethren to dwell together in unity!" or other such plain and intelligible psalms, which likewise should be expounded in the briefest and most correct manner possible, so that the children may know, both the substance of what they have learned and where to find it.

On this day too the teacher should give a grammatical exposition of Matthew; and, when he has gone through with it, he should commence it anew. But, when the boys are somewhat more advanced, he may comment upon the two epistles of Paul to Timothy, or the 1st Epistle of John, or the Proverbs of Solomon. But teachers must not undertake any other books. For it is not profitable to burden the young with deep and difficult books as some do, who, to add to their own reputation, read Isaiah, Paul's Epistle to the Romans, St. John's Gospel, and others of a like nature.

THE THIRD GROUP.—Now, when these children have been well trained in grammar, those among them who have made the greatest proficiency should be taken out, and formed into the third group. The hour after mid-day they, together with the rest, are to devote to music. After this the teacher is to give an explanation of Virgil. When he has finished this, he may take up Ovid's *Metamorphoses*, and in the latter part of the afternoon Cicero's "Offices," or "Letters to Friends." In the morning Virgil may be reviewed, and the teacher, to keep up practice in the grammar, may call for constructions and inflections, and point out the prominent figures of speech.

The hour before mid-day, grammar should still be kept up, that the scholars may be thoroughly versed therein. And when they are perfectly familiar with etymology and syntax, then prosody (*metrica*) should be opened to them, so that they can thereby become accustomed to make verses. For this exercise is a very great help toward understanding the writings of others; and it likewise gives the boys a rich fund of words, and renders them accomplished many ways. In course of time, after they have been sufficiently practiced in the grammar, this same hour is to be given to logic and rhetoric. The boys in the second and third groups are to be required every week to write compositions, either in the form of letters or of verses. They should also be rigidly confined to Latin conversation, and to this end the teachers themselves must, as far as possible, speak nothing but Latin with the boys; thus they will acquire the practice by use, and the more rapidly for the incentives held out to them.

Thus much for schools. We have here the yet crude beginnings

of a high-school system, without any thorough organization or well-regulated activity. These, it remained for Trotzendorf and Sturm to develop.

d. Melancthon's Manuals.

His influence upon schools was very widely diffused by means of his manuals, which were universally introduced into use, and were perpetuated through many editions. He wrote a Greek and a Latin grammar, two manuals of logic, one of rhetoric, one of ethics, and one of physics.

These manuals are characterized by great clearness of expression: it was a matter of great moment with Melancthon, by means of concise and clear definitions and a well-ordered arrangement, to make himself as intelligible as possible. Confused sentiments, and obscure language, whose sense we vainly perplex ourselves to get at, these were Melancthon's abhorrence.

The Greek Grammar.—An edition of the year 1542 lies before me.* In the preface Melancthon says: "He has often wished that his little work on Greek grammar had perished, because he wrote it while yet scarcely out of boyhood, for the use of the boys whom he had under his charge. And indeed it would have perished had not the bookseller constrained him to repeat the foolish action, (*denuo ineptire*,) and to rebuild the old ruins. He has accordingly critically revised the whole, altering it and improving it." The grammar is simple and clear, but it does not include syntax; it ends with the paradigms of the verbs in $\mu\iota$.†

The Latin Grammar.—Melancthon wrote this originally for his pupil, Erasmus Ebner, of Nuremberg. Goldstein, afterward recorder of the town of Halle, issued it, as he tells us himself in the preface, against Melancthon's wish, in 1525. In the edition of 1542 there is a letter of Melancthon to the Frankfort bookseller, Egenolph. "In the first edition of my grammar," he writes, "there were various omissions. These may be supplied; yet there should not be too many rules, lest their number prove discouraging to the learner." He then expresses his confidence that Micyllus, whom he has prevailed upon to prepare an improved edition, will, in virtue of his learning and good judgment, adopt the right method. Next, he launches into a panegyric of grammar, especially of its usefulness to the theologian. "How important it is," he says, "to the church that boys be thoroughly disciplined in the languages! Inasmuch as the purity of

* *Grammatica graeca Ph. Melancthonis jam novissime recognita atque multis in locis locupletata. Francofurti, XLII.*

† The commentaries on syntax he sent in manuscript to Count Nuenar, but they were not printed.

the divine teachings can not be maintained without learning, and weighty controversies can only be settled by a determination of the meaning of words, and a wide range of well-chosen expressions is indispensable to a correct construction; therefore what will a teacher in the church be, if he does not understand grammar, other than a silent mask, or a shameless bawler? He who does not understand the mode of speech of God's word can not love it either. *Ignoti nulla cupido* is a true maxim. But how can he be a good teacher in the church who neither loves the heavenly doctrine, nor yet understands it, nor is able to explain it? Neglect of grammar has recoiled upon our own heads, in that through the means the monks have palmed off upon the church and the schools spurious wares for genuine. Hence princes should have a care to maintain learning; we observe, however, that a very few do it. And cities too should strive to uphold and protect these studies, that embellish not only the church but the whole of life." In conclusion he exhorts youth to a diligent study of grammar.

This letter of Melancthon's is dated in 1540. It was also printed with the edition of the grammar which Camerarius brought out in 1550. To the second part of this grammar, or the syntax, there is prefixed a preface addressed to the son of Justus Jonas. It is written against those who think to become philologists merely through the perusal of the classics, without grammatical studies. Such persons will never be rooted and grounded. Their false view proceeds from a repugnance to the restraint of rules,—a repugnance that by and by will degenerate into a dangerous contempt of all law and order.

The following is the history of this edition of Melancthon's grammar: Camerarius requested Melancthon, on behalf of the bookseller, Papst, in Leipzig, that he would authorize the latter to bring out a new edition. Melancthon acceded to the request in the most friendly manner, and signified his approval, in advance, of all the emendations and additions which Camerarius should make. In his preface, Camerarius thus speaks of the additions: "They will not merely profit the scholar, but they will likewise assist the teacher." The opinion that Schenk, who lectured on Latin grammar at Leipzig, expressed of this work, will doubtless appear to most of us somewhat exaggerated. "This little book has now attained to that perfection that there appears to be nothing deficient in it, nor can there hereafter be any thing added to it; and accordingly it will ever continue to be, as it now is, the sum of all perfection, neither to be altered nor remodeled."

The distinguished Hefeld rector, Michael Neander, did not assent
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to this view, as far as it referred to the utility of Camerarius' book as a school-grammar. He published an edition himself, with this title, namely, "The Latin grammar of Ph. Melancthon, delivered with brevity, ease, and clearness, in the compass of a few pages, yet in such a manner as not only to give Melancthon's language, but his method in the smaller grammar and smaller syntax, that first and oldest manual, which is most admirably adapted to the learner, and which more than any other has been used in all our German schools." He moreover assures us on the title-page that boys can learn every thing that is necessary to the understanding of Latin, out of this grammar, in a few months. In the preface, Neander explains the object of his work more distinctly. He says, since he has observed that boys are burdened by a multitude of rules and examples, and since this diffuseness is moreover unsuitable to teachers, therefore he has made this abridgment of Melancthon's grammar. It is so concise that the scholar should be required to learn it all thoroughly; then he can read, compare, and exercise himself in Melancthon's own admirable grammars, both the smaller and the larger; nay he may then read and digest the remarks and illustrations which have been incorporated into the larger grammar of Melancthon by a very learned man,* and which swell the book to twice or three times its original size. Camerarius' edition of Melancthon's grammar contains 507 pages, Neander's but 130. It is evident that both Camerarius and Micyllus before him neglected Melancthon's warning against discouraging the pupil by too great diffuseness. While they designed their grammars not for scholars alone, but also for teachers, as Camerarius claims in so many words in the title of his book, and thus aimed at completeness and perfection, it happened that their labor was lost as far as school-instruction was concerned. Neander's simplification, on the other hand, is sure to meet with the general approval of school-teachers; for they must needs feel ever more deeply that there is a heaven-wide difference between a grammar for beginners and one for learned philologists,—a difference as great as that between the catechism and a learned and profound treatise on doctrinal theology. Every intermingling of these distinct and different objects results in hybrid grammars, which are too advanced for the learner and too simple for the teacher. It is evident from Neander's preface that Melancthon's grammar held the chief place in the schools of Germany in the last half of the 16th century. Yet the precise and critical Strobel enumerates, between the years 1525 and 1727, no fewer than fifty-one editions, more or less altered from the original. But

* Camerarius.

notwithstanding, its influence can be traced even to our time. For example, that very useful book, the larger "*grammatica Marchica*," strikingly coincides with Melancthon's, both in the general arrangement and in the treatment of the parts; and the phraseology of the two is often alike, in definitions, rules of syntax and the like. Again, Otto Schulz, in the preface to his complete Latin grammar, which appeared in 1825, says: "In respect to my method, I have designed to follow as closely as possible the larger Mark grammar, whose main features all teachers concur in approving." A history of grammars, from Donatus to Zumpt and Schulz, would be a most interesting book. How characteristic even are the various definitions of the word "grammar," which have been given in different periods! Melancthon defines it thus: "Grammar is an exact method of speaking and writing." The Mark grammar of 1728, in essential agreement with this definition, says: "Grammar is the art of speaking and writing correctly." Otto Schulz, on the other hand, has it thus: "Latin grammar is a guide to the knowledge of the Latin tongue; it shows how the universal laws of language should be applied in the special instance of Latin." Lastly, Kühner thus defines it: "Grammar is the guide to a correct understanding of a language, through its words and forms of speech." In these definitions we may perceive what progress has been made since 1728, from a practical treatment of the ancient languages, according to the *art* of speaking and writing, to a theoretical, whose aim is by means of *science* to attain to a perfect *understanding* of the same.

But let us return to Melancthon and his manuals.

The Manual of Logic.—The first edition of this work appeared in 1520, an enlarged and improved edition in 1527, a third in 1529; this latter is dedicated to William Reiffenstein. The book, Melancthon says, is designed to assist in a better understanding of Aristotle. It was followed by a second treatise upon the same subject, the "*Erotemata Dialectices*," the principal portion of which he composed in the unfortunate year 1547. The dedication, addressed to John, son of Joachim Camerarius, bears date, September 1st, 1547; by the 18th of October, the same year, three thousand copies were disposed of.

This dedication touches upon the point above adverted to as having been discussed in the preface to the "Syntax," namely, "Whether logic is indispensable to every one, inasmuch as we find its absence atoned for in many instances by a strong, native common sense?" The reply is that it is a necessary art, since it teaches men of moderate capacities, and is a help to them, while on the other hand the more gifted are controlled by it, and kept within bounds, and are led

to seek after truth and to prize truth alone. Then he pronounces judgment against those who decry logic. "Even as there are many men of unbridled passions who hate the restraints of moral law, so there are those who can not abide the rules of art. Dialectics, as hitherto taught by the school-men, had, to be sure, fallen into contempt; however, this was because it was not veritable art, but only the shadow of an art, and entangled men amid endless labyrinthine mazes. But," he continues, "I present here a true, pure and unsophisticated logic, just as we have received it from Aristotle and some of his judicious commentators." He then proceeds to show the necessity of logic in order to a correct statement and determination of the doctrines of the church; its abuse by heretical teachers ought not to deter us from its right use. He urges those, who have the capacity, to read Aristotle himself, and that in the Greek; but adds, that it will be of service first to acquire a knowledge of the elements, in order to understand him the more readily.

Manual of Rhetoric.—The first edition appeared in 1519, under the title "*De Rhetorica Libri tres.*—Wittenberg, Io. Grunenberg." The dedication to Bernard Maurus was written in January, 1519; and treats, among other things, of the relation of rhetoric to logic. The later edition was dedicated in the year 1531 to the brothers Reiffenstein. Says Melancthon in this dedication, whereas he had been compelled to speak against corrupt logicians, the case was far different with rhetoric. Upon rhetoric no one had written but eminent men, as for instance Cicero and Quintilian. And his rhetoric was designed to be an elementary guide to the understanding of their writings. In these they (the brothers Reiffenstein) might perceive the length and breadth of the art of eloquence, and not fall into the delusion that many self-conceited blockheads indulge, namely, that those have reached the very pitch and perfection of eloquence who have learned how to indite a letter. But eloquence is rather to be ranked among the highest accomplishments, and involves extensive learning, great talents, long practice, and a keen judgment. Rhetoric is closely allied to logic, and one can not be comprehended without the other.

Manual of Physics.—I shall speak at greater length of this book, when I come to describe the pre-Baconian realism.* Melancthon's pious and sensible manner of contemplating nature will be clearly set forth as well from passages in this manual as from his preface to Sacrobusto's work on the Sphere.

Manual of Ethics.—As early as the year 1529, he issued his

* Knowledge of *things* as contra-distinguished from knowledge of *words*.

commentary on the ethics of Aristotle, and in the year 1538 his "*Philosophiæ moralis epitome*."

With these manuals we should rank one upon history, namely, the "*Chronicon*" of his pupil Cario, which Melancthon improved and enlarged in 1532 in the German, and in 1538 rewrote entire and published in Latin.

e. Declamationes.

Melancthon's universal learning, his eminent skill as a teacher, and his practical exercise in teaching, for well-nigh half a century, lead us to infer the existence of many excellent hints to instructors in his manuals. Nor are we disappointed. We find in these manuals an educational wisdom of enduring value for all time. Much, it is true, betokens the 16th century. In Melancthon, the preceptor of Germany, (*Præceptor Germaniæ*), both the ideal and the modes of culture that prevailed among his contemporaries, appear as it were personified before our eyes.

Not merely in his manuals, however, but in other works of his, the orations especially, there is contained a treasure of educational wisdom. Under the title "*Declamationes*," we have a collection of Melancthon's academical orations, delivered some by himself and some by others.*

In these orations we perceive his love of science, and are made familiar with his views upon mental culture and upon study in general, as well as its single branches. Repeatedly does he express himself on these topics,—above all on the relation of science to the church.

1. *His Love of Science.*

In the year 1535, Melancthon delivered an oration on love of truth. "It is a matter of inexpressible moment," he here says, "that a man from his youth up should cherish a burning hatred toward all sophistry, especially toward that which wears the garb of wisdom." Among the abettors of this latter species of sophistry, he includes both Stoics and Epicureans, as well as the Anabaptists, who were wholly wrapped in the mists and delusions of this false wisdom; and adds:—

There are others who have misapplied their talents, not seeking to bring the truth to light, but only to prove or to disprove in perpetual rotation whatever they have happened to conjecture possible. And this legerdemain they have taken to be the true element of genius. Such men were those universal doubters, the academics and sophists of Plato's time. These undisciplined, lawless spirits were very dangerous; whatever pleased their fancy, this they never ceased to magnify, but every thing disagreeable to them they rejected as of no account; that which looked plausible they insisted upon as true; they united things which did not belong together, and things which were manifestly related to each other they put

* Strobel, in the "*Literary Miscellany*," Nuremberg, 1781, in speaking of Melancthon's orations, says that the most eminent of Melancthon's colleagues, men like Major, Reinholt, and Winshemius, were not ashamed to deliver orations prepared by him.

asunder; they employed clear and well-defined terms to express nothing, and threw around sober realities an air of irony. Against this kind of sophistry all well-meaning persons must wage an implacable warfare. Plato was very earnest to exhort men in their speech to seek not the applause of men but the approbation of God. And accordingly we ought with our whole soul to aim at this one point, namely, to find the truth, and to set it forth with as much simplicity and clearness as possible. Men who, in matters of science, sport with truth, are blind guides likewise where revelation is concerned. Sophistry has by means of its false precepts occasioned religious dissensions and religious wars. The dispositions of men are easily warped, and it needs great wisdom to keep them in the right way; and Christ calls down the severest judgments upon those by whom offenses come.

Studies. The Old time and the New. Science and the Church.

In the oration, which Melancthon delivered in 1518, at his induction into his preceptorial office, he marks the contrast between the old and barbarous studies, that had hitherto been in vogue, and those excellent and new objects of inquiry that were beginning to receive attention. "The advocates of the old method," he says, "decry the new. 'The study of the restored classical literature,' they say, 'with great labor, yields but small profit. Idle men have betaken themselves to Greek in order to make a vain boast of their knowledge; the Hebrew promises but little with the moderns; all true studies have fallen away, and philosophy is utterly neglected.'"

Against such accusers Melancthon entered the lists, first attacking with vigor the old methods of study. Those scholastics had planted themselves upon Aristotle, who was hard to understand even for the Greeks, but had become in the scholastic Latin versions absolutely unintelligible. Better things fell into disrepute, Greek was forgotten, a jargon of useless learning forced upon the mind, and the classics were thrown aside altogether. He himself had been almost ruined by being six long years under the teachings of the pseudo-Aristotelian sophists, men who bore not the least trace of resemblance to Socrates. For this one had said "that one thing only did he know, namely, that he knew nothing, while they knew every thing, save this one, namely, that they did not know any thing."

Then he goes on to indicate briefly what the students at the Wittenberg university were expected, after the new method, to take hold of, viz., Aristotle as he is in the original, Quintilian and Pliny, the mathematics, poets, orators, historians, and a sound philosophy.

These were studies which the clergy and jurists equally needed; and the former in addition to Greek should understand Hebrew. For with the downfall of these studies the church had sunk into ruins, having become marred and disfigured by ordinances of man's device.

Of a similar purport is a speech which Melancthon delivered eighteen years later, (in 1536.) In this he commends not merely the study of the languages, but also of philosophy and the other arts,

since they all serve to enrich and adorn the church. Ignorance obscures religion, and leads to frightful divisions, and to barbarism,—in short to the entire destruction of all social order. An unenlightened theology is one of the greatest of evils, confounding all doctrines, having no clear conception of vital truths, uniting things that should be divided, and tearing asunder things that are joined together. It is contradictory and inconsistent, and there is neither beginning, progress, nor result in it. Such teachings are prolific of unnumbered errors and endless disagreements, because in the general confusion one and the same thing is understood thus by one man and quite differently by another. And, since every one defends his own view, there arises strife and discord. Meanwhile consciences are racked with doubt, and doubt not resolved ends in disbelief. But an enlightened theology should not rest content with grammar and logic; it also has need of physics, moral philosophy, and history, for which latter too a knowledge of the mathematics, for their bearing on chronology, is indispensable.

And with great justice does Melancthon remark in this speech: "Learning is at this day of the utmost consequence to the church, because ignorant priests are growing ever bolder and more careless in their office. Learned men, who have accustomed themselves to thorough investigation in every thing they undertake, know but too well how liable they are to fall into error, and thus diligence itself teaches them modesty. But what great disasters ever befall the church, from the recklessness of ignorance, this, the present condition of things will teach us."

The theme, "Learning is a blessing to the church and ignorance its curse," was frequently taken up by Melancthon. So, in the already cited preface to his Latin Grammar, and again in the introduction to a treatise on the art of poetry, "*Cuidam libello de arte poetica.*" "Hand in hand with diligent study," he here says, "we ever find modesty and a prayerful spirit." A disciple of Schwenkfeld had written a book against him and Paul Eber, in which he attacked the liberal arts, and undertook to prove that the church is not built up and established by means of reading, hearing, and reflecting upon the doctrines of the Bible, but that a certain enthusiasm first overmasters the spirit, and reading the Scriptures and meditation comes afterward. "Thus," he adds, "these fanatics invert the order indicated by Paul, namely, 'how shall they believe who have not heard?'"

In the oration entitled "*Encomium eloquentiae,*" he takes a survey of the studies essential to a complete education. Here he again censures the unintelligible style of Scotus and the school-men. Picus,

he thinks, was but in jest when he took up the gauntlet for them, and maintained the proposition that it mattered not whether a man spoke with elegance or not, provided only that he expressed his thoughts clearly. The earlier theological bunglers were of a piece, as well in style as in sentiments,—barbarians in both. He then advocates the reading of the ancient poets, historians, and orators, and at the same time a diligent practice in style, both in prose and poetry. In the close he recurs again to the importance of a knowledge of the languages to the theologian to assist him in understanding the Scriptures. A godless spirit goes hand in hand with ignorance. The classical studies had again dawned upon the world in order that theology, which had become corrupt, might again be purified. The deeper meaning of the word, it is true, is imparted to us by the Holy Spirit; but we must first come to a knowledge of the language, for it is in this that the divine mysteries are embodied. He then gives an example of the mistakes which continually occur, where the knowledge of language is inadequate to convey the true meaning of the words. One of their masters of arts rendered the words "*Melchisedec rex Salem panem et vinum obtulit,*" thus: Melchisedec set before (Abraham) salt, bread, and wine; and he then proceeded at great length to remark upon the nature of salt.

From his oration upon the study of Hebrew it would appear that the Wittenberg university ranked the original language of the Old Testament among the chief objects of attention. The opinion of Politian that this was an unpolished language, and that it formed a hindrance both to the study of the classics and the attainment of Latin eloquence,—this opinion was there opposed with the utmost earnestness. In this connection, Melancthon's preface to Terence, written in 1525, is worthy of note. "There is scarcely any book," he says, "which is more worthy of daily perusal than this poet. In point of fitness of expression he surpasses perhaps every other author. Chrysostom took such pleasure in Aristophanes that he laid him under his pillow at night; and without doubt he perused this poet with such assiduity, in order by the means to perfect himself in eloquence. How much more highly," he continues, "is Terence to be esteemed, whose plays are both free from obscenity, and likewise, if I mistake not, models of rhetoric. I therefore advise all teachers urgently to commend this author to the study of youth. For he appears to me to present a theory of human life that far surpasses that set forth in most philosophical works. And no other author teaches a purer diction, none other accustoms boys so well to those forms of speech in which they need to be drilled for future use."

VI. REVIEW OF MELANCTHON'S LIFE FROM 1518 TO 1560.

Agreeably to the scope of this work, I have kept in view the educational labors of Melancthon, and have accordingly dwelt but little upon the part he played in the reformation of the church. This too was the less called for, inasmuch as so many histories of the Reformation and recent biographies have rendered us familiar with his efficiency in this field. Repeated expressions in his letters prove that he was drawn into the wide arena of the Reformation almost against his will, and amid the dust of the conflict that he often yearned to devote himself wholly to philology and philosophy. Even his theological lectures were undertaken contrary to the dictates of his own inclination, and only in compliance with the desire of Luther. "Thou knowest," he wrote to Spalatin, "the circumstance that occasioned me to give a theological course. I first began it in order, as *Baccalaureus ad biblia*, to conform to established usage, nor had I then the most distant presentiment of the turn that matters were destined to take. My exegesis was not finished when Dr. Martin went to Worms; and, so long as he continued absent, it was not possible for me to give up these lectures. Thus it has come to pass that I have dangled from that cliff for more than two years. I yesterday finished John's gospel, and this appears to me to be an appropriate time to make a change in respect to the lectures. I can not hesitate to follow whither thou leadest, even to become a keeper of cattle. Nevertheless, I could wish in this one respect to be free." Noteworthy too is the fact that he did not take the degree of Doctor of Theology, while Luther, in virtue of *his* theological doctorate, felt constrained in his conscience to go into the lists against emperor and Pope; nor did Melancthon ever preach, notwithstanding that Luther frequently urged him to do so,—"*Nolentem trahunt fatu*;" and, whether he would or not, he was forced to remain his life long in the field as a soldier of Christ, and ever to fight in the fore-front of the battle, while he yearned forever after a life of literary retirement and quiet. Luther, so long as he lived, hurried Melancthon along with him; and, when he died, it was too late for Melancthon to withdraw, for the powerful current and commotion of the reorganizing church was bearing him resistlessly on. Whatsoever opinion we may any of us have formed of those doctrinal controversies, yet we can not but feel a deep sympathy for Melancthon when we read of the unhappy feuds in which the excellent man was involved in the closing years of his life, and what rudeness and indignity he suffered at the hands of his adversaries.

Let us now turn back again for a few moments to his younger

days. In 1520 he married Catherine, daughter of Herr Krapp, Mayor of Wittenberg. Camerarius said of her: "She was pious, very affectionate toward her husband, careful and diligent in matters pertaining to the household, and kind and benevolent to all." She bore her husband two sons and two daughters. Anna, the eldest of these children, who was her father's idol, was married in 1536 to George Sabinus, a man of learning indeed, but of a restless, ambitious spirit; she died in 1547. The second child was a son named Philip, whose talents were quite inferior. He was born in 1525, and died in 1603. At the time of his death he was secretary of the consistory. George, the second son, did not survive quite two years; Magdalena, the second daughter, was married in 1550 to the physician Casper Peucer, who afterward suffered many years' imprisonment on account of his clandestine adherence to Calvinism. Through her grief at this calamity she died in the year 1576.

Of Melancthon's domestic life, Camerarius, who was an intimate friend of his, tells us much that is worthy of our admiration; as that he loved his children most dearly, was unstinted in his charity toward the needy, and kindly and cheerful, true and single-minded in his intercourse with his friends. Almost too thoughtless with respect to the goods of this life, he amassed nothing to bequeath to his family. We might hence conclude that he was perpetually serene and happy in his disposition; but his life and many of his letters undeceive us in this respect. He suffered from bodily afflictions; sleeplessness in his earlier years, and later the sharp pains of the gravel. He was also weighed down by many family troubles; the death of two of his children, and of his wife, and, in addition to all, the perverse behavior of his son-in-law, Sabinus. Yet all this, as his letters evince, receded into the back-ground, compared with the overshadowing unrest which grew out of his relations to the church. A conscientious man will pass sleepless nights, if his soul is weighed down with anxiety for the welfare of a few children or pupils. Is it then to be wondered at if Melancthon,—with his so tender conscience, at the Diet of Augsburg, for instance, where his words were to decide the temporal and eternal welfare of countless souls among those who were then living, as well as of those who should come after him,—is it to be wondered at if he there was overwhelmed, like Moses and Jeremiah, by the fearful responsibilities which devolved upon him? To this too was afterward added a deeper sorrow, namely, to be forsaken by his own familiar friends, and to be most bitterly persecuted.

We may behold depicted before us, as it were, the trials which he was called to endure, if we compare the admirable likeness, engraved

upon copper by Albert Durer, of Melancthon, the young man of twenty-nine, with that portrait of Melancthon, the gray-haired old man, which Luke Cranach has bequeathed to us. The one is a fair and a very striking head, with a high forehead, and eyes out of which the liveliest expression of kindness and grace beams toward you. But, on the other hand, the countenance of the old man is deeply scored with the furrows of many sorrowful years, toiled through amid heavy trials, and the ceaseless and bitter whirl of controversy.

Melancthon was at Heidelberg in 1557, when Camerarius brought him the news of the death of his wife. Without betraying the least token of sorrow, although every one felt that his heart was sore and sad almost to bursting, he only said, "I shall soon follow her."

The depth of his grief may be estimated, however, from a letter which he wrote two years after the death of his wife, and one year before the final summons came to him also. "Passionate and sorrowful yearning for a deceased wife is not effaced in the old man as it may be with those who are younger. When day by day I gaze upon my grandchildren, I recall not without a sigh their grandmother, and thus at the sight of the bereaved little ones my sorrow is renewed. She cared for the whole family, she cherished the infants, she nursed the sick; by her consoling words she lessened my griefs; she taught the children to pray. And so it is that I miss her everywhere. I bethink me how almost daily she repeated these words of the psalm, 'Forsake me not in my old age;' and thus I also continually pray."

After the departure of his wife Melancthon repeatedly spoke of his own approaching death. The increasing violence which marked the theological controversies of the day embittered his life more and more. He himself came in danger thereby of banishment. "If they drive me out," he wrote to Hardenberg, "I have made up my mind to go to Palestine, and there in the seclusion of the cloister of Hieronymus, at the call of the Son of God, to record my unclouded testimony to the doctrine, and dying to commend my soul to God."

In a subsequent letter he wrote: "My troubles and sorrows are waxing greater, but the far journey to the church in heaven will soon liberate me from them all."

The 19th of April, 1560, was the day of his death. When he was dying he found consolation from passages in the Bible, this especially, "As many as received him, to these gave he power to become sons of God." Then he repeated in an undertone these words from the last prayer of Christ, "that they may all be one, even as we are one." Attacked and maligned in his closing years, and tired of the unholy war, the old man felt a longing desire for an assured and peaceful

rest, and for a union with his Lord and Master, whom with truest love he had served all his days. Paul Eber and other godly men kneeled around his death-bed. To Peucer's question "whether he desired any thing," he replied "nothing but heaven; let me rest and pray. My time has almost come." In the evening, before seven o'clock, he passed away to his heavenly rest, on the 21st of April. He was buried in the Wittenberg castle church, by the side of Luther.

Note.—MELANCTHON'S LATIN GRAMMAR.—The indefatigable Strobel, in his "Contributions to Literature, with reference especially to the 16th century," has furnished a chapter on "Melancthon's grammatical labors and influence." In this we find a list of the various editions of the Latin grammar.

The first, brought out under the auspices of Goldstein, is of the year 1525. The fourth, according to Strobel, is that of 1529, as follows: "Gram. lat. P. Melancthonis ab autore nuper et aucta et recognita. Norembergae apud I. Petreium, 1529."

The following edition, of which I have a copy, Strobel has not mentioned: "Gram. lat. P. Mel. ab autore nuper aucta et recognita. Secunda editio. Parisiis ex officina Roberti Stephani, 1529." On the last page it reads: "Excudebat Rob. Stephanus, Par. anno 1529, XVI. Cal. Octobris." This is a reprint of the preceding edition, save that the syntax is omitted, and all German words are translated into corresponding terms in the French. For instance, in the sentence "Substantivum cui non potest addi *Mann, Weib, Ding* ut campus," Stephanus uses the words "*homme, femme, chose*."

Next in Strobel's enumeration is "Gram. P. Mel., Latina, jam denuo recognita et plerisque in locis locupletata. Nor. ab. I. Petreium, 1542." At the end of this edition, (a copy of which lies before me,) Strobel met with Melancthon's letter to Egenolph, as he says, "for the first time."

This letter was afterward repeatedly reprinted in various editions of the grammar, and likewise of the Declamations of Melancthon, and always under the date of 1540. It is somewhat singular that the letter of 1540 should not have appeared until 1542, and moreover that it should have appeared first in the edition of Petreius, while it is addressed to the bookseller Egenolph, at Frankfort, who himself published under his own imprint many editions of Melancthon's grammar. It is altogether probable that the revision of Micyllus first appeared from the press of Egenolph as early as 1540 or 1541, and was afterward reprinted or rather pirated by Petreius.

After Micyllus, Camerarius, aided by Bechius and Schengius, undertook the work of editing Melancthon's book.

Strobel gives the edition of 1552 as the first by Camerarius; I have an earlier one, however, of the year 1550, to which I have before adverted; the preface bears date,—Lipsiae, XIII. Calendas Octobris, 1550. In an issue of 1560, which lies before me, the same preface is reprinted word for word, though with an addition having reference to the chapter on orthography, then first introduced, and the edition is designated as the second, (*recens editio*.) This preface dates,—Lipsiae, Id. April, 1552.

While preparing the first edition of my history, I had only a copy of Camerarius before me, but none of Micyllus. And the expressions used by Camerarius in reference to his additions and those of his coadjutors led me to infer that the increased size of the grammar was chiefly owing to their labors. For instance, he says, "though Schengius may appear of his boundless diligence to have elaborated some points, with it may be an excess of care;" and again, "the grammar in its new form will be of service not merely to scholars, but to teachers likewise; and it has now reached that degree of perfection that nothing important remains to be added to it."

But the rector Schoenborn, of Breslau, after comparing the grammar of Micyllus with that of Camerarius, remarked, as the result of his comparison, that the latter agreed word for word with the former, save that passages from the old grammarians referred to by Micyllus or Melancthon were given in full,—quoted for the use of teachers.

I have since compared Camerarius' book with the editions of 1542 and 1546 of Micyllus, and have thereby been able to confirm this remark of Schoenborn; but as regards another of his observations, I may be permitted to differ from him. It is this: "Melancthon, in the letter to Egenolph, speaks as if the revision of Micyllus were completed. He says, 'I am rejoiced, my Egenolph, that Micyllus has undertaken (*instituisse*) this task of emendation, and in view of it I solicit the thanks of the young, both for you and Micyllus.' The high praise which Melancthon in this letter to Egenolph bestows upon the enlargement of the grammar, shews conclusively that he was not dissatisfied with the editor, though he deprecates at the same time any future increase in it."

Had Melancthon really the completed grammar of Micyllus before him, and if so, would he have praised the work, but said nothing in commendation of the workman? In that letter he says that he requested Micyllus to undertake the grammar; then he continues, "though I myself had sufficient time, yet I would prefer the criticism of Micyllus to my own." And further: "I am rejoiced that Micyllus has undertaken this task." Much, he implies, had been omitted in the first edition. "Although," he says, "it is desirable to add much, still a certain limit should be observed in the selection of examples, lest the young be intimidated by their extent. But I intrust this whole matter to the judgment and the faithfulness of Micyllus, and may God accept his earnest and devout labors."

These passages appear to me rather to prove that Micyllus was yet engaged upon the grammar, when Melancthon wrote to Egenolph. Perhaps he feared lest Micyllus, carried away by his love of learning, should overstep the limits of a school-grammar, and accordingly wrote this letter to serve indirectly as a caution to him.

XII. CUMBERLAND UNIVERSITY,

LEBANON, TENNESSEE.

CUMBERLAND UNIVERSITY, located in Lebanon, Tennessee, had its origin in the failure of Cumberland College, at Princeton, Kentucky, to meet the wants of the Presbyterian Church for ministerial education,—the endowment was inadequate, and the scanty means furnished were badly managed. Soon the institution was involved in debt, and, though several efforts were made to relieve it, they were unavailing.

Accordingly the General Assembly appointed a committee to select a suitable location, and establish another institution. After due notice, the committee met in the city of Nashville, in July, 1842, to receive propositions for the location of a college, to be under the supervision and patronage of the General Assembly of the Cumberland Presbyterian Church.

A delegation of the citizens of Lebanon waited upon the committee, and proposed to erect a college edifice at a cost of ten thousand dollars, provided the institution should be located in that place. This being the best bid received by the committee, it was accepted, and the college was located at Lebanon. The committee appointed a Board of Trustees, and instructed them to select a competent Faculty, and put the institution in operation as soon as practicable.

The trustees selected Rev. F. R. Cossitt, D. D., President; Rev. C. G. McPherson, Professor of Mathematics; and Rev. T. C. Anderson, Professor of Languages. Professor McPherson opened a school in the Cumberland Presbyterian Church, in September, 1842. In February, 1843, Dr. Cossitt arrived in Lebanon, and assumed the Presidency; and in September, 1843, Mr. Anderson was inaugurated Professor of Ancient Languages, and Mr. N. L. Lindsley, son of President Lindsley, of Nashville University, was elected Professor of Modern Languages.

In February, 1844, the college was chartered, under the appellation of "Cumberland University," and a few days thereafter, the school

* The following history of Cumberland University, Tennessee, is slightly abridged from one prepared by Rev. T. C. ANDERSON, D. D.

For thirteen years, and with signal ability, Dr. Anderson has filled the office of President of this young and prosperous institution. Before this memorable epoch in his life, he had been distinguished as Professor of Languages in Cumberland College, Kentucky; then, as editor of several church papers; and from 1832 to 1842, as an earnest and eloquent minister of the gospel.

was removed from the church to the college edifice, now completed, and the collegiate classes were regularly organized.

In April, 1844, Professor Anderson, on account of declining health, tendered his resignation, and retired from the department of Languages. The Board of Trustees declined accepting his resignation, but supplied the department by the temporary appointment of Professor N. L. Lindsley. At the opening of the next collegiate year, in October, Mr. Anderson was still unable to perform the arduous labors, and Mr. Lindsley was elected Professor of Languages. Shortly after the commencement of the term, Dr. Cossitt resigned the Presidency, and on the same day Professor McPherson retired from the Mathematical department.

Mr. Anderson was elected to the Presidency, and, though still in feeble health, he entered immediately upon the duties of the office. The vacant chair of Mathematics was offered to Mr. Lindsley, who, though declining the appointment, consented to give instruction temporarily. Toward the close of the year, Lieut. A. P. Stewart, of West Point Academy, was elected Professor of Mathematics, but did not enter on its duties till May, 1845. The re-organization of the Faculty was completed by the election of Dr. James H. Sharp, to the department of Physical Science.

As a leading object in the establishment of the University was the education of candidates for the ministry, to encourage and aid that class, the Board enacted an ordinance exempting from tuition fees all probationers for the ministry, of all denominations; and some ten or twelve gentlemen in Lebanon and vicinity, agreed that each would board, every year, without charge, one, and thus enable many worthy young men to acquire a liberal education.

The first catalogue of the college was published in 1845. Then there were only eighty-two students, sixteen of whom were candidates for the ministry. The next year there were ninety-six, of whom twenty-five were probationers; and in 1847 there were one hundred and thirty-eight, of whom thirty were preparing for the ministry.

In October, 1847, a Law School was organized as a department of the University, and Hon. Abraham Caruthers, one of the circuit judges of the State, was elected Professor of Law. This was the first attempt to establish a Law School in Tennessee, or in the South-west. The school opened with six students, but the number increased during the collegiate year to twenty-five. Early in the second year, the school had so increased that additional professional aid became necessary; when the Hon. Nathan Green, Chief Justice of the State, was elected Professor of Law, and associated with Judge Caruthers. But,

as much of Judge Green's time was occupied with the sessions of the Supreme Court, Hon. B. L. Ridley, one of the Chancellors of the State, was added to the Law Faculty.

In January, 1848, Professor Lindsley's health failed,* and, having tendered his resignation, the Board declined accepting it, but permitted him to retire, and elected Professor William Mariner, of West Tennessee University, as assistant Professor of Languages.

In the summer of 1848, Dr. James Sharp having resigned, James M. Safford, of Yale College, was elected Professor of Physical Science, and that department was regularly organized in the fall of 1848.

On the 4th of July, 1849, the cholera made its appearance in Lebanon, and dispersed the students three weeks before the close of the collegiate year. It prevailed with great malignity till the middle of September; and so short was the period intervening between the disappearance of the epidemic and the opening of the college, on the first Monday of October, that the number of students was greatly diminished; but prospects brightened toward the close, and the catalogue of 1850 numbered one hundred and fifty-three.

The classes in the Preparatory School were instructed by tutors selected from the higher classes in college, until 1850, when Mr. R. P. Decherd, a graduate of the University, was appointed permanent Classical Teacher; and, in 1852, W. J. Grannis, of New York, was appointed Principal of the English School, to be assisted by an additional teacher when necessary.

When the University was established, it had no endowment, and the Faculty were wholly dependent upon tuition fees. But the trustees, impressed with the fact that a liberal endowment is indispensable to permanence, as early as 1842, appointed Rev. H. S. Porter, General Agent, to raise a permanent fund, the principal of which was to be invested, and the interest only to be appropriated to the support of the Faculty. He labored one year, and succeeded in raising about four thousand dollars. In the fall of 1845, Rev. J. M. McMurray entered the field, and in three months secured seven thousand dollars. He continued to labor, until the spring of 1852, when the endowment fund had reached sixty thousand dollars.

Whilst there were usually from thirty to forty young men in the college preparing for the ministry, it was a source of deep regret that

* The labors undergone by Professor N. L. Lindsley, resulted in a serious and nearly fatal attack of bronchitis. Released from college duties, and retired on his beautiful farm, four and a half miles from Lebanon, his health was gradually reestablished. Since his retirement, Professor Lindsley has resisted calls to several prominent institutions of learning, with the view to the establishment, on his farm, of a select high school for young ladies, under the name of Greenwood Seminary, which has become widely and favorably known.

they were receiving no theological instruction. And, in view of the urgent want of such instruction, President Anderson, as early as 1846, commenced a course of weekly lectures, for their benefit. The principal subjects embraced in those lectures were,—Preparation for the Pulpit, the Manner of Preaching, Pastoral Duties, Management of Revivals, Church Polity, Ecclesiastical History, and Expositions of Prophecy. The pastor of the church in Lebanon—at first, Rev. Robert Donnell, and subsequently, Rev. David Lowry—delivered lectures to the class upon Systematic Theology, and various practical subjects.

As early as 1849 a plan for the establishment of a Theological School was discussed in the General Assembly; but no definite action was taken until 1852, when the Assembly established a Theological Department in Cumberland University; and in March, 1853, Rev. Richard Beard, D. D., was inaugurated Professor of Systematic Theology, and entered immediately upon the duties of his office.

At this date no endowment for the department had been created; but members of the Board of Trustees and citizens of Lebanon, became responsible to the Professor for a moderate salary, and Rev. W. D. Chadick was appointed General Agent for the endowment of the department; and, in eighteen months, he succeeded^d in raising about nineteen thousand dollars. No farther effort was made to increase the endowment until 1856, when the Rev. W. E. Ward accepted an agency; and, during the year, he raised about nine thousand dollars.

In 1852, an Engineering School was established as a department of the University, and Professor Stewart, a graduate of the United States Military Academy, was appointed Professor in the department. Some of the graduates of this school have already gained distinction in practical engineering.

In 1854, Professor Safford was appointed State Geologist, and as he was necessarily absent during the summer, B. C. Jilson, of New York, was appointed assistant Professor in the department of Physical Science. Mr. R. P. Decherd resigned his position as Classical Teacher in the Preparatory School, and Mr. A. H. Buchanan, a graduate of the University, was elected to the position. Professor Stewart accepted the Chair of Mathematics in the Nashville University, and Rev. T. C. Blake, a graduate of Cumberland University, was elected to fill the vacancy.

In consequence of the multiplication of departments, and the constant increase of students, the want of additional buildings became a source of great inconvenience and perpetual annoyance. So urgent was the necessity that, in July, 1857, the trustees resolved to add two spacious wings. When completed, the buildings will be sufficiently ample for the accommodation of six hundred students.

XIII. SCHOOL ARCHITECTURE.

THE following Plans of the Dwight Grammar School, in Boston, the State Normal University of Illinois, at Bloomington, and the Union Public School, at Ypsilanti, Michigan, present the latest improvements in School Architecture, which we have seen. We are indebted for the first to Hon. J. D. Philbrick, Superintendent of Public Instruction in Boston; to Prof. Hovey, Principal of the Illinois State Normal University, for the second; and to the School Committee of Ypsilanti, for the last.

PLANS AND DESCRIPTION OF THE DWIGHT SCHOOL HOUSE, BOSTON, MASS.

THE DWIGHT SCHOOL HOUSE is located on Springfield Street, in Ward XI., and occupies the center of a lot, measuring one hundred and ninety-two feet on Springfield Street, by about ninety-seven feet in depth.

The building has a front of ninety-one feet six inches on Springfield Street, is sixty feet deep, and four stories high, exclusive of the basement. It is built of brick, the external surface of the walls being covered with mastic, and painted a bright drab color.

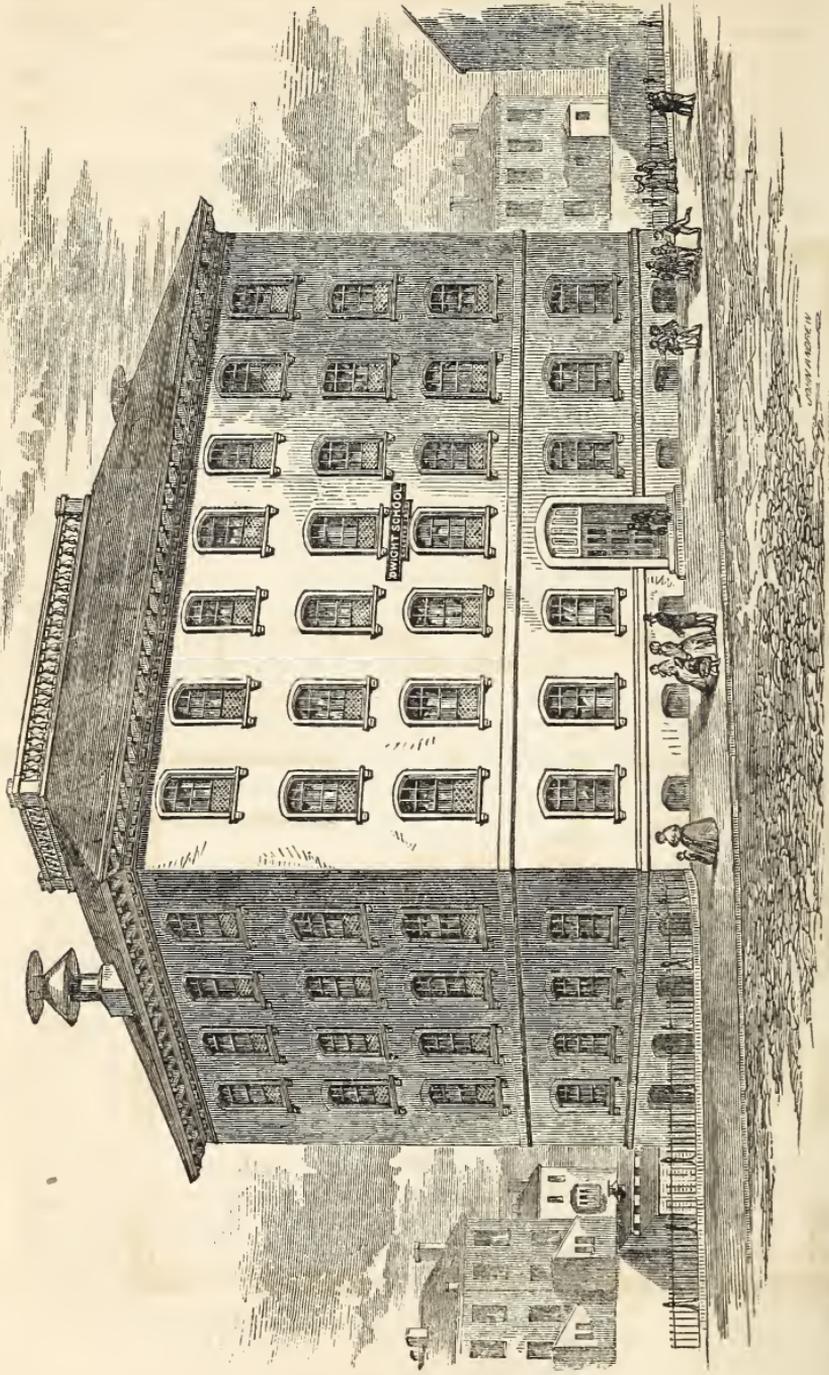
The floors are of hard pine one inch thick, and in widths not over five inches. The walls of the rooms are sheathed three and a half feet high, and the stairways, halls and closets five feet high, with matched chesnut boards, in widths not over six inches. The doors and window sashes are of the same kind of wood. The inside woodwork is varnished, but not painted.

The windows, except those of the first story, have ornamented iron guards outside, and curtains inside instead of blinds. All the doors have top lights hung on pintels, which contributes much to give the building a light and airy appearance.

The yard is enclosed on the front and sides by a stone and iron fence, and on the rear by a high brick wall, which also constitutes the rear wall of the water-closets. The arrangements of the yard are designed for both sexes, a separate entrance being provided for each. From the yard the pupils enter the basement at either end of the building, and pass, by two flights of stairs, to the corridor on the first floor.

The basement is eight and a half feet in the clear, and its level, which corresponds with the level of the yard, is four feet below the sidewalk, both being well paved with brick. Thus situated with respect to the yard, and being well supplied with light and air, it furnishes an excellent covered play-ground. This mode of constructing and using the basement of a school house is a decided improvement over former plans. An apartment in the center, (*Plan No. 2.*) is appropriated to the warming apparatus and fuel. The level of this room is two feet below that of the play-ground.

The first, second and third stories are each twelve and a half feet in the clear, and are precisely alike in all their arrangements. Each of these stories, (*Plan No. 12.*—[VOL. IV., No. 3.]—49.



DWIGHT GRAMMAR SCHOOL. BOSTON, MASSACHUSETTS.

W. A. RAY, DEL.

The fourth story, (Plan No. 4,) contains two school rooms similar to those already described, and a hall for public occasions and general purposes of the whole school, furnished with movable settees. This story is fifteen feet in the clear.

The warming apparatus consists of four hot-air furnaces. The smoke pipes are of cast iron, and pass up through and warm the corridors. This arrangement is rendered practicable by locating the furnaces in the center of the basement, and is found more convenient and economical than previous plans.

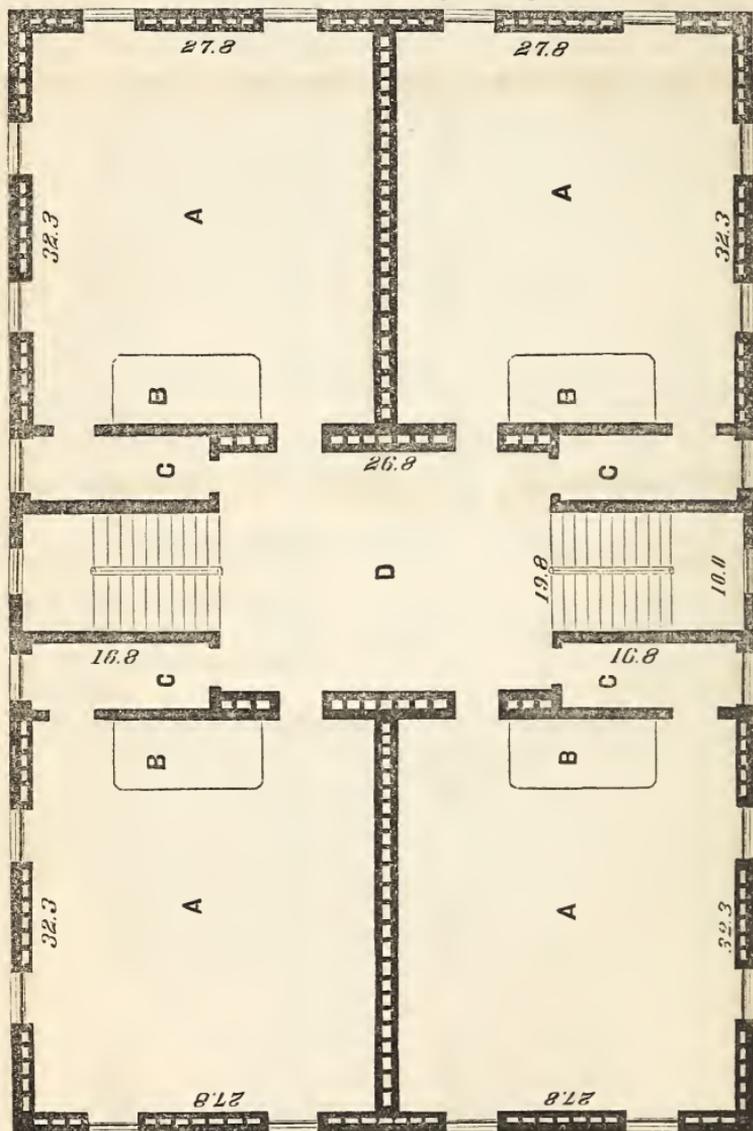


FIG. 3. PLAN OF FIRST, SECOND AND THIRD FLOORS.

- D. Corridor.
- A. School Room for 60 pupils.
- C. Clothes Room.
- B. Teachers' Platform.

The means of ventilation consist of a separate ventiduct of wood, leading from each school to the roof. Here they are brought into two groups, at the opposite ends of the building, each of which is surmounted with one of Emerson's Ejectors. The transverse section of each ventiduct is about fourteen inches square. In each room there is a sliding register near the ceiling, and another near the floor opening into the ventiduct. The building has seats for 882 pupils.

The cost of the house and furniture was	\$45,645 50
Cost of lot	14,362 50
Total cost	<u>\$60,008 00</u>

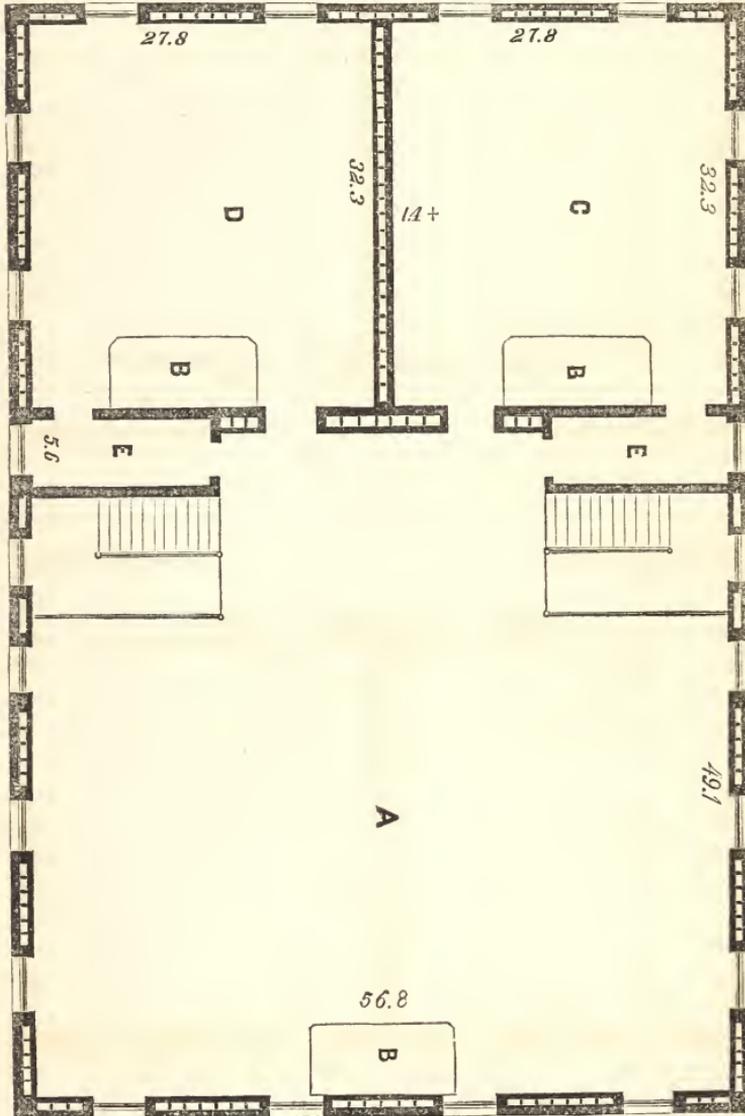


FIG. 4. PLAN OF FOURTH FLOOR.
 A. Hall furnished with settees for general exercises.
 C. School Room for 60 pupils.
 B. Teachers' Platform.
 L. Clothes Room.

PLANS AND DESCRIPTION OF THE STATE NORMAL UNIVERSITY AT BLOOMINGTON
ILLINOIS.

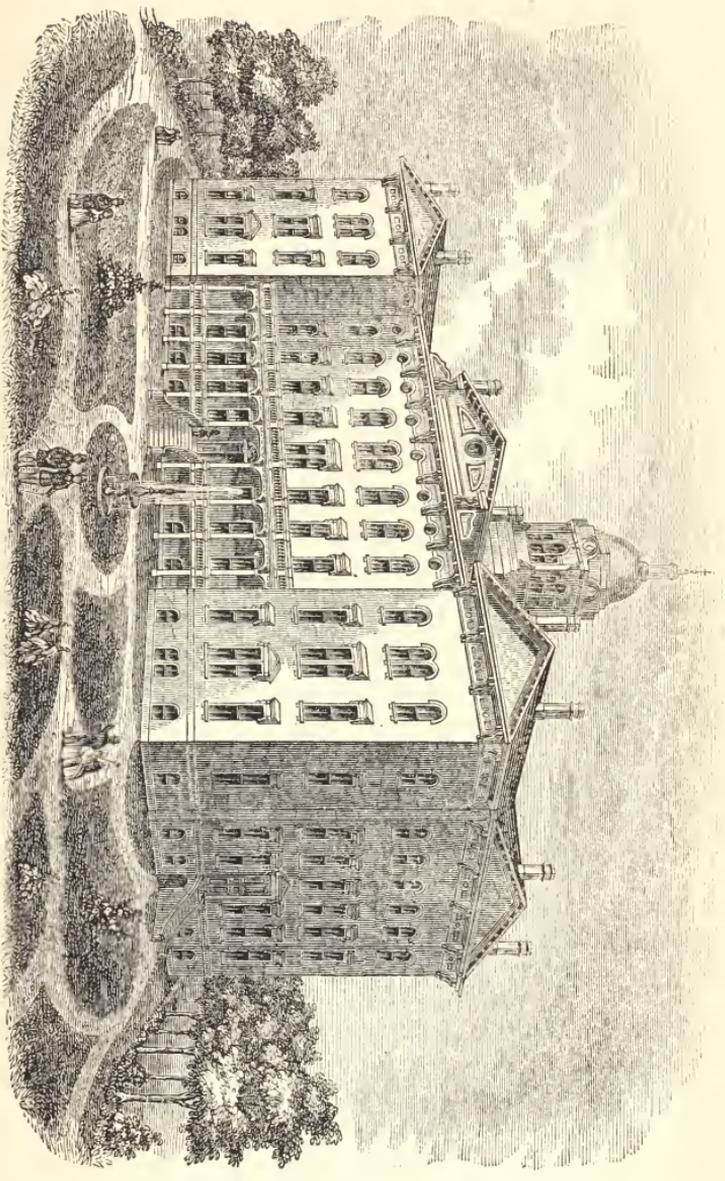
The Illinois State Normal University, is located at Bloomington,—that city, and McLean county, of which Bloomington is the county-seat, having appropriated \$70,000, and one hundred and sixty acres of land, estimated at \$70,000, to secure the local advantages of such an institution. The following brief history of the institution, is abridged from an article in the Illinois Teacher, for October, 1857.

The State Normal University owes its existence to a deep-seated conviction of the want of more well-instructed teachers for the free schools of Illinois. The question of establishing a school of some kind to supply this want, had been discussed by the leading educators of the State for several years ; but the project of establishing a distinct and separate Normal School, first assumed a definite form at the annual meeting of the State Teachers' Association, at Chicago, in Dec. 1856.

After a protracted debate, a resolution unanimously prevailed, asking the Legislature to make an appropriation for the establishment and maintenance of a Normal School, and MESSRS. WRIGHT, WILKINS and ESTABROOK were directed to lay the subject before the Legislature, on behalf of the Association. The late Superintendent of Public Instruction, Hon. N. W. Edwards, in his Report to the Legislature for 1856, recommended the establishment of such a school, and aided the project by his presence and influence. HON. WILLIAM A. POWELL, the new Superintendent, labored heartily for the enterprise. These gentlemen were met by a liberal spirit on the part of both Houses, especially the Educational Committees, and an act was drafted, discussed and passed, establishing and endowing a NORMAL UNIVERSITY, and creating a State Board of Education, under whose control it should go into operation.

The act provides that the avails of the Seminary and University funds, (\$300,000) shall be appropriated for the *support* of the Institution, but no part thereof can be used in purchasing a site or erecting buildings. The Board were instructed to locate the University in that city or town, accessible, and not otherwise objectionable, which should offer the greatest donation. It was understood that the central portions of the State were "accessible," and there competition ran high. At first almost every enterprising town in the interior took the initiatory steps toward making a bid ; but some time before the day for opening the proposals, it was whispered round that Bloomington and Peoria were ahead of all competitors. Most of the smaller towns declined to submit their proposals, and the contest virtually lay between the two cities. The Board of Education, in a body, visited these points and examined the sites offered. The site at Bloomington consisted in two tracts of rolling prairie, one of 56, the other of 104 acres, connected by a narrow neck and lying about a mile and a half north of the city, near the junction of the railroads. The site at Peoria consisted of fifteen acres of land lying on the bluff, just back of and overlooking the city, and affording, doubtless, the most varied prospect in the State.

STATE NORMAL UNIVERSITY, BLOOMINGTON, ILLINOIS.



Upon opening the bids, it was found that Peoria had offered in the aggregate, including the estimated value of the site, over \$80,000; and

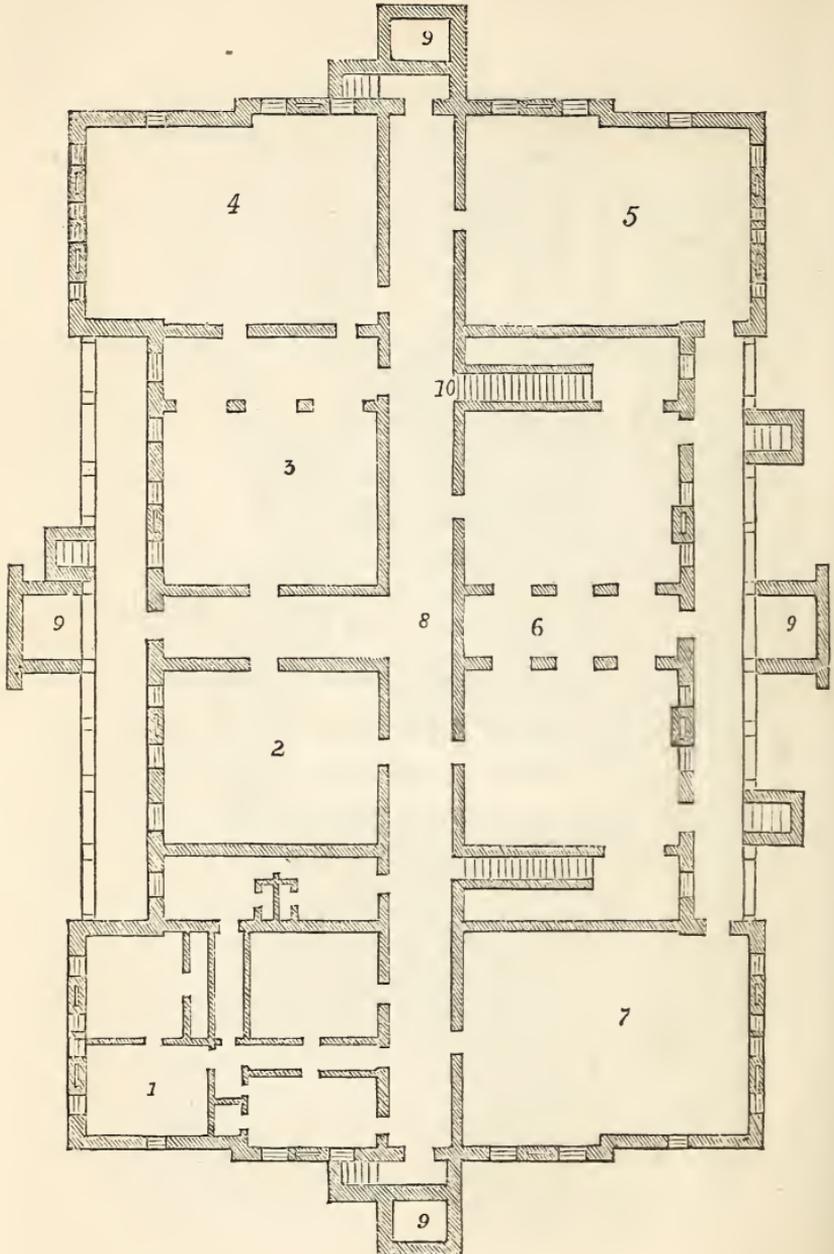


Fig. 2. PLAN OF BASEMENT.

In this story, (*Fig. 2.*) are the Janitor's House, (1,) consisting of a parlor, kitchen, cellar, three bedrooms, etc.; storage room, (2); laboratory, (3); chemical-lecture room (4); boys' play-room for Model School (5); boiler or furnace rooms (6); girls' play-room for Model School (7); corridor (8); filtering cisterns (9); and stairways (10).

that Bloomington had offered in the aggregate, including the estimated value of the site, over \$140,000. McLean county, by an appropriation

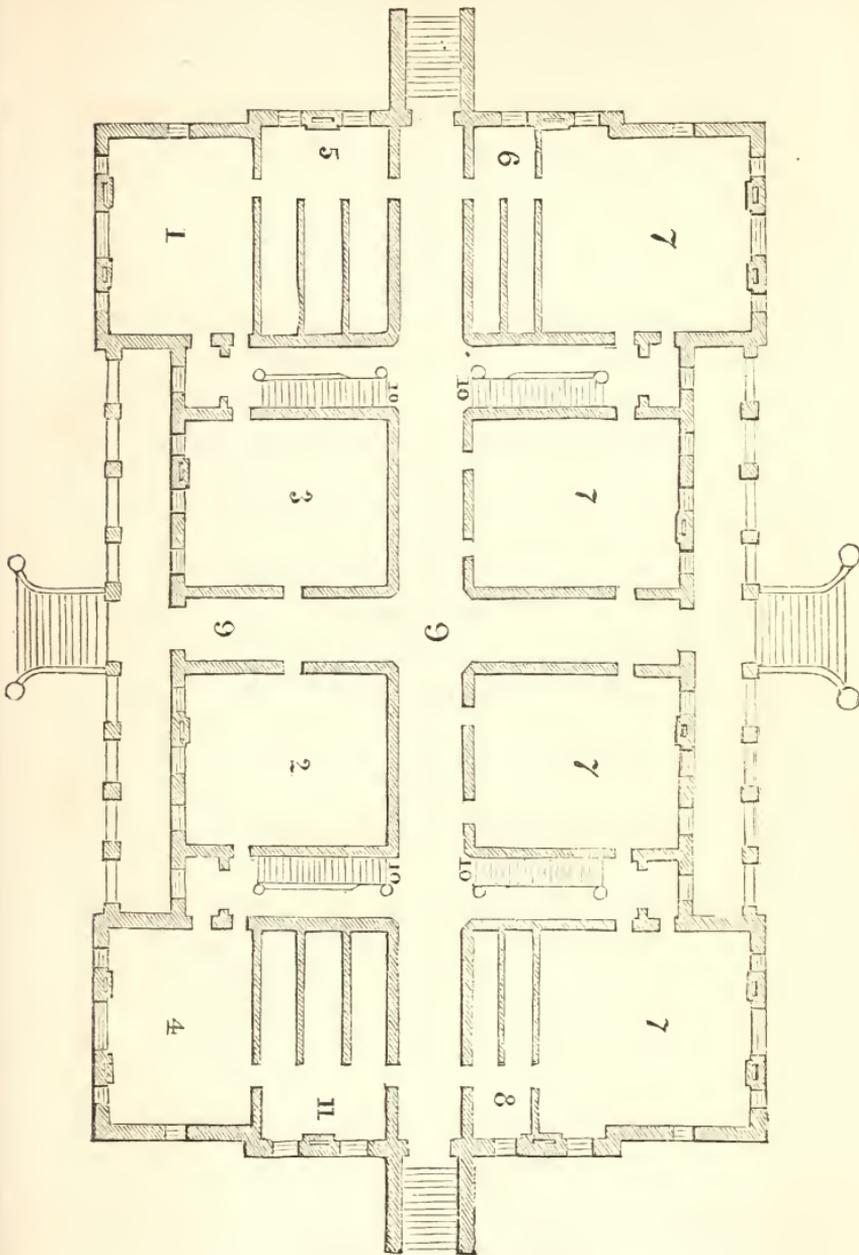


Fig. 3. PLAN OF FIRST FLOOR.

In the principal story, (*Fig. 3*) 15 feet high in the clear, are the Principal's room, 30ft.×22ft. 6in. (1); the reception room, 31ft. 6in.×27ft. (2); book and apparatus room, 31ft. 6in.×27ft. (3); teachers' retiring room, 30ft.×22ft. 6in. (4); gentlemen's wardrobe, 32ft.×19ft. 9in. (5); masters' wardrobe for Model School, 32ft.×10ft. 2in. (6); Model-School rooms, 32×32ft. and 25ft. 6in.+37ft. 6in. (7); misses' wardrobe for Model School, 32ft.×10ft. 2in. (8); corridors (9); and the stairways (10).

of \$70,000 from her swamp-land fund, enabled Bloomington thus to out-strip her rival.

We know of nothing more honorable than this competition between the different towns of Illinois, for the advantages which must flow from an institution of this kind rightly managed, in all future time.

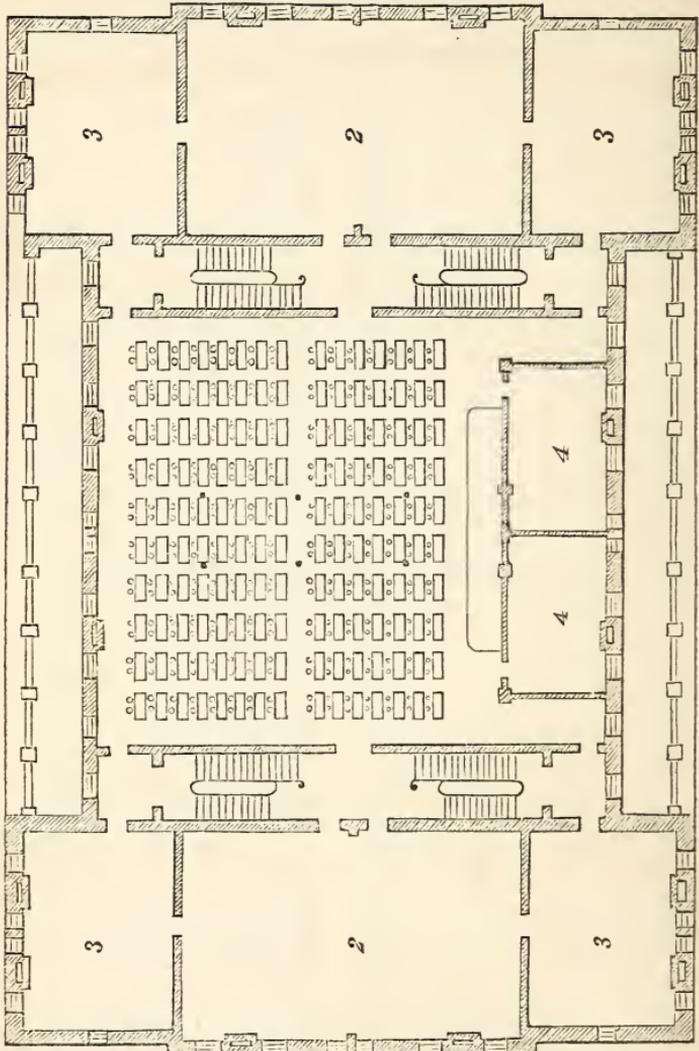


Fig. 4. PLAN OF SECOND FLOOR.

In the second story, (*Fig. 4.*) 16 feet high in the clear, are the Normal School room, 60×66ft. (1); two lecture rooms, 51×32ft. (2); four class rooms, 30×23ft. (3); two class rooms, 27×15ft. (4); and the stairways (5).

The Board of Education elected Prof. C. E. Hovey, (Principal of the Union School of Peoria,) Principal, and adopted, on his recommendation and that of G. P. Randall, Architect, of Chicago, the plan of a building to accommodate three hundred normal pupils, and two hundred model school pupils, and to be erected at a cost of \$80,000. The exterior and internal arrangements of the building, are represented in the diagrams: 1, 2, 3, 4, 5.

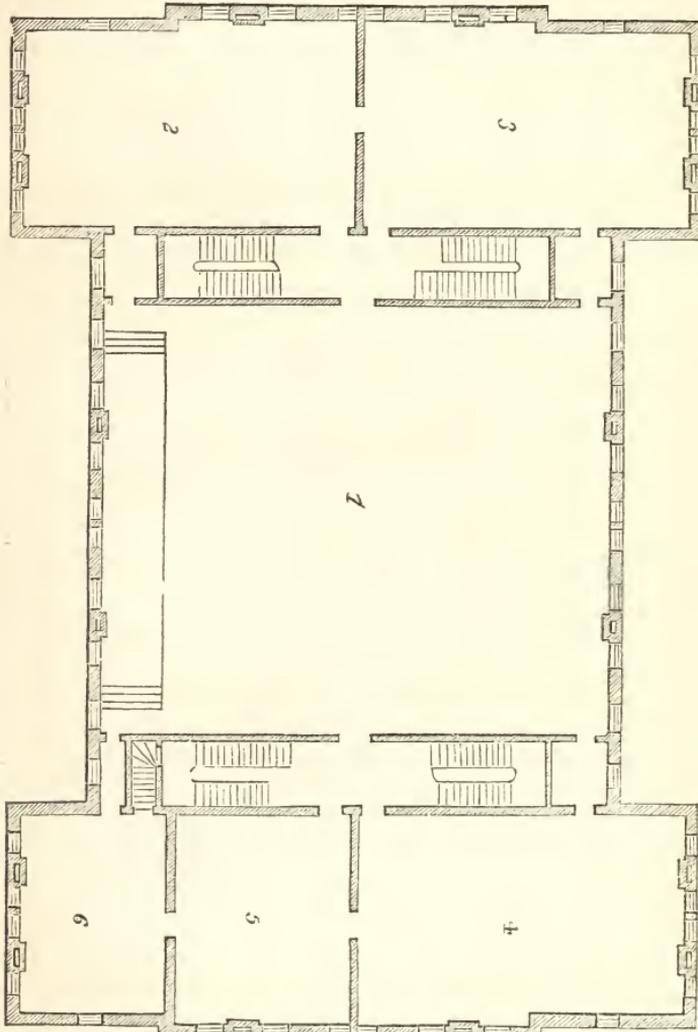
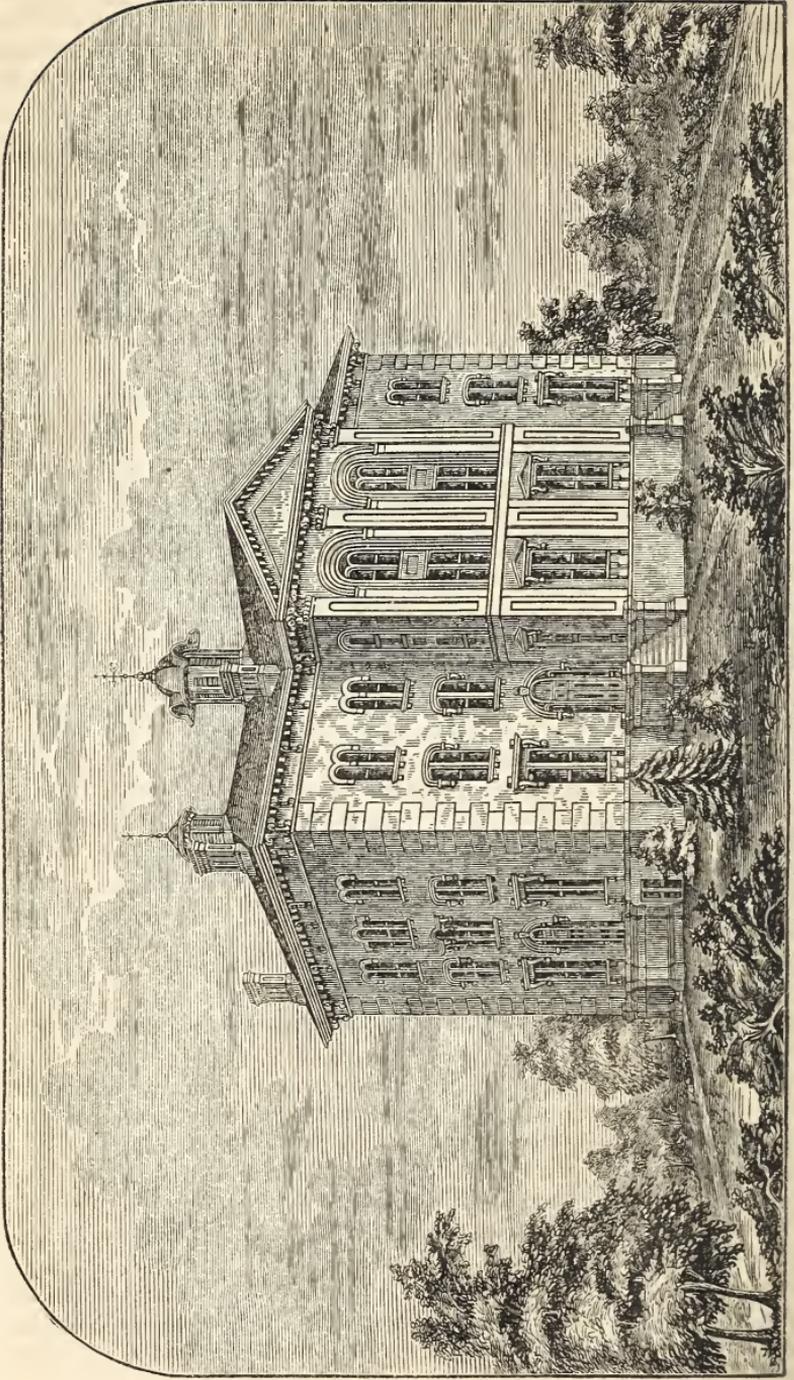


Fig. 5. PLAN OF THIRD FLOOR.

In the third story (*Fig. 5*), 20 feet high in the clear, are the Normal Hall, 65×75 ft. (1); library, 32ft. 4in.×48ft. 6in. (2); museum, 32ft. 4in.×48ft. 6in. (3); gallery of painting and statuary, 32ft. 4in.×48ft. 6in. (4); music room, 32×25ft. (5); and an ante room, 32ft. 4in.×22ft. 4 in. (6).

The building is warmed by steam, and the ventilation of each room is secured by a separate flue properly constructed for this purpose.

The seats and desks are manufactured by Joseph L. Ross, Boston, after the most approved patterns.



UNION PUBLIC SCHOOL, YPSILANTI, MICHIGAN.

PLANS AND DESCRIPTIONS OF UNION SCHOOL HOUSE, YPSILANTI, MICHIGAN.

THIS edifice stands in the center of a beautiful square in the central part of the city of Ypsilanti, one of the most attractive, healthy and flourishing towns in the State of Michigan. The building has a transept of 120 feet and a depth through the transept of 95 feet, and through the end compartments of 68 feet. The first story of the building which is 20 feet high in the clear, contains a large room, 90 by 45 feet, used for public exercises, chapel, &c., four primary school rooms, with necessary clothes rooms, and two main transverse corridors, running entirely through the building, each 12 feet wide. The large room is a clear and uninterrupted space, without column or pillar of any kind to intercept the view.

The second story contains one class room 45 by 41 feet—two other class rooms, each 41 by 22 feet, four recitation rooms, library, apparatus room and necessary clothes room. In this story the main corridor, 8 feet wide, runs longitudinally through the building, lighted at each end by a triplet window.

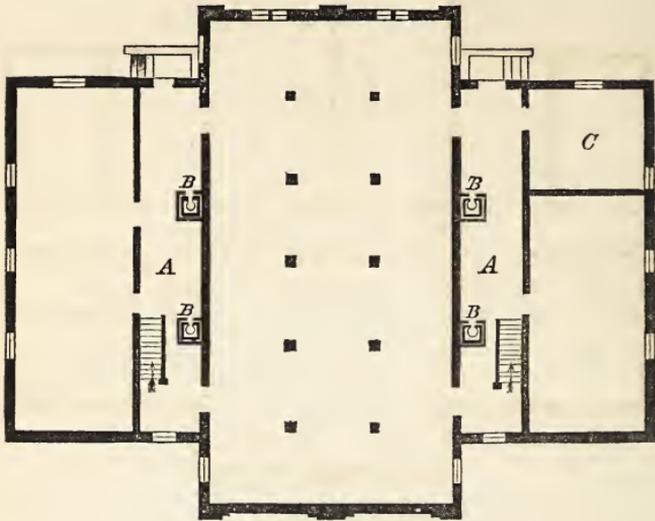
The third story contains one class room 45 by 41 feet, one do. 35 1-2 by 28 1-2 feet, two do. each 45 by 22 feet, three recitation rooms, suit of rooms for janitor's residence, clothes rooms, corridors, &c., the latter being arranged as in the second story. The second and third stories are each 16 feet high in the clear. The first story is raised 6 feet above the level of lot, leaving a lofty basement story under which will be occupied by heating apparatus, storage and fuel rooms.

The elevation is designed in the Italian style of architecture, and can be sufficiently understood by the accompanying engraving. The quoins in the corners, the window and door caps and sills, the cornice, the architrave mouldings, belt courses, &c., are finished in imitation of brown free stone,—the remainder of the work being of hand pressed brick.

There are several advantages claimed in the plan of this Union School. In the first place the large room or chapel is placed in the first, instead of as is usual, in the third or upper story. This is infinitely more convenient and safe, than it is to require an entire congregation at commencement or other exercises, to climb up to the top of a high building. It is also more desirable, as the infant children can be taken into the room on all occasions, without danger to them, which in ordinary cases, tutors are afraid to do. In this plan it will be seen that the infant children have access to their school room by side doors, independent of the main halls which are used by the older scholars, also a very desirable arrangement. The entire separation of the sexes in the access to, and egress from, the school is secured, and yet by the interior arrangement of the rooms they can unite when required during their studies, and separate again to their respective class rooms without confusion or inconvenience. Constructively also it has several advantages. Requiring strong interior walls, there is ample opportunity for carrying up the warm air and ventilating flues in them, instead of in outside walls, thereby securing more sure and constant action of the air in the flues, both injecting and ejecting, and removing all doubt as to their proper action. The doors to all rooms are made with a swinging panel over the transom, so that in the warm weather, by opening these, and the windows of halls and rooms, a constant change of air is gained. The exterior walls are all hollow and plastered into the brick work. The staircases are wide and easy to ascend, giving ample opportunity to discharge the entire number of scholars in a few seconds of time.

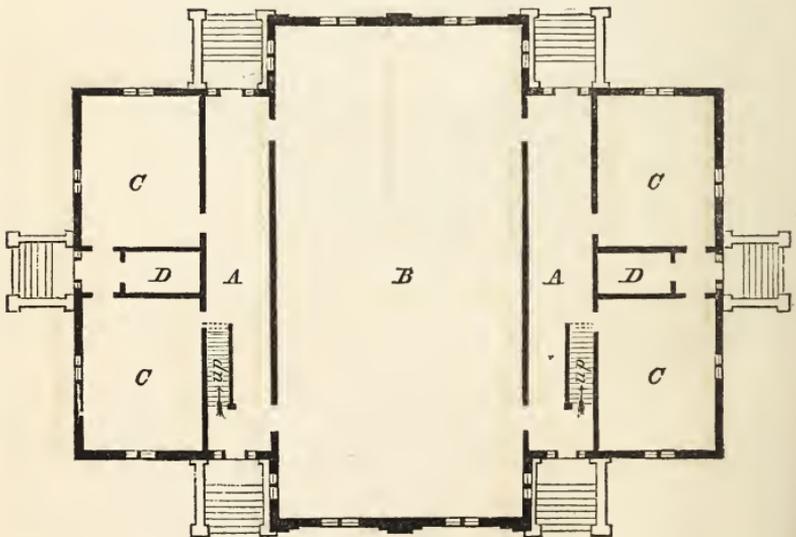
The plans have been originated, matured and carried out, by Messrs. Jordan & Anderson of Detroit, Michigan.

Fig. 2.—PLAN OF BASEMENT.



A A—Halls.
 B B B B—Furnaces.
 C—Janitor's Room.

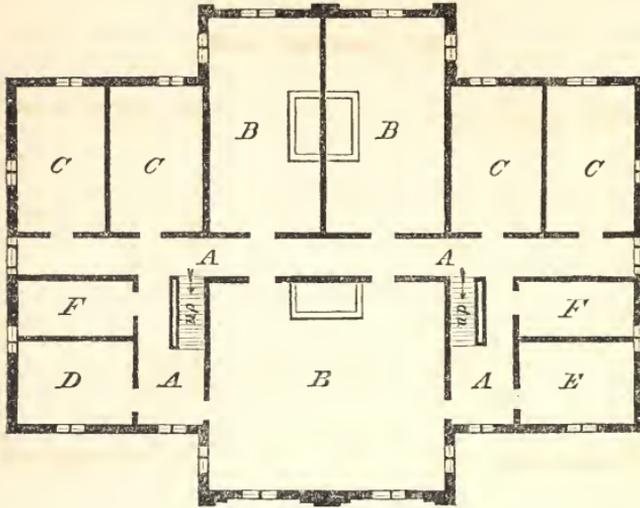
Fig. 3.—PLAN OF FIRST STORY.



A A—Halls.
 B—Chapel, or Hall for general exercises.
 C C C C—Primary Rooms.
 D D—Clothes Rooms.

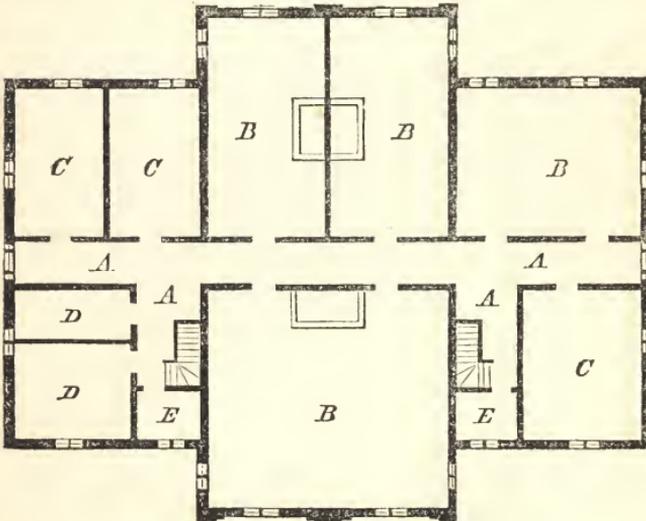
Scale 40 ft. to 1 inch.

Fig. 4.—SECOND STORY PLAN.



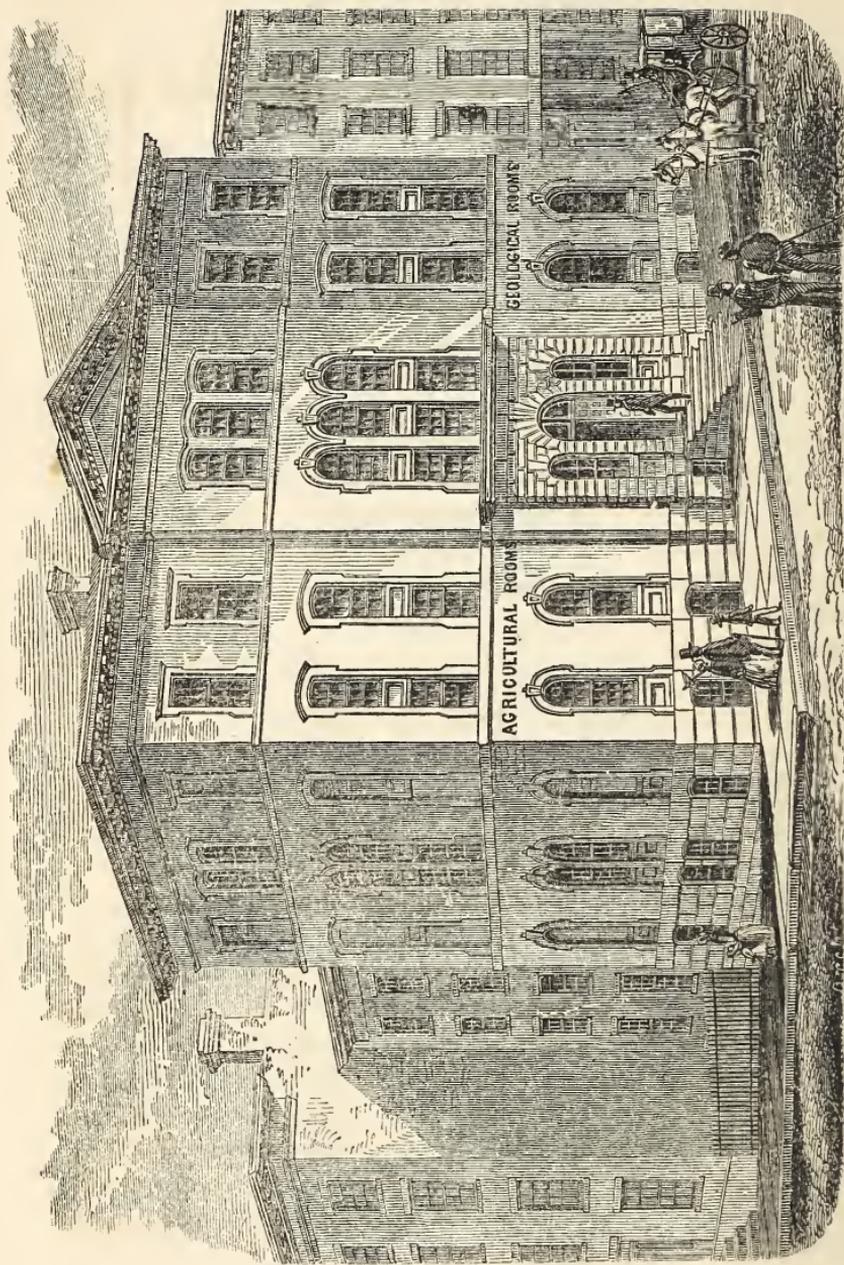
A A A A—Halls.
 B B B—Class Rooms.
 C C C—Recitation Rooms.
 D—Library.
 E—Apparatus Room.
 F—Clothes Rooms.

Fig. 4.—THIRD STORY PLAN.



A A A A—Halls.
 B B B B—Class Rooms.
 C C C—Recitation Rooms.
 D D—Tutors' Rooms.
 E E—Clothes Rooms.

Scale 40 ft. to 1 inch.



STATE GEOLOGICAL HALL AND AGRICULTURAL ROOMS. ALBANY NEW YORK

XIV. STATE GEOLOGICAL HALL AND AGRICULTURAL ROOMS OF NEW YORK.

EDUCATIONAL USES OF MUSEUMS OF NATURAL HISTORY.

THE Legislature of New York has crowned its munificent appropriations for a Geological Survey of the State, by erecting a spacious building for the exhibition of its natural resources,—its minerals and rocks, its plants and animals, and at the same time for the accommodation of the State Agricultural Society, which is devoted to the highest improvement of these natural resources, by science and art, for the educational and economical uses of its vast and growing population. The cost of the survey—the original exploration, and the publication of the reports, up to this time, exceeds \$600,000, and to this must now be added the erection of this hall, on the site of the old State House, at an expense of \$50,000. Large as this expenditure is, the state will be manifold richer every year, in all future time, in the discovery and improved working of its mines, in the improvement of its domestic animals, the implements and modes of culture, the destruction of noxious insects, the enrichment of its soil by the application of natural and artificial manures, and the proper alternation of crops, which will result from this survey and its publications, the examination by people from every part of the state of the specimens exhibited in these halls, and the diversified operations of the Agricultural Society from year to year.

The Geological Hall was inaugurated during the annual session of the American Association for the advancement of science, (which was itself one of the direct results of the geological survey,) in 1856, by appropriate addresses from Prof. Agassiz, of Cambridge, Prof. Dewey and Pres. Anderson, of Rochester, Pres. Hitchcock of Amherst, and Prof. Davies, of Fishkill. From the address of President Hitchcock, as published in the Tenth Annual Report of the Regents of the University of New York, on the Cabinet of Natural History, we present a few extracts :

This, I believe, is the first example in which a State Government in our country has erected a museum for the exhibition of its natural resources: its minerals and rocks; its plants and animals, living and fossil. And this seems to me the most appropriate spot in the country for placing the first Geological Hall erected by the Government: for the county of Albany was the district

where the first geological survey was undertaken on this side of the Atlantic. This was in 1820, and was ordered by that eminent philanthropist, STEPHEN VAN RENSSELAER; who, three years later, appointed Professor EATON to survey in like manner the whole region traversed by the Erie canal. This was the commencement of a work, which, during the last thirty years, has had a wonderful expansion; reaching a large part of the states of the Union, as well as Canada, Nova-Scotia and New Brunswick, and I might add several European countries, where the magnificent surveys now in progress did not commence till after the survey of Albany and Rensselaer counties. How glad are we, therefore, to find on this spot the first Museum of Economical Geology on this side of the Atlantic. Nay, embracing as it does all the departments of natural history, I see in it more than a European Museum of Economical Geology, splendid though they are. I fancy rather that I see here the germ of a Cis-atlantic British Museum, or Garden of Plants.

North Carolina was the first State that ordered a geological survey; and I have the pleasure of seeing before me the gentleman who executed it, and in 1824 and 5 published a report of 140 pages. I refer to Professor OLMSTEAD,* who, though he has since won still brighter laurels in another department of science, will always be honored as the first commissioned State Geologist in our land.

South Carolina commissioned Professor VANUXEM only a year later, to do for her what had been done in North Carolina. This report, however, was never published save in the newspapers. After this there was a long hiatus in the State surveys. In 1828 I published a review of Professor OLMSTEAD'S labors, in the hope of turning the attention of legislators to the subject, but in vain. In 1830, however, I was more successful. Pardon me if I tell you how. Being on my way to visit the Coal regions of Pennsylvania, the newspapers informed me that the State of Massachusetts had ordered a trigonometrical survey. I ventured to suggest to Gov. LINCOLN, how desirable it would be to have a geological survey connected with the enterprise. On my return, I found that he had recommended it, and that the Legislature had adopted it, and that a geological commission awaited myself.

It was not till three or four years later, that any other State moved in this enterprise: then followed Tennessee, Maryland, and New Jersey. But in 1836 New York entered upon the work, on a scale more liberal and with a plan more judicious than any other State before or since. She first obtained the opinion of scientific men as to the best mode of procedure, by a circular sent forth from the Hon. JOHN A. DIX, then Secretary of State: then she appropriated over \$100,000 to the survey; and now behold the magnificent result, or rather some of the results! For the nineteen splendid quartos already issued do not tell the whole story; since others are in reserve, which are looked for with deep interest by scientific men on both sides of the Atlantic. This survey has developed the older fossiliferous rocks with a fullness and distinctness unknown elsewhere. Hence European savans study the New York Reports with eagerness. In 1850, as I entered the Woodwardian Museum in the University of Cambridge in England, I found Professor M'COY busy with a collection of Silurian fossils before him, which he was studying with HALL'S first volume of Palæontology as his guide; and in the splendid volumes entitled *British Palæozoic Rocks and Fossils*, which appeared last year as the result of those researches, I find Professor HALL denominated "the great American palæontologist." I tell you, Sir, that this survey has given New York a reputation throughout the learned world, of which she may well be proud.

Another important result of the New York Survey, was the origination of the Association of American Geologists, which has gradually expanded into the American Association for the Advancement of Science. Many of us who were engaged in the State surveys, were so isolated from one another, that we had few means of comparing views, or obtaining advice in our conclusions. Professor MATHER, I believe, through EMMONS, first suggested the subject of a meeting to the Board of Geologists in November, 1838, in a letter proposing several points for their consideration. I quote from that letter the following paragraph relating to the meeting:

* Memoir of Denison Olmsted, *American Journal of Education*, Vol. V., p.

"Would it not be well," says he, "to suggest the propriety of a meeting of the geologists and other scientific men of our country at some central point next fall, say in New York or Philadelphia. There are many questions in our geology, that will receive new light from friendly discussion and the combined observations of various individuals who have noted them in various parts of our country. Such a meeting has been suggested by Prof. ИГГНСОК, and to me it seems desirable. It would undoubtedly be an advantage not only to science, but to the several surveys that are now in progress, and that may in future be authorized. It will tend to make known our scientific men to each other personally; give them more confidence in each other, and cause them to concentrate their observations on those questions that are of interest either in a scientific or commercial point of view. More questions may be satisfactorily settled in a day by oral discussion, than in a year by writing and publication."

Though the Board adopted the plan of a meeting, various causes delayed the first one till April, 1840, when we assembled in Philadelphia, and spent a week in most profitable and pleasant discussion and the presentation of papers. Our number that year was only 18, because confined almost exclusively to the State geologists; but the next year, when we met again in Philadelphia, and a more extended invitation was given, about 80 were present, and the numbers have been increasing to the present time. But in fact those two first meetings proved the type, in all things essential, of all that have followed. The principal changes have been those of expansion, and the consequent introduction of many other branches of science, with their eminent cultivators. In 1842, we changed the name to that of the Association of American Geologists and Naturalists; and in 1847, to that of the American Association for the Advancement of Science.

Such are some of the results of this Geological Survey, that have become matter of history: others, perhaps greater than these, belong to posterity, and need the ken of prophecy to describe. We may be quite sure, however, that this Hall will be a centre of deep interest to coming generations. Long after we shall have passed away, will the men of New York, as they survey these monuments, feel stimulated to engage in other noble enterprises by this work of their progenitors; and from many a distant part of the civilized world will men come here to solve their scientific questions, and to bring far off regions into comparison with this.

The Agricultural Rooms were dedicated by appropriate exercises, during the annual meeting of the State Agricultural Society, on the 12th of July, 1857. The accommodations consist of a large office for the Secretary, a library, a laboratory of analytic chemistry, store room for seeds, halls suitably cased for exhibition of specimens of domestic animals, insects, plants, &c., and a large lecture room. The Geological Hall constitutes the true foundation on which the structure of an improved State Agriculture should rest.

There is,—remarks Hon. Samuel Cheever, in his inaugurating address,—great fitness in this arrangement; there is great intimacy between the Geology, Mineralogy, Botany, Zoology and Entomology of the State, and its Agriculture. Geology teaches us the order, arrangement and position of the rocks; Mineralogy teaches us where the elements are found which, when the rock is crumbled down, give fertility to the soil which it forms. We wanted a science to teach us the constituent parts of the agricultural plant, that we might know its wants, and what elements to select from the great mineral storehouse to supply those wants and give it growth. This instruction the agricultural chemist and analyst have given us. Zoology gives us the form, classification, history and habits of our animals. Here the chemical analyst comes again to our aid and shows us the component parts of the animal, and points to the vegetables to supply them. Chemistry is here the connecting link between these sciences and that humble yet gigantic agriculture, which shares so largely in the public burthens, and at the same time gives sustenance to the whole family of man, including the men of all the sciences.

Botany, too, teaches us the history of our plants, from the forest tree to the blade of wheat,—their classes and orders, their habits and their wants, as well as their adaptation to soil, climate, temperature and moisture.

The foregoing sciences make the farmer acquainted with his friends. Entomology introduces him to the insect tribe, and makes him acquainted with his enemies: it teaches him their history, their habits, the time and manner of their annoyance, and, as far as known, the best means of defense against their ravages, and the means for their destruction.

Valuable indeed to science and to the world are the labors of the Geologist, the Mineralogist, the Botanist, the Zoölogist and Entomologist; but not less valuable are the labors of the Chemist, the Analyst and intelligent Agriculturist, who take their work where they leave it, and elaborate and appropriate it to the wants and practical purposes of life. It is humbly but confidently claimed that the intelligent agriculturist who successfully applies the principles of these sciences to enlarge and to improve the means of human life, is entitled to a share in the general commendation as a benefactor of his race.

The geologist who traces a new development in a protozoic layer, makes a contribution to science; but the chemist and agriculturist who follow him and discover a fertilizing element in the crumbling fossil of the trilobite found in the rock, and apply that fertility to the growth of the cereal plant, make a contribution to the means of human life.

When, from the fossil of the saurian, the geologist defined the age of the rock where dry land first appeared, he made a valuable achievement for science; and the chemist also made an achievement when he traced the fertilizing carbonate in that fossil; but the agriculturist made the final achievement for human benefit, when, from the application of that fertility, he reaped his wheat and fed his herds where the saurian first grazed the lichen and the fern.

To make the Geological Hall and the Agricultural Rooms in the largest measure, and to the widest extent, useful, there should be a well organized instructional institution connected with them,—similar in its aims, but more comprehensive in its course of study, than the Metropolitan School of Science, applied to Mining and the Arts, associated with the Museum of Practical Geology, in London. The department of Arts should embrace all the great industrial pursuits of the State,—Agricultural, Mechanical and Artistic.

The "Educational Uses of Museums of Natural History," like the State Geological Hall and Agricultural Rooms, are well set forth by the late Prof. Edward Forbes, in an introductory lecture before the Metropolitan School of Mines, above referred to.

Museums, of themselves alone, are powerless to educate. But they can instruct the educated, and excite a desire for knowledge in the ignorant. The laborer who spends his holiday in a walk through the British Museum, can not fail to come away with a strong and reverential sense of the extent of knowledge possessed by his fellow-men. It is not the objects themselves that he sees there and wonders at, that make this impression, so much as the order and evident science which he can not but recognize in the manner in which they are grouped and arranged. He learns that there is a meaning and value in every object however insignificant, and that there is a way of looking at things common and rare distinct from the regarding them as useless, useful, or curious,—the three terms of classification in favor with the ignorant. He goes home and thinks over it; and when a holiday in summer or a Sunday's afternoon in spring tempts him with his wife and little ones to walk into the fields, he finds that he has acquired a new interest in the stones, in the flowers, in the creatures of all kinds that throng around him. He can look at them with an inquiring pleasure, and talk of them to his children with a tale about things like them that he had seen ranged in order in the Museum. He has gained a new sense,—a thirst for natural knowledge, one promising to

quench the thirst for beer and vicious excitement that tortured him of old. If his intellectual capacity be limited and ordinary, he will become a better citizen and happier man; if, in his brain there be dormant power, it may waken up to make him a Watt, a Stephenson, or a Miller.

It is not the ignorant only who may benefit in the way just indicated. The so-called educated are as likely to gain by a visit to a Museum, where their least cultivated faculties, those of observation, may be healthily stimulated and brought into action. The great defect of our systems of education is the neglect of the *educating* of the observing powers,—a very distinct matter, be it noted, from scientific or industrial *instruction*. It is necessary to say this, since the confounding of the two is evident in many of the documents that have been published of late on these very important subjects. Many persons seem to fancy that the elements that should constitute a sound and manly education are antagonistic,—that the cultivation of taste through purely literary studies and of reasoning through logic and mathematics, one or both, is opposed to the training in the equally important matter of observation through those sciences that are descriptive and experimental. Surely this is an error; partizanship of the one or other method or rather department of mental training, to the exclusion of the rest, is a narrow-minded and cramping view from whatsoever point it be taken. Equal development and strengthening of all are required for the constitution of the complete mind, and it is full time that we should begin to do now what we ought to have done long ago. Through the teaching of some of the sections of natural history and chemistry,—the former for observation of forms, the latter of phenomena,—I can not but think the end in view might be gained, even keeping out of sight altogether, if the teacher holds it best to do so, what are called practical applications. For this branch of education, museums are the best text-books; but, in order that they should be effectively studied, require to be explained by competent teachers. Herein at present lies the main difficulty concerning the introduction of the science of observation into courses of ordinary education. A grade of teachers who should be able and willing to carry science into schools for youth has hardly yet appeared. Hitherto there have been few opportunities for their normal instruction. Now, in a great measure, this defect may be considered as removed; and in the metropolitan schools of science and art connected with the Board of Trade there are ample opportunities afforded for the acquirement of scientific knowledge in the required direction by persons who purpose to become educators.

In their educational aspect, considered apart from their educational applications, the value of Museums must in a great measure depend on the perfection of their arrangement and the leading ideas regulating the classification of their contents. The educated youth ought, in a well-arranged museum, to be able to instruct himself in the studies of which its contents are illustrations, with facility and advantage. On the officers in charge of the institution there consequently falls a serious responsibility. It is not sufficient that they should be well versed in the department of science, antiquities, or art committed to their charge. They may be prodigies of learning, and yet utterly unfitted for their posts. They must be men mindful of the main end and purpose in view, and of the best way of communicating knowledge according to its kind, not merely to those who are already men of science, historians, or connoisseurs, but equally to those who as yet ignorant desire to learn, or in whom it is desirable that a thirst for learning should be incited. Unfortunately museums and public collections of all kinds are too often regarded by their curators in their scientific aspect only,—as subservient to the advancement of knowledge through the medium of men of science or learning, and consequently as principally intended for the use of very few persons. This is not the main purpose for which the public money is spent on museums, though one of the very highest of their uses, and in the end of national consequence, since the surest measure of national advancement is the increase and diffusion of scientific and literary pursuits of a high grade. One of the signs of a spread of sound knowledge and intellectual tastes in a country is the abundant production of purely monographic works by its philosophers, and the evidence of their appreciation by the general mass of readers, as indicated by the facility with which they find publishers. * *

It has long been a subject of discussion, in what manner and to what extent can instruction by means of lectures and public teaching be advantageously associated

with public collections. There are those who are opposed to such a course, holding that museums should stand on their own exclusive merits, and be mainly places of personal study and consultation. This, however, is the contemplation of them under their scientific aspect only; and though it may fairly be maintained, that a great central collection, such as the British Museum, may be rendered most serviceable by this course of action, holding that magnificent establishment as a general index for science, and, as it were, Encyclopædia of reference,—I feel convinced, after a long and earnest consideration of the question for many years, that unless connected with systems of public teaching, museums in most instances are of little use to the people. The most useful museums are those which are made accessory to professorial instruction, and there are many such in the country, but almost all confined to purposes of professional education, and not adapted for or open to the general public. The museums of our Universities and Colleges are, for the most part, utilized in this way, but the advantages derived from them are confined to a very limited class of persons. In this Institution, an endeavor has been made to render its contents subservient to the cause of education and instruction; and the course which is here taken may be imitated with advantage in the provinces, where there are not unfrequently collections of considerable extent turned to small account for the benefit of the residents, a large proportion of whom in many instances are ignorant of their very existence. Yet it is to the development of the provincial museums, that I believe we must look in the future for the extension of intellectual pursuits throughout the land, and therefore I venture to say a few words respecting what they are and what they should be.

When a naturalist goes from one country into another, his first inquiry is for local collections. He is anxious to see authentic and full cabinets of the productions of the region he is visiting. He wishes, moreover, if possible, to study them apart,—not mingled up with general or miscellaneous collections,—and distinctly arranged with special reference to the region they illustrate.

There are local collections arranged with skill and judgment in several of our county towns, and which at a glance tell us of the neighborhood and activity of a few guiding and enlightened men of science. It would be invidious to cite examples, and yet the principles, in each case distinct, adopted in the arrangement of those of Ipswich and Belfast ought especially to be noticed. In the former, thanks to the advice and activity of Professor Henslow, the specimens of various kinds, whether antiquarian, natural history, or industrial, are so arranged as to convey distinct notions of principles, practice, or history. In the Belfast Museum the eminent naturalists and antiquarians who have given celebrity to their town have made its contents at a glance explanatory of the geology, zoölogy, botany, and ancient history of the locality and neighboring province. The museums of Manchester, York, Scarborough, and Newcastle might be cited as highly commendable likewise, thanks to the science and ability of the eminent men connected with them, or who have taken an interest in their formation. It so happens, however, that the value and excellence of almost every provincial museum depend upon the energy and earnestness of one, two, or three individuals, after whose death or retirement there invariably comes a period of decline and decay.

In every museum of natural history, and probably in those devoted to other objects, there gradually, often rapidly, accumulates a store of duplicates that if displayed in the collection render it more difficult to be studied than if they were away altogether, occupying as they do valuable space and impeding the understanding of the relations and sequence of the objects classified. If, as is sometimes the case, they are rejected from the collection and stowed away in boxes or cellars, they are still in the way, for cellarage and stowage,—as we know here, from the want of them, to our detriment,—are indispensable for the proper conducting of the arrangements of museums. Yet out of these duplicates, more or less perfect sets of specimens might be made up, of very high value for purposes of instruction. A well-organized system of mutual interchange and assistance would be one of the most efficient means of making museums generally valuable aids to education. Much money, when money is at the command of curators or committees, is spent in purchasing what might be obtained for asking or through exchange. Some objects of great scientific interest, but equally costly, might be purchased by one establishment only, and made fully as useful, instead of being bought in duplicate by two or more contiguous institutions. The larger institutions might supply the

smaller; and out of the national stores, numerous examples,—to them almost worthless, but to provincial establishments highly valuable,—might be contributed with facility and greatly to the public benefit.

It is in this way, viz., by the contribution of authenticated and instructive specimens, that the museums supported by the State can most legitimately assist those established from local resources in the provinces; the scientific arrangements of the latter might also be facilitated through the aid of the officers attached to Government institutions. Money grants would do in many cases, more harm than good, destructive as they are of a spirit of self-reliance, and apt to induce a looseness of expenditure and habits of extravagance.

At the same time, every shilling granted judiciously by the State for purposes of education and instruction, for the promotion of schools, libraries, and museums, is a seed that will in the end generate a rich crop of good citizens. Out of sound knowledge spring charity, loyalty, and patriotism,—the love of our neighbors, the love of just authority, and the love of our country's good. In proportion as these virtues flourish, the weeds of idleness, viciousness, and crime perish. Out of sound knowledge will arise in time civilization and peace. At present it is folly and self-conceit in nations to claim to be civilized, otherwise than as contrasted with savage barbarity. The admiration of physical prowess, the honoring of tinsel and pomp, the glorification of martial renown, are far too deeply inrooted yet in the spirit of the most cultivated nations to permit of the noble epithet "civilized," being appended to their names. The nobility of industry in all its grades,—first soul-work, the labor of genius,—then head-work, the labor of talent,—then hand-work, the honest labor of the body striving in the cause of peace,—must be honored by state and people, before either can with truthfulness claim to be civilized. We are at best as yet but enlightened barbarians. Think how all Europe and half Asia have stood for months,* and are even now standing, on the verge of foul and barbarous war; how Christian nations have girded on their armor, and, with mutual distrust and well-grounded suspicion, have stood with hand on sword-hilt ready to guard or to strike; think of what is worse, of the crime and ignorance that fester in the by-ways of Christian cities, and then boast of civilization if you can. The arts, the sciences, taste, literature, skill, and industry seem to have thriven among us in spite of ourselves,—to have come among mankind like good spirits, and by main force to have established themselves on earth. They struggle with us and conquer us for our welfare, but are not yet our rulers. Sent from Heaven, aided by the few, not by the many, they have made firm their footing. If the monarchs and presidents of the states of the earth knew wherein the best interest of themselves and their people lay, it is in these intellectual invaders they would confide. The cost of armaments and the keep of criminals would cease in time unproductively to drain their treasuries. But ambition and strife are sturdy demons yet, and the educator, who dreams of their enchainment, and anticipates the speedy approach of a peaceful millenium, has but a limited acquaintance with the condition of mankind, and the hearts of its governors.

I can not help hoping that the time will come when every British town even of moderate size will be able to boast of possessing public institutions for the education and instruction of its adults as well as its youthful and childish population,—when it shall have a well-organized museum, wherein collections of natural bodies shall be displayed, not with regard to show or curiosity, but according to their illustration of the analogies and affinities of organized and unorganized objects, so that the visitor may at a glance learn something of the laws of nature,—wherein the products of the surrounding district, animate and inanimate, shall be scientifically marshaled and their industrial applications carefully and suggestively illustrated,—wherein the memorials of the neighboring province and the races that have peopled it shall be reverently assembled and learnedly yet popularly explained; when each town shall have a library the property of the public and freely open to the well-conducted reader of every class; when its public walks and parks, (too many as yet existing only in prospect,) shall be made instructors in botany and agriculture; when it shall have a gallery of its own, possibly not boasting of the most famous pictures or statues, but nevertheless showing good examples of sound art, examples of the history and purpose of design, and, above all, the best specimens to be procured of works of genius by its own natives who

* This was written in 1853-4, on the eve of the Russian, French and English War.

have deservedly risen to fame. When that good time comes, true-hearted citizens will decorate their streets and squares with statues and memorials of the wise and worthy men and women who have adorned their province, not merely of kings, statesmen, or warriors, but of philosophers, poets, men of science, physicians, philanthropists, and great workmen. How often in traveling through our beautiful country do we not feel ashamed of its towns and cities, when we seek for their ornaments and the records of their true glories and find none? How ugly is the comparison that forces itself upon our minds between the conduct of our countrymen in this respect and that of the citizens of continental towns? A traveler need not go far through the streets of most foreign cities without seeing statues or trophies of honor, serving at once as decorations and as grateful records of the illustrious men they have produced,—reminding the old of a glorious past, and inciting by example the young to add to the fame of their native soil.

Since the delivery of the Lecture from which the foregoing extracts are taken, the English Government have enlarged and systemised its appropriations in behalf of Museums of Natural History, and Industrial Exhibitions and Instruction. In 1855-56, the expenditures by the "Department of Science and Art," under the Committee of Privy Council for Trade, amounted to £81,384, or about \$450,000. The Third Report of this Department, a volume of over 300 pages, made to and published by Parliament, in 1856, gives in detail the operations for the year 1855. The following summary gives, in a condensed form, the results :

The Museums and Libraries of the Department continue to be in an effective state, and have been visited by above 331,000 persons, being an increase of fifty-six per cent. above the numbers of the previous year. This increase is chiefly due to the new Circulating Museum of Ornamental Art, which has been visited by 55,701 persons in the provinces, and to the success which has attended the new arrangements made by the Department in regard to the Museum of Natural History in Edinburg, resulting in an increase of the visitors from the old average of 800 to above 100,000.

The Botanical Gardens in Dublin have been visited by above 30,000 persons, and the Zoölogical Gardens by 138,000.

The Exhibitions of the Department have been attended by 72,000 persons.

The Geological Surveys in Great Britain and Ireland, and Mining Record Office, continue to be carried on with increased activity.

The Schools of Art, including the Training School in London, have been attended by nearly 12,000 pupils.

The number of children taught drawing in public schools, through the agency of the masters of Art Schools, amounts to 18,988; but although this is an increase of eighty per cent. above the return for last year, it is not sufficient to meet the public wants, and new measures are being devised to give increased development to elementary art instruction.

Instruction in art has been given to 2,181 teachers of public schools, and the results of their examinations have been more satisfactory than in preceding years.

The Schools of Science, which have this year increased considerably in number, the Working Men's Lectures in London, and provincial lectures in Ireland, have been attended by 10,000 persons.

Means of illustrating the courses of instruction by the diffusion of examples have been taken advantage of by 192 schools, at a cost to the schools of £1,510.

XV. EDUCATIONAL MISCELLANY AND INTELLIGENCE.

GERMANY.

[COMMUNICATED BY DR. HERMANN WIMMER, DRESDEN.]

FRIEDRICH FROEBEL, AND THE KINDERGARTEN. Froebel, who died in 1852, was a Pestalozzian, and founder of the kindergarten, (children's garden.) Some gentlemen at Liebenstein, a watering place near Eisenach, called him "the old fool;" but Diesterweg, on hearing the name, said that Socrates was such a fool, and Pestalozzi also. Froebel considered the *kinderbewahr-anstalten*, (schools for keeping and caring for abandoned children,) as insufficient, because merely negative: he wished not only to keep, but to develop them, without checking the growth of the body, or separating the child from its mother,—as he would have the children in the garden but two or three hours daily. Children are born with the desire of acting. This was the first principle: hence, his garden was to be free, and planted with trees and shrubs, to enable the children to observe the organic life of nature, and themselves to plant and work. Thus he would change the instinct of activity into a desire of occupation. The child will play; hence the right *kindergarten* is a play ground or play school, though Froebel avoids the name school. *The kindergartnerin*, (the nurse or female gardener,) plays with the children. Froebel's chief object has been to invent plays for the purpose. His educational career commenced November 13th, 1816, in Greisheim, a little village near Stadt-Ilm, in Thuringia; but in 1817, when his Pestalozzian friend, Middendorf, joined him, (Froebel had been several years learning and teaching in Pestalozzi's school, at Yverdon,) the school was transferred to the beautiful village of *Keilhau*, near *Rudolstadt*, which may be considered as his chief starting-place, and is still, under Middendorf and Mrs. Froebel, a seminary of female teachers. Langenthal, another Pestalozzian, associated himself with them, and they commenced building a house. The number of pupils rose to twelve in 1818. Then the daughter of war-counselor Hoffman of Berlin, from enthusiasm for Froebel's educational ideas, became his wife. She had a considerable dowry, which, together with the accession of Froebel's elder brother, increased the funds and welfare of the school. In 1831 he was invited by the composer, Schnyder von Wartensee, to erect a similar garden on his estate, near the lake of Sempach, in the canton Luzern. It was done. Froebel changed his residence the next year, from Keilhau to Switzerland. In 1834 the government of Bern invited him to arrange a training course for teachers in Burgdorf. In 1835 he became principal of the orphan asylum in Burgdorf, but in 1836 he and his wife wished to return to Germany. There he was active in Berlin, Keilhau, Blankenburg, Dresden, Liebenstein in Thuringia, Hamburg, (1849,) and Marienthal, near Liebenstein, where he lived until his decease in 1852, among the young ladies, whom he trained as nurses for the *kindergarten*, and the little children who attended his school. In August 7th, 1851, to the surprise of all, the *kindergarten* were

suddenly prohibited by the Prussian government, (and afterward in Saxony,) "because they formed a part of Froebel's socialistic system, and trained the children to atheism." This was an error; Charles Froebel, Friedrich's nephew, was the socialist, and the *kindergarten* had no connection with him.

A meeting of educationalists was called by Diesterweg, at Liebenstein, when the following resolutions were adopted:

1. Froebel intends a universal development of the talents given by God to the child.

2. For this purpose he intends,

a. To cultivate the body by a series of gymnastic exercises.

b. To cultivate the senses, particularly the more spiritual; the sense for form and color by instruction, and the rhythmical and musical sense by songs and melodies.

c. To cultivate the desired want of action, as well as the mental faculties in general, by a series of exercises furnished by plays of his own invention.

d. To stimulate the moral and religious sense by addresses and narratives, and especially by the child's communion with the educating nurse.

e. To extinguish the children's bad habits, and to accustom them to child-like virtues by keeping them by themselves in social circles and merry plays.

Soon after this the garden at Marienthal was visited by an officer of the Prussian government, school-counselor Bormann of Berlin, who declared its tendency rather anti-revolutionary than otherwise, and bestowed upon it much praise. In the fifth general assembly of German teachers, in Salzungen, May 16-19, 1853, the following resolutions were adopted by a majority: that Froebel's educational method is in true accordance with nature, as developing and promoting independent action; and that his *kindergarten* is an excellent preparation for the common school. The *Volksfreund* of Hesse, however, says that it furthers revolution, and that every one who agrees with it by word or deed, is himself revolutionary.

There are in Germany a great many *klein-kinder-bewahranstalten*, (institutions for keeping little children,) e. g. in Bavaria, in 1852, 182, with 6,796 children, (2,740 gratis,) and an income of 51,772 florins. In Berlin there are 33, the first of which was founded in 1830 by private charity, to keep little children whose parents are in daytime absent from home, under a good inspection, to accustom them to order, cleanliness and morality, and to fit them for attendance at school. These charity schools are provided, as to the age of children, by the well-known "*Krippen*," (*crèches*), founded in 1844 by M. *Marbeau* in Paris, the author of "*Les crèches, ou moyen de diminuer la misère en augmentant la population*," a little book that received a price of 3000 francs from the French Academy. Filling a gap between the lying-in-institutions and the *kindergarten*, they were rapidly adopted by governments and cities, for children from a fortnight to two years old; and in 1852 Paris had already 18. The first in London dates from March, 1850; in Vienna, from 1849, (in 1852 there were 8;) in Belgium, from 1846; in Dresden, from 1851, etc. Further information is given in the *Bulletin des crèches*, published monthly in Paris. On the education of little children, Mr. Foelsing, at the head of a *kindergarten* in Darmstadt on Froebel's principles but in a somewhat different way, publishes at Darmstadt a monthly paper called "Home and the Infant School." The Sunday and weekly papers published formerly by Froebel in Liebenstein, might be still read with advantage.

It must be observed, that the *kindergarten* are for the most part not charity nor public schools, as are the other institutions mentioned; and this may in part account for this small increase compared with that of other schools. Yet no one can doubt, that Froebel's work has not been lost; it has influenced education generally and that of infant schools in particular, to a great extent.

GERMAN VIEWS ON FEMALE TEACHING IN AMERICA.—Dr. Vogel makes the following remarks on this subject, in the *Leipziger Zeitung*, July 16, 1857.

“Among the many interesting communications from the United States, which we owe partly to the kindness of private friends, and partly to the liberality of the Smithsonian Institution, through the kind mediation of the American consul at Leipsic, in a statement in the 37th Report on the Public Schools of the City and County of Philadelphia. This brings to our notice a very important fact, to which we deem it the more our duty to draw general attention through this gazette, because it throws a warning light on the future of our own schools, and especially of city and country teachers.

We premise the general statement, that among our transatlantic cousins in North America, a most praiseworthy effort has been made during a series of years, to found and extend a well-organized national school system. Men well qualified for the task, and justly appreciating the wants of their country, so rich in material resources,—Alexander Dallas Bache, Horace Mann, and above all, at a later period, Dr. Henry Barnard of Hartford, in Connecticut, so wisely and perseveringly active in laboring to raise the standard of American schools, and whose *American Journal of Education*, elegant in form and rich in matter, we propose shortly to discuss—have traveled in Europe with the express purpose of observing and knowing for themselves, the school systems of the different countries, and of applying the results of their observations to the benefit of their country, by the improvement of existing schools and systems, or the foundation of new ones.

We return to the Philadelphia report for 1850. This contains all necessary information respecting organization, number of teachers and scholars, gradation of schools in different districts, supervision by district authorities, salaries, other expenses, school interiors, (with cuts of several new ones,) &c., &c., all as clear and definite in names and numbers, as is to be expected from such a practical nation.

The number of children from six to fifteen years of age, was 54,813; of which 28,152 were boys, and 26,661 girls. These attended 303 schools, in 24 districts. Among these schools are; a high school with 601 pupils and 16 teachers; a normal school for females, with 196 pupils and 2 male and 6 female teachers; and a school of practice, with 244 pupils, and 4 female teachers. The remainder, primary, secondary, grammar, and unclassified schools, all belong to the category which we call Elementary Schools, People's Schools, (*Volksschulen*), and Burgher Schools. The sexes are partly separate and partly mixed, often very unequally. E. g., in one secondary school there are 170 girls, and only 14 boys. Generally, however, the proportions are nearly equal; and the whole number of pupils is in no school greater than 400, and in most not more than 200. Schools grown like an avalanche to 2000 pupils and upwards, are unknown there.

But in respect to the teachers we find the important and altogether abnormal fact, to which this communication is intended to call attention. The whole body of teachers in the common schools of Philadelphia, including the normal school and school of practice, amounts in all to 935 persons, a number relatively not very

large; but hear and wonder:—*Among the 935, there are only EIGHTY-ONE MEN.*

All the rest are women. Hear! Hear! A city of more than 400,000 inhabitants, the second of the United States in importance, commits the education of its male and female youth, until the 14th and 15th year of age, almost exclusively to female hands! Ladies teach not only languages, history and geography, but also rhetoric, geometry and algebra, natural philosophy and chemistry; are at the head of large boys' schools, and guide bodies of teachers. And the reason for this is to be found, not at all in a different pedagogical system, as might be supposed, but rather,—as a glance at the teachers' salaries shows—solely or principally, because man's capacity values itself at a price higher than the school and financial officers wish to pay. A well trained and able man will not sell himself at a price below that demanded by his self-consciousness, and by his modest and reasonable claims to a sufficient living; i. e., he will not devote himself with all he has, is, knows, and is able to do, to the teacher's profession, if more is offered from another, perhaps less agreeable, side; he will not be valued at less by the school than by the counting house, the railroad, or the farmer. Hence we see, in the list of teachers, no man at less than 600 dollars, (800 thalers,) income. He would consider such a one below the dignity of the place to which he should be called, or below his own dignity, or as foolish, or something like it. And who can blame him for it, how high-soever the "ideals" of life are to be valued?

But what may we in Germany, our school boards, parishes, the state—which must have as much interest in possessing a body of able teachers as in possessing an able army—what may they all learn from the fact spoken of? To endeavor, by every means, and in good season, that the German Common School may not fall into a like situation, which would endanger its inmost life. For, highly as we esteem the work of women in general, and particularly in the field of education, we refuse decidedly, to permit them so abundant a share in the proper school work and teacher's office, as that granted—as it appears, by necessity—in Philadelphia. The boy who has passed his eighth year, especially, needs a severer discipline; stronger food for his mind, than women *can* afford him. Single exceptions make no rule; wherefore we dare to entertain some modest doubts of the "superior character of the instruction and the high state of discipline," which the report, (p. 15,) asserts of the public schools of Philadelphia. We want *men* in our German school, and men in the fullest and best sense of the word: sure in the needed knowledge, firm in character, decided and persevering in their endeavor for higher objects, warm and faithful in their love of children, men of clear mind, of noble and pious heart; religious without hypocrisy, or fear of man, genuine and true sons of their country, whose welfare and honor is their own. To gain and to keep such men for the school, state and parish, must not be niggard; else the best will leave it, and only the weak will remain; the women, and the woman-like, who indeed will do far less than women who strive with enthusiasm after the high aim of their vocation. Let us then no longer hesitate, when the values of money and of the necessities of life, have undergone such important changes, to re-adjust and increase the salaries of teachers, in order to escape the danger which threatens that they will sink into poverty and distress, and that thus the inner life of the schools, and with it that of our youth, the hope of future ages, will be necessarily destroyed. Thus we conclude, with the warning call of the Roman state in time of danger: *Videant consules, ne quid detrimenti respublica capiat!*"

[REMARKS.—We shall endeavor elsewhere to give a full discussion of the whole subject involved in the above final paragraphs. Here we can only indicate an answer. To our American readers, the first, if not the only sensation, at hearing such views from one of the wisest and most skillful teachers of Germany, will be unmixed astonishment. They would no more think of argument, authority, or statistics, in controversion of them, than they would to prove that men are not the only appropriate nurses for young children.

The whole later career of Common School Education in America, is a vast accumulation of facts, in direct opposition to Dr. Vogel's doctrine; and—so far as argument has been had, or opinion stated, upon a point of late in fact almost universally assumed as decided—the voice of our educators and laborers in the field of instruction proper, has been a unit, and distinct, in favor of extensive employment of female teachers, with the coöperation, at least, in higher schools of men.

The reply to what we deem the errors spoken of, in order to be complete, would require statements of those traits of children and women which adapt them to become respectively pupils and teachers; a comparison of the male and female mind, and the deduction thence of their respective departments in instruction; and a statement of facts from American Common School history, in proof of the success which has attended the practice of employing female teachers. To this should also be added, a consideration of such differences between the social position and training of women, and social conditions generally, in Europe and in America, as may have assisted in causing the difference in estimating their value as teachers.

The result of such a discussion would by no means necessarily show that an American system would be best for Germany, or even that any modification of the German system could advantageously be adopted from us. It might not determine the right or wrong of the principle involved, in its actual present applications; but we believe that it would be an unanswerable demonstration of the truth of the broad principle so singularly and successfully exemplified in American schools and American men and women, that *women are divinely ordained teachers for children.*—P.]

SAXONY.

SCHOOL OF AGRICULTURE AND FORESTRY AT THARAND.—This school contains about 150 students, there being at present no English or Americans. It is under the immediate charge of the ministry of finance, while the Polytechnic, Industrial and Mining Schools belong to the home department. Each of the two sections of the school has a principal, but the principal of the department of forestry is now at the head of the school.

The students are of two classes; those preparing for an office relating to the forests in Saxony, and "externs." The former, for admission, must bring a certificate from a real school in Dresden, Leipzig, Annaberg, or some other of similar standing, and a certificate from a forest officer, of practical labor for at least a year. Others desiring to pass through the full course, and to receive the academical certificate, must prove the same education or pass an examination in it, but need not present the second certificate. Those desiring to attend only a partial course are admitted as "externs." These, as indeed all, must show that they are more than seventeen, or if not, that their attendance is permitted by the parent or guardian, and that they are competent to understand the lectures. Regular students pay fifty thalers a year, externs seventy-five thalers.

The full course lasts two years, terms commencing a week after Easter, and October 15th. Vacations are about a week at the three great festivals, and from August 15th to October 15th. During the latter, however, are required practical exercises and academic travels. The course of lectures and exercises is in mathematics, (drawing and architecture,) natural philosophy, natural history, geognosy, technology, knowledge of soil, political economy, chemistry, forestry, agriculture, veterinary medicine, hunting, and laws on agriculture and forests. Externs receive no academical certificate, but may receive a special one for a particular study, from a professor, and signed by the principal.

INDUSTRIAL SCHOOL AT CHEMNITZ.—In 1857 was connected with this institution a higher weaving school. Up to January, 1858, the lectures on the mechanics of weaving had proceeded as far as to the mechanical loom; those on the making and use of the loom to Jacquard's weaving; and with these lectures were connected visits to several spinning and weaving establishments, practical exercises in weaving and drawing. Such as graduate with a good certificate may count each year's attendance as two years' apprenticeship. In September, 1857, was joined to this school a weaver's "school for continuing education," (*Fortbildungsschule*.) which opened with twenty pupils.

ANNABERG SCHOOL OF FRINGE MAKING.—A *Posamentierschule*, i. e., fringe making school, was opened January 3d, 1858. Apprentices to this trade are obliged to attend.

LACE MAKING SCHOOLS.—The burgomaster of Leipzig, a short time since, in the Chambers, recommended to the attention of government the *Klöppelschulen*, or schools for lace making.

SCHOOL APPROPRIATIONS.—In January, 1858, government demanded, and the second chamber granted, 50,000 thalers for special industrial schools, and schools for continuing education, being an increase of 10,000 thalers; also 30,000 thalers to complete the normal school building at Annaberg; 6,500 thalers to enlarge the normal school at Plauen; and 2,500 thalers for the new edifice at Nossen.

FESTIVAL IN HONOR OF DR. J. C. C. VOGEL.—(From the Dresden Journal, October 9th, 1857.)—A public festival, on occasion of the twenty-fifth anniversary of Dr. Vogel's official life as principal of the general burgher and real school of Leipsig, was celebrated at that city, October 7th, 1857. A serenade was given him, the night before, by the Riedel *Gesangverein*, and a choral with accompaniments, and a festal hymn, written for the occasion by Richard Müller, were sung at his house early in the morning. The ceremonies of the occasion were opened by the private presentation to Dr. Vogel of the honorary citizenship of Leipsic, by Bürgermeister Koch, and of a three-branched silver candlestick, by the teachers of the three schools under his direction, as a symbol of the unity of the schools. The public ceremonies then succeeded, in the hall of the burgher school. Dr. Reuter, one of the teachers, pronounced the festival oration; a choral was sung; Herr von Burgsdorff, director of the circle, formally presented to Dr. Vogel the congratulations of the Consistorial Board and of the Ministry of Education, and the knight's cross of the Order of Albert from the King; Bürgermeister Koch offered the congratulations of the town council; and Pastor Dr. Ahlfeld delivered a cordial address from the pulpit. After music, Dr. Vogel expressed his thanks, gave a short review of his twenty-five years' labors, and closed with his good wishes for his fellow-laborers and for the cause of education. The ceremonies

concluded with music, after which congratulations were offered to Dr. Vogel by representatives of the united schools of the city, of the Rector of the University, of the Pædagogical Society of Dresden, (with an honorary diploma,) and of other authorities and individuals, among them Dr. Barnard of North America. In the afternoon there was a festive entertainment, at which were present many eminent officials and members of the university.

TEACHERS' MUTUAL BENEFIT ASSOCIATIONS.—These charitable associations for widows and orphans of teachers, for *emeriti* teachers, &c., are very prosperous; and Diesterweg recommends them as examples for his friends in Prussia.

TEACHERS' WAGES.—At the opening of the Chambers a short time since, government introduced a bill for increasing salaries of teachers.

WURTEMBERG.

GUSTAVUS WERNER AND HIS ARBEITSCHULE.—An account of the work school, (*arbeitschule*), of *Gustavus Werner*, in Reutlingen, Würtemberg, is to be found in Weber's Illustrated News, (1847.) Werner is an itinerant missionary for education; and must remind every one of the Methodists, especially as his labors are confined to the poorer classes. Indeed one might take him for a disciple of Methodism, if he founded his educational work on a dogmatical religion, which, however, is not the case: for though always maintaining that "Christ is King," he allows the creed no sectarian sway in his colony,—a circumstance that has not failed to draw upon his school the censure of the orthodox party. His efforts, like those of Methodism, have been deservedly successful, and his school, founded ten years ago, is now so flourishing, that besides the 300 boys in the mother school, there are 400 boys in four other schools, kept by his pupils, but superintended by himself. All those boys are collected by Werner in his travels, and the poorest, most neglected and abandoned children find there a home, a good education, and sufficient instruction in the common school branches, and are trained to labor in the extensive manufactures of the institution. When "confirmed" and leaving school, they are not thrown upon the world as the boys from the schools of refuge, but remain from four to six years to work on the large farm, in a paper mill, and various workshops, where they are instructed after their confirmation. These buildings form one part of the establishment; the other and older part containing the school rooms, several work rooms, and the store house,—in which fine woolen and silk manufactures, after the most tasteful patterns, are to be seen, and so much sought for, that all the orders can not be executed. All inmates work of course gratuitously and for the institution, in which they are clothed, fed and educated. Werner, being asked by a visitor, what he would do by and by with the great number of young men, answered that he was not at a loss to employ them as workmen, inspectors, stewards, or as assistants and founders of new schools. The same visitor was present, when Werner addressed a meeting of neighbors and strangers in his barn, in a large room on the second floor. The address was lively and adapted to the understanding of the majority of his hearers. Werner is, and is called, the "father" of all, and governs the whole by the wonderful power of disinterested love.

Similar schools, intended as a remedy for pauperism and its evils, have often been tried but have generally failed. A good one, too, though on a much smaller scale, exists in Alfeld, and has been recently brought before the public by the Inspector of Seminaries, Dr. Michelsen, in a little pamphlet, entitled "What part

has the school in the struggle against pauperism? and answered by a report on the *Lehr-und Arbeitsschule* in Alfeld by Michelsen," Hildesheim, 1854. Whoever wishes to get an insight into a work school, (with which a school proper is connected,) will find this short report very useful.

PRUSSIA.

SCHOOLS OF INDUSTRY AND ART.—The six schools of this class in Prussia contain at present 2,237 students, viz., Berlin 1,374, Breslau 133, Dantzic 190, Erfurt 63, Koenigsberg 243, Magdeburg 234.

GYMNASIA.—In the 114 Prussian gymnasia, containing 35,905 students, 2,109 entered for the graduating examination, (*abiturienten-prüfung*), of whom 1,659 received the certificate of maturity, which is necessary for admission to one of the four faculties of the universities.

NORMAL SCHOOLS.—A normal school for Catholic teachers is to be established in the old female convent at Braunsberg.

Two more normal schools are to be established in Prussia: one at Oranienburg near Potsdam, and one at Driesen, near Frankfort, on the Oder.

SCARCITY OF TEACHERS.—The want of teachers becomes more general, even in high schools. In the eastern part of Prussia, fifteen places are vacant in gymnasia, for want of suitable candidates.

TOWN LIBRARIES.—The town libraries in Berlin contain 19,000 volumes; and they were sometime since being used by 3,190 persons, of whom 1,588 were trades-people.

DIESTERWEG.—The pupils of this veteran educator celebrated May 5th, 1857, twenty-five years since he became principal of the Berlin City Normal School, by a festival, and a gift for the Pestalozzian foundation at Pankow, near Berlin.

PESTALOZZIAN FOUNDATION AT PANKOW, for widows and orphans of teachers. Income in 1856, 2,086 thalers; expenditures, 2,123 thalers. Only 43 thalers were contributed of the entire sum, by teachers without Berlin.

AUSTRIA.

NORMAL SCHOOLS.—Two Catholic Normal Schools are to be founded; one at Agram in Croatia, and one at Diakovas in Selavonia.

VIENNA PROTESTANT SCHOOL.—The principal Protestant school at Vienna, contained in 1856, 472 boys and 114 girls, Lutherans; 83 boys and 32 girls, Reformed; and 9 Jewish children. The contributions to the Protestant School Fund reached 2,879 florins, besides 280 florins for the pension fund.

UPPER AUSTRIA.—A normal school was established at Linz, (the capital of the province,) four years ago, under the direction of the secular clergy. There are nevertheless ninety teachers' situations empty. "This shows," says the Saxon School Gazette, "that it is not sufficient to establish normal schools, if the condition of the teachers is not ameliorated."

GYMNASIA.—A ministerial decree limits classes in gymnasia to the number of fifty. A parallel class must be formed if there be an overplus, but the more capable must not be selected into either division.

SWITZERLAND

POLITICAL INFLUENCE IN THE SCHOOLS.—In Friburg the ultramontanists have come into power, and M. Charles, Superintendent of Schools, has abolished the

higher schools for girls, which the liberals had established, saying that citizens may send their daughters to the nuns to be educated. The cantonal school is now under ecclesiastical jurisdiction, and all "liberal" teachers are losing their places. The reverse process is taking place in the Aargau. Here, Superintendent Keller is changing all the nunneries into female schools. (L^öw's *Monatsschrift*.)

TEACHERS' SALARIES.—The parishes of Zurich are rivaling each other in raising the salaries of their teachers. Several have given as much as 1,000 francs.

HOLLAND.

SCHOOL LAW.—The new law of instruction contains seventy-three articles. A motion from the "exclusives" to establish separate schools for those kept away from the common schools by religious scruples was lost. Another, that the State should pay the whole salaries of teachers, was lost, for financial reasons. The schools are to be under the inspection of the government, provincial boards, and communes, (parishes.) The latter must establish and support the schools; but if they prove their insolvency, the state pays half the expense. A certificate of capability is required from the teacher. This law has passed the second chamber, and is expected to pass the first or upper.

BELGIUM.

FEMALE INDUSTRIAL SCHOOLS, for the instruction of girls in lace making, spinning, &c., are increasing rapidly. In East Flanders alone there were some time since about 400, with 17,121 pupils, besides as many more who worked at home. Of this number, 328 are for lace making exclusively. The rate of earning is about 3 22 of a kreutzer a day. Belgium has about 740 such schools, with nearly 4,500 pupils, mostly girls. (L^öw's *Monatsschrift*.)

SAXE-ALTENBURG.—The legislature has appropriated 20,000 thalers to reorganize the normal school.

HAMBURG.—The School Board has requested the senate to establish a normal school from the state fund.

SWEDEN has about 400,000 children of school age, and expends for schools a million six dollars yearly. It is hoped that this amount will soon be increased to three or four millions, which will give from eight to ten rix dollars to each child.

SARDINIA.—There are in Sardinia 25 technical schools, with 1,546 pupils. The amount paid for the teacher's salaries is 155,000 francs a year.

ATHENS.—The king has laid the foundation of a nautical school.

CONSTANTINOPLE.—A German (Prussian) school was formally opened here June 1st, 1857. Mr. Dreyer of Lubeck is the teacher.

ALGIERS.—There were in this province in 1848, 115 elementary schools for Europeans, attended by 3,858 boys, and 4,250 girls. There are now 178 schools for boys, 119 for girls, and 67 primary schools, with a total attendance of 10,672 boys, and 8,986 girls.

[We have received from Dr. Wimmer other valuable communications; "On the system of public instruction in Saxony;" "German Pedagogical Journals and Literature;" "Life of Dinter;" all of which will appear in subsequent numbers of this Journal.]

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ITALY.

We are indebted to Prof. Botta, of the University of New York, for specimen numbers of the following

EDUCATIONAL PERIODICALS.

L'EDUCATORE ; Giornale per l' Educazione della gioventù d' ambo i sessi e del popolo, compilato da *Gaetano Valeriani*. No. 1, 15 Luglio, 1857. Alessandria : Fratelli Gazzotti. (THE EDUCATOR ; a Journal for the Education of Youth of both Sexes and of the People, composed by Gaetano Valeriani. No. 1, July 15, 1857. Alessandria, of Piedmont : Gazzotti Brothers.)

This semi-monthly Review contains several engravings, and presents a criticism on the modern bibliography of Italy.

IL MONITORE SCOLASTICO. No. 1 e 2. Torino, 1857. (THE SCHOLASTIC MONITOR. No. 1 and 2. Turin, 1857.)

This semi-monthly Journal is published by a company established in Turin, with the object of aiding the progress of education in Sardinia, by gathering, in a central point, all the articles and furniture which refer to schools, and to sell them at a low rate for the benefit of schools and teachers. This company proposes, also, to publish the best educational works, either original Italian, or translations from foreign languages, to encourage educational writers, to aid the necessities of teachers, to convene them in public meetings, to find schools for them, etc. This company was founded last year, in Turin, by Prof. Colombetti, and it bears the name of *Emporio Scolastico Magistrale*. It has a capital of two hundred thousand francs, divided into four hundred shares of five hundred francs each, bearing the interest of six per cent., with an additional dividend.

L'ISTITUTORE ; Giornale d' Istruzione, pubblicato dal Prof. Lanza. Torino, 1857. (THE INSTITUTOR ; Journal of Instruction, published semi-monthly, by Prof. Lanza. Turin, 1857.)

IL GIOVEDÌ ; Giornale d' Educazione, per i giovanetti d' ambo i sessi. Torino, 1857. (THE THURSDAY ; A weekly paper of Education for children of both the sexes. Turin, 1857.)

L'EDUCATORE LOMBARDO ; Giornale dell' Istituto dei maestri di Lombardia. Milano, 1857. (THE LOMBARD EDUCATOR ; the Journal of the Institution of the teachers of Lombardy. Milan, 1857.)

This is a weekly paper, published by the association of the teachers established in Lombardy, for their mutual aid. This institution was created in Milan, in July, 1857, and to it may belong all the private teachers who pay an annual contribution of about twenty francs. By paying at once the sum of three hundred and twenty francs, a teacher may become a fellow of the institution, during his life, without any other charge. The associates who, by a physical and permanent illness, should be unable to continue in their profession, are entitled to an annuity, to be given by the association. This annuity varies according to the length of time of the fellowship, so that it increases in proportion to the age of the associate and of his connection with the association. The fellows, however, who reached the age of sixty years, and have belonged to the institution for three years, are entitled to the annuity without any other condition. The public teachers, who receive salary from the government or from the municipality, may belong to the institution, but they are not entitled to the annuity, unless that which they receive from the government is less than that of the association. But in this case they receive only the difference. The annuity to which the associates are entitled varies from one franc to three francs a day.

RIVISTA GINNASIALE E DELLE SCUOLE TECNICHE E REALI. Compilato dal Dre. Bolza e dal Prof. Picci. Milano, 1857. Fascicolo 5. Settembre e Ottobre. (THE REVIEW OF GYMNASIA, OF TECHNICAL AND REAL SCHOOLS. By Dr. Bolza and Prof. Picci. Number 5. September and October, 1857. Milan.)

It is published in six numbers a year, every two months.

ENGLAND.

VISIT TO REV. MR. SEWALL'S SCHOOL AT RADLEIGH.

Letter from Rt. Rev. Bishop Smith of Kentucky.

KALORAMA, Oct. 5th, 1857.

MY DEAR SIR:—You know all about the system of fagging at most of the ancient and great schools which supply to the Universities their best prepared annual recruits, such as Eton, Rugby, and Winchester: and you are, of course, further aware of the great diversity of opinion upon the subject; opinions held on each side with the greatest possible passion and pertinacity, and yet deviating so widely, that whilst their conservative friends claim for them the merit of imparting all the hardihood and chivalry which undeniably still distinguish an otherwise luxurious aristocracy; their progressive antagonists denounce them as the last remaining strongholds, in emancipated England, of the roughness and barbarism of those fierce old feudal times, when thumbscrews, fire and fag-gots were deemed the best tests of truth.

There is no telling how long these points would have been warmly contested, as theories, without the slightest effort being made to effect a reform, had not other evils, of a much more serious nature crept into the administration of these glorious old Institutions, alarming and arousing the strongest religious convictions, which have stirred the bosoms of the most gifted and earnest men of the Church of England, since the Restoration. Of the fruits of this, we have a notable instance, in the earnestness and success with which Dr. Arnold applied himself to the experiment of infusing a robust and manly religious sentiment into the school at Rugby. Some there were, however, who, not content with the kind of religious influence infused, or the measure of it possible, under so many disadvantages, conceived the idea of a model school, equal in scholarship to any of the ancient foundations, and not destitute, by any means, of the advantages derived from the athletic exercises of boating, and cricket, should yet secure to each pupil, not merely the food and the shelter, but also the delicacy and the refinement of the comfortable paternal home; and above all, a degree of religious culture, not wholly disproportioned to the worth of the immortal soul.

It was an experiment as delicate as it was difficult. It required an almost inconceivable amount of religious earnestness, and of moral heroism, for a son of Oxford to select a spot for his purpose so near as Radleigh, to that glorious old seat of classical learning; and for a bishop of Oxford to spread over it the shelter of the name of his illustrious father, and the prodigious influence of his great talents, and of his high office.

It was on the occasion of the fifth or sixth annual Confirmation of several of the boys of this school, and in the company of this distinguished Prelate, and of one of his Archdeacons, that I visited Radleigh, on the 8th of June last.

As we approached the house, there was a long sweep in the smooth road, through the polished and beautiful lawn, on each side of which the boys of the school, about one hundred and fifty in number, and of about the usual assortment as to size, were arranged to bid us welcome; and wild and loud were the cheers, and wonderfully vigorous the waving and tossing of hats, in honor of their Bishop. At the door of the vast, but yet plain and substantial Farm House which had been converted into the uses of the school, we met the Ward-

en and founder, the Rev. Mr. Sewall, and several clerical subordinates and fellow laborers in their clerical costume, prepared in a few moments, to accompany us to the chapel. Those few moments, employed refreshing ourselves, and in robing, were sufficient to bring under our eye many of the appliances of the establishment for health, comfort, and a sober refinement of life, very perfect and beautiful, yet, in the eyes of a back-woods American, a little too near, perhaps, to the confines of an expensive luxury.

The covered walk from Hall to Chapel, in a modern way, doing the duty of ancient cloisters, was long enough for the procession, which consisted of the boys in the simple white surplices of choristers, the officers of the school, followed by the Bishop in his robes, and a few clerical visitors. I have never seen any thing so unique or in such perfect taste and keeping, as that chapel. It is but a temporary building, extemporized, for a few years, until his resources shall permit him to erect something more durable. But I should greatly fear that even the almost perfect and faultless taste of the Rev. Warden may fail to construct in enduring stone, any thing so quaint and picturesque and perfect of its kind, as this temporary modern antique. The lancet windows are high above the floor, and between them from the hands of worshipping angels, which form the corbels of the arches of the open timber roof, simple and charming baskets of flowers were suspended, welcoming their guests, and marking, as is customary in England, the recent festival of Pentecost, as we, in America, do that of the Nativity, with evergreens.

The chancel was somewhat elevated and without a railing; and beneath its beautiful stained glass triplet window, there was the most remarkable old wood scriptural carving, in the small, from one of the old churches upon the continent, any where to be found in its ancient niches and so every where, the antique and the new stood in the strangest proximity to each other; the children and the roses of to-day, by the side of imported specimens of Art, whose designers and artificers have long since been forgotten; fit exponents of which this establishment would perpetuate the ancient love, and the more ancient worship, inwrought into the unfolding texture of young minds.

The organ was good and the music uncommonly fine, which it might not have been so important to mention, had not the service, instead of Morning Prayer, consisted of a choral Litany, which reached the measure of the most exact fitness and the most wonderful solemnity, in consequence of the almost absolute perfection of the responses by the whole school, trained like a choir. The Bishop had received from his predecessors in the see of Oxford the practice of conferring orders upon each candidate separately, each kneeling before him, whilst seated in his episcopal chair, and without the intervention of a chancel rail; a practice which, whilst it imparts somewhat of additional dignity to his official character, serves to deepen the impression of the individual interest, of each candidate, where the number is considerable, in the solemnity of the transaction. This practice was extended to this confirmation occasion; and each boy was led forward by the Warden himself, decently attired in his little surplice, and resting his head almost upon the knee of the Bishop, received the imposition of hands; and each time as the prayer was fervently breathed over one after another, a loud choral Amen arose from all his young companions and filled the House of God!

During the confirmation service the Bishop's chaplain stood by his side, holding an elaborate and beautiful crosier of the olden time, which he passed to the

Bishop at the moment when he raised his right hand to pronounce the final benediction upon all the confirmed.

Entering fully into the spirit of the occasion, the good Bishop, as if addressing a circle of his own children, first pointed out to them the nature and solemnity of the vows they were about to take upon themselves; and then, after a portion of the service had been pronounced, and just before the solemn question was propounded to them, the answer to which contained the vow itself, he begged them to pause, and once more to reflect upon what they were about to do; and again the third time, after the promise was made, endeavored, in the most solemn and heart-searching manner, to impress upon them the duty of a life of prayer; and of daily, practical devotion to the service of their Creator and Redeemer, in the days of their youth.

From the chapel, in the same order of procession, we all proceeded to the school room, also a temporary building, fitted up, out of the old barn, belonging to the farm house, showing its naked rafters, a little gothicised, and yet airy and roomy, to a degree quite impracticable, for winter purposes, in our far colder country. Here, after a short narrative report to the Bishop, on the part of the Warden, including, in the most simple and manly way possible, a commendation of the boys, for their mental and classical progress, not less, it was thought, than that of boys of the same age, from the great, old schools; and, also, for their truthfulness and high sense of honor and of principle; and their proficiency in all athletic and manly exercises.

There was a Latin salutatory addressed to the Bishop by one of the older boys; to which, in good old Saxon English, the Bishop replied, in his most happy and effective manner. There was a manliness, naturalness, and pathos connected with the whole scene, rarely witnessed any where, on similar occasions.

From the school room, after a few moments of recess, for the purpose of unrobing and of refreshment, the summons was given for repairing to the dining hall. The table furniture, around the magnates, at least, would not have been unworthy of the great dons at Oxford itself; and the antique surroundings, of chimney pieces, old carved cornices, tables, and sideboards; and even of grand old portraits, filled one with astonishment at the ease with which, in England, even the modern may be made to assume the hue of age.

So deeply was I interested and so profoundly affected by all that I had seen on this occasion, that I repeated my visit, a few days after, with a dear companion whose sympathies, I knew, would be even more in unison than my own, with all that had excited my admiration. We were present at the ordinary evening prayer in the chapel, and shared with the boys their customary evening meal. Evening prayer was introduced, and was complete in its choral forms; and in all those studied tokens of deference and respect for age and office, which enter so deeply into the genius and spirit of all the training of the young in England; and which stands in such striking contrast with the irreverence and insubordination of the young people of America.

On this occasion we had more ample opportunity to examine and admire the antique bureaux, wardrobes, tables desks and chairs, which all Europe had been constrained to give up, to meet the cravings of our insatiable virtuoso; to converse with his gifted and accomplished sister, (not the authoress, at this time she was in some other part of England;) and to hear them expatiate upon their favorite ideas with regard to the training of the young. Ideas do not so prop-

erly belong to this, the narrative portion of my letter; but as that is now pretty well exhausted, perhaps I might as well pass on, at once, to the discussion of some of those ideas, and the obtrusion of some of my own comments.

As nearly as I could judge, Mr. Sewall has arrived at a very happy solution of his main problem, vigor and manliness, devoid of roughness, on the playgrounds, in sufficient harmony with gentlemanly bearing, and true culture and refinement of manners, in all other places. In most American schools and colleges, there seems to me to be an almost equal want of both of these high qualities; there is a neglect of athletic games approaching but too nearly a luxurious effeminacy; and yet a still greater neglect of the common courtesies of life, far more disagreeable than the boisterous mirth of the play-ground. The combination of manly vigor, on the one hand, with scrupulous cleanliness of person, and true gentleness and refinement of manners, on the other, is a point of attainment in a boys' school as difficult as it is desirable.

The question of Christian culture and religious training, is far more complex and difficult. As far as I was witness of the process and the apparent results at Radleigh, I might have more to say than could be embraced in many letters like this. The mere analysis might run somewhat in this way: The influence of virtualism, measured by its amount and its frequency; and the effect of very concentrated educational Christianity, when compared with that of the intense and the unoptional.

Of the former, to my taste, I must confess there was rather too much; certainly too much for America. But with the calmer and more sedate temperament of the English, and with their tastes and habits, I should be slow to affirm that there was too much for them. And any where it must exert a powerful influence in the right direction, quieting the nervousness of the youthful temperament, and making a decent external reverence for sacred things, habitual. Overmuch of this would endanger a reaction. The heads of such establishments can judge better than we, whether such reaction is common. Upon the other question I will not venture to enter. Of hundreds of young men at Radleigh, carefully trained for confirmation, how many more finally make shipwreck of their profession, than of a like number in our American colleges, powerfully wrought upon in repeated revivals. I will not even pretend to conjecture. The application of one test would seem to be decidedly favorable to the English practice—more professional men in England are decidedly religious, than in America; and their piety is of a decidedly more hardy and practical type. For my own part, I could earnestly wish that there were in all our schools and colleges, in both countries, a better and larger admixture of both elements. In each country, one is greatly in excess; and for that reason, a person like myself, educated under the undue influence of the one, can hardly be looked upon as an impartial judge of the value of the other; though I am free to confess that I am profoundly impressed with a sense of the great evils under which we labor in the West and South-west, for lack of more of the ritual and educational element. Perhaps I should the less deplore it, if there were more of the direct, personal and educational, which, at times have reached the hearts of young men in our Eastern colleges. The effect of the absence of both, is deplorable in the extreme.

The reader, from the general tone of admiration pervading this narrative, may, perhaps, too readily infer that I entirely approved of every thing I saw. I do not wish to be understood as altogether censuring some things which did not

strike me so favorably; for the reason that I feel myself to be a very poor judge, indeed, of what is altogether suitable and desirable, for just such an effort, for just such a class of society, in just such a country as England, in precisely this age of the world. But I am very free to repeat what I heard from several of the warmest friends of this enterprise, that, perhaps the energetic Warden, was a little too much of a virtuoso, and had carried mere matters of taste to a rather fanciful, and very costly extreme.

I liked the surplices and the church responses; and was particularly struck with grace at meals, in Latin, with a common, deep-toned, choral response; but I certainly thought that the crosier might have been dispensed with; and gravely doubt whether so long a service, morning and evening, in chapel, as the regular church service, can be for the good of edifying. I would vastly prefer a service of fifteen or twenty minutes, choral and responses, with brief Psalter, and one portion of the word of God, to any longer services.

I have only to add, that, like most private enterprises of its kind, Radleigh has had great pecuniary difficulties to contend with. Its projector ventured much in it, and induced several of his friends to join with him; thinking to devolve the laboring oar upon others. But, with extreme reluctance, he was constrained to come to the rescue, and to identify himself with it, as his life object. It now has its full number, and should it continue to have for a few years longer, and to deserve the measure of approbation from its distinguished patrons which it now enjoys, it must be pronounced a complete success.

By two of the remarks of the Rev. Warden, I was profoundly impressed that, to the success of such an enterprise, it is not enough that all the officers should be Christians,—they must also be Christian gentlemen. In other words, not their principles only will be severely tried, but their nerves and their equanimity! They must not only be ready always to do right, but to exercise boundless kindness and infinite forbearance!

And so, again he added: we are called upon continually to fall back upon first principles; we must be ready to toil and suffer, not for wealth, nor for fame; nor to perfect a project, or realize an idea, or to carry a point; but the one, animating motive must be, or we shall utterly fail, love for Christ, and love for the precious souls of young people, for whom Christ died.

B. B. SMITH,

Bishop of Kentucky.

Foundation Schools of England.—Of the endowed Public Schools,—“the most English Institutions of England,” as they are called by the London Times,—one dates back to the time of Alfred; ten were founded before, and three in the reign of Henry VI.; one in the reign of Richard III.; twelve in that of Henry VII.; forty-nine in that of Henry VIII.; forty-four in that of Edward VI.; twelve in that of Mary; one hundred and fifteen in that of Elizabeth; forty-eight in that of James I.; twenty-eight in that of Charles I.; sixteen in that of Cromwell; thirty-six in that of Charles II. We propose to give the history and internal economy of the oldest and most influential of these schools,—of Eton, Winchester, Christ Hospital, &c.

MILITARY EDUCATION.

THE following account of the institutions for military education in England is abridged from an article in *Blackwood's Magazine* for November, 1858 :

There exist in this country three military seminaries—the Royal Military Academy at Woolwich, where youths are educated for service in the Artillery and Engineers; the Royal Military College at Sandhurst, where cadets are prepared for the Infantry and Cavalry; and the Honorable East India Company's Military School at Addiscombe, which educates simultaneously for the Artillery, Engineers, and Infantry services of the three Presidencies. Supplementary to these are the School of Practical Instruction at Chatham, where passed cadets from Woolwich and Addiscombe learn practical engineering; and the senior department at Sandhurst, supposed to be a Staff school, into which officers of infantry and cavalry are, under certain restrictions, admitted.

I. The Military Academy at Woolwich came into existence in the year 1741. It was created by George II., to supply a want under which the English army then suffered, by giving some instructions in matters connected with their respective arts to officers and men who served in the Artillery and in the Engineers. Its beginnings were of the humblest imaginable order. A single room in a house at Woolwich, where the Board of Ordnance used occasionally to assemble, was set apart by Government as a hall of study; and two masters were appointed to give lectures by rotation, during four consecutive hours, in three days of every week. At first only the officers of the single battalion composing the English Artillery and of the corps of Engineers were required to attend. By and by the room was thrown open to the non-commissioned officers and privates also, and eventually the cadets, of whom five were supposed to be on the strength of each company of Artillery, repaired thither in like manner. But the cadets being the sons of the officers of the corps, as they neither dressed in uniform, nor were under any military control, proved very difficult to manage; and the difficulty led to a great change as well in their condition as in that of the Academy itself.

In the year 1744 the cadets were, for the first time, clothed in uniform, and collected into a distinct company. Two officers, with a drum-major, undertook the management of them; and the arrangement worked, or was supposed to work, so satisfactorily, that by little and little, as the regiment enlarged itself, the numbers composing the Cadet Company were increased also. In 1782 they had grown from twenty to sixty; in 1798 to a hundred; after which steps were taken to lodge and board, as well as to educate and drill them, apart from the residences of their fathers. Hence, after trying for a while to accommodate some in a separate barrack, while others were billeted on private persons at a payment of 2s. a day per head, the pile which now attracts the attention of the passer-by on Woolwich Common was erected. And by the addition of a lieutenant-governor, and a whole host of officers and professors, it grew into the sort of establishment which is familiar to most of us. In 1806 the staff of officers and teachers appointed to the Cadet Company consisted of—

1. Lieutenant-Governor; 2. Inspector; 3. Professor of Mathematics; 4. Professor of Fortification; 5. Mathematical Master; 6. Arithmetical do.; 7. French do.; 8. Fortification do.; 9. Landscape-drawing do.; 10. Figure-drawing do.; 11. Second French do.; 12. Fencing do.; 13. Dancing do.; 14. First Modeller; 15. Second do.; 16. Clerk.

In 1829 the fencing and dancing masters were discontinued, and a chemical lecturer appointed. In 1836 three new masters were added; and in 1857 the staff stood thus :

Military.—A Governor; one Second Captain, commanding; one do. for Practical Class; four First-Lieutenants; one Quartermaster; one Staff-Sergeant; seven Drill-Sergeants; one Paymaster's Clerk; one Assistant do.; Servants.

Civil or Educational.—A Chaplain; Inspector—a Lieut.-Colonel of Artillery; Assistant do.—Major, R. E.; Professor of Fortification—Lieut.-Col. R. E.; two Assistants—Second Captains; Professor of Mathematics; seven Mathematical Masters; Master of Descriptive Geometry; Master for Geometrical Drawing; Drawing-Master for Landscape; Second do.; Master for Military Plan-Drawing—Brevet-Major, R. A.; Instructor in Surveying and Field Works—Captain, R. E.; Assistant do.—Captain, R. A.; Instructor in Practical Artillery—Second Captain, R. A.; Assistant do.—Second Captain, R. A.; four French Masters; four

German do.; Master for History and Geography; Lecturer in Chemistry; Assistant to do.; Lecturer in Geology and Mineralogy; Lecturer in Practical Mechanics, Machinery, and Metallurgy; Lecturer in Astronomy and Natural Philosophy; Clerk; First Assistant do.—a Sergeant; Second do.—Bombardier; one Drill-Sergeant—Practical Class; Modeller, Modelling Smith, Servants, &c.

Admittance to the Academy was, till very lately, obtained only on the nomination of the Master-General of the Ordnance. There was a preliminary examination, it is true; but this all except the dullest might calculate on passing, and the ages of entrance ranged between fourteen and sixteen. In 1835 the minimum age was raised to fifteen, the maximum to seventeen; while candidates were called up to compete for admission in the proportion of four youths for every three vacancies. The arrangement did not avail to produce any radical change in the spirit of the institution. The preliminary examination still proved to be a "pass," and no more; and so it continued till those political views obtained the ascendant which abolished altogether the office of Master-General and Board of Ordnance, and gave us in their place a Secretary of State for the War Department.

Occasions had arisen, even under the old regime, when young men were permitted to enter the service of the Artillery under what may be called exceptional conditions. During the pressure of the great war of the French Revolution, the demand for officers became at one time so urgent, that it was found necessary to dispense with a regular academical education, and to give commissions to candidates who were pronounced by competent examiners sufficiently conversant with mathematics and physical science to enter upon the practical duties of their profession. Lord Panmure, taking advantage of the precedent thus furnished, threw open Artillery commissions in 1855, and has continued ever since to treat admission into the Royal Military Academy as a prize for which the youth of the United Kingdom may freely compete.

The subjects of study to be pursued in the Royal Military Academy at Woolwich, not less than the mode of dealing with them, and the text-books to be used, have hitherto been prescribed to the most minute particular by regulation. They embrace Mathematics, Fortification, Descriptive Geometry, French, German, Plan-Drawing, Geometrical Drawing, Landscape Drawing, History and Geography; to which, during his continuance in what are called the "theoretical classes," the attention of the cadet is confined. When he enters the "practical class," the student is instructed, over and above, in Practical Artillery, Surveying and Field-Works, and attends lectures in Astronomy, Chemistry, Geology, and Mineralogy. As many as five years may be spent by a young man in going over this course—viz., four years in the "theoretical," and one year in the "practical" class—though the average period of actual residence does not appear to exceed two years and a half or three years. There are periodical examinations at the end of every half-year, the second of which, by its results, determines whether the young man shall be allowed to go on to a commission, or be removed from the Academy.

The moral tone of this military college has never, we regret to say, been of a very high order. Excellent men have been at the head of it, and the ability of the professors and teachers appointed to instruct admits of no question. Yet few right-minded officers look back upon the years spent in the cadet barracks except with disgust. It is not very difficult to account for the circumstance. Long after Continental nations had seen the absurdity of pressing upon boys the sort of training which belongs to men, we refused to be guided by their experience, and persisted, both at Woolwich and elsewhere, in our endeavor to accomplish an impossibility. "Boys of fourteen, fifteen, and sixteen," says a very high authority on this subject, "require much personal supervision in order to form their characters, which young officers, very often appointed without any sufficient knowledge of their tempers and habits, cannot be expected to bestow. Such officers may indeed be able to superintend drill, but not moral training. Rarely do they draw the cadets towards them, and become their advisers; more frequently repel them by a harsh dictatorial manner, the cadet being in their eyes a soldier. There has been also, during all the time I have known the Academy, great inconsistency in treating the cadets. Honor is constantly

talked of, and yet doubts as to their truthfulness are not unfrequently expressed. I have heard even the lie given in rough and emphatic terms. Confidence is professedly placed, and yet offences are found out in a way that shows that no confidence existed. Hence a contest arises between the officer and cadet, and the latter becomes tricky and disingenuous."

In these emphatic words Colonel Portlock has struck at the root of most of the evil which has long been felt, and heretofore combated without success, in the Royal Military Academy at Woolwich. Whatever is wanting in the morale of that establishment, it owes to the original sin of its constitution. We know how to deal with boys so long as we recognize their boyhood, even while appealing to the point of honor among them. But we no sooner dress them up in uniform, and affect to treat them as soldiers, than we lose all moral control over them. They smoke, drink, swear, and fall into other vices, not because they are overcome by any irresistible temptation, but because they look upon such acts as tokens of manhood. And the corporals, who report readily enough for insubordination, and the officers, who punish for what they call military offences, take little heed of worse things; partly because, in a military point of view, they are scarcely criminal; partly because, not being regarded as such, they are seldom brought under the notice of the superior authorities. How a seminary so conducted and so managed should have given to the Artillery and Engineers a body of officers distinguished, as those of both arms unquestionably are for talent, intelligence, and gentlemanly bearing, would be inexplicable, were not the fact well known, that one of the first lessons taught to the young lieutenant, after quitting the Academy, is to throw off the habits which he had contracted there, and to adopt the high moral tone and excellent habits of his regiment.

It was partly with a view to provide a palliative for this admitted evil, partly to encourage in our young Artillery officers the habit of sustained study, that they were required, by a recent regulation, "to place themselves under the orders of a director of studies for half a year after obtaining their commissions. Meanwhile cadets who are appointed to the Engineers proceed to the training-school for that arm at Chatham; where they go through a somewhat careful course of surveying, and are instructed less elaborately in architecture, civil as well as military, and in mining, sapping, pontooning, and so forth. According to the report of the Commissioners, it does not appear that they reach their new field of instruction over and above well prepared to make the most of it. Indeed, the whole of the Woolwich system is by these gentlemen condemned in terms as decided as is consistent with good breeding.

II. It was not till the year 1804 that the propriety of training young men in ever so slight a degree for the service of the infantry and cavalry, seems to have occurred to any statesman or soldier in this country. Appointments to both arms took place for a time by purchase only, and by and by, when the numbers of the rank and file increased, through the weight of influence, personal, political, or social. Moreover, when the pressure of the great war was at its height, a third door of entrance to military rank was opened, and ensigncies and captaincies, and even lieutenant-colonelcies, became the prize of private gentlemen who were able to bring certain fixed contingents of able-bodied men under the royal standard. So far as the candidates for commissions themselves were concerned, however, the same even-handed justice was meted out to all. Nobody took the trouble to inquire whether the candidates were qualified morally, intellectually, or physically. He might be a pimp and blockhead, or lame, or deaf, or blind; but so long as his patron had the ear of the Government, or the men whom he brought with him were able to pass muster, his commission, whatever it might be, was secure.

The Military College at Sandhurst consisted at first, as it still consists, of two departments—one, called the Junior Department, for cadets—the other, the Senior Department, for officers desirous of qualifying for the Staff. But it had, in its original constitution, this marked advantage over the arrangement which has since been effected, that whereas now cadets and officers occupy portions of the same range of buildings, and come under the instruc-

tion of the same professors, they were, in 1804 placed, the one at Marlow, the other at Highwickam—each class of students having its own teachers, though both were subject to the control and management of the same military administration.

As first constituted, the junior department afforded both an asylum and a place of education for the sons of officers exclusively. Youths once admitted ceased to be a burden to their friends, except for the necessary expenses of travelling; they were housed, clothed, and educated at the public expense. But no sooner was the great war ended than Parliament began to slacken in its gratitude to the army, and by little and little the grants for military education fell off, till in the end they ceased altogether. As a necessary consequence, the numbers of persons seeking education at the Military College fell off in like manner. And now the junior department exhibits a muster-roll of 180 cadets only, while the strength of the senior department has dwindled to nine individuals. To be sure, other causes than the withdrawal of public support from the institution have operated to produce this latter result. Whatever it might have been forty years ago, the senior department at Sandhurst is certainly no Staff school now. Indeed, the only science effectively taught there seems to be mathematics; and it is a curious fact, that though the army abounds with officers who have passed through that school, and taken high honors, the instances are rare in which Staff appointments have fallen to the lot of any of them.

Lads are admitted into the junior department at Sandhurst between the ages of thirteen and fifteen. The preliminary examination is of the most trivial kind, and the instruction communicated is, for half the course, that of a common school not of the highest order. No doubt each youth may, if he be disposed, master more than the elements of a good deal of science; for over and above physical geography and history, instruction is given in practical astronomy, dynamics, and statics, practical mechanics, co-ordinate geometry, the differential and integral calculus, trigonometry and mensuration, Euclid's Geometry, attack and defence of fortresses, practical field-fortification, course of military surveying, the Latin, French, and German languages. Unfortunately, however, there is no compulsion to study, nor any inducement, unless the youth aspire to win for himself a commission without purchase.

III. The Hon. East India Company's College at Addiscombe approaches nearer in its constitution and objects to what a military school ought to be, than any other of which we can boast in this country. It came into existence in 1818, previously to which date the Directors were in the habit of sending to Woolwich, for instruction, youths to whom they had given cadetships in the Company's Artillery and Engineers. When first founded, it was intended as a place of training exclusively for these young gentlemen; but the benefits derived from it became so obvious and so great that the Court of Directors gradually enlarged its views, and now young men are educated at Addiscombe not only for the Company's Artillery and Engineers, but for their infantry also. And herein it is that the Directors have mixed up evil with good. They consider an Engineer cadetship as their great prize, and next to that a cadetship of Artillery; and they select for these appointments, not the youths who may have exhibited special talents for either arm, but the best men, or the men reported as generally best, of their batch. The consequence is, that to the infantry—for good service in which talent is as much required as for either the Artillery or Engineers—the idlers of the College are appointed, while many a clever lad, who would have shone as an infantry officer, becomes an indifferent engineer or gunner, simply because he has been posted to an arm for the practical operation of which he has no genius.

In all other respects the Military School at Addiscombe may be fairly said to surpass both Woolwich and Sandhurst. In the first place, youths enter there almost invariably at a more mature age. Though eligible for admission after completing their fifteenth year, they seldom, if ever, come up for examination till after they have turned seventeen. In the next place, the entrance examination is more severe than either at Woolwich or Sandhurst:

and in the third and last place—and this is the most important condition of the whole—cadets must complete their course at Addiscombe in two years, unless for special reasons, such as sickness, they be allowed to prolong their stay one half-year more. Now, lads may linger on at Woolwich four, and even five years, gaining this remarkable advantage from their stupidity, that when forced to compete at last for choice between Artillery and Engineers, they compete with youths who may have had but two years' training. And at Sandhurst, the course which nominally covers four years, may, if the youth have interest at headquarters, be completed, as far as his appointment to a commission completes it, in four months.

The general education given at Addiscombe is certainly not inferior to that which the cadets receive either at Woolwich or at Sandhurst. It embraces, indeed, almost entirely the same subjects which are set down in the curriculum of the others—including lectures in geology, chemistry, and artillery. But it undeniably falls short in specialties. Hence, after completing his course at Addiscombe, the Company's cadet intended for the Engineers proceeds to Chatham, where, side by side with young men from Woolwich, he receives practical instruction in his art. For the Artillery cadet, on the other hand, there is no practical school. Like his comrade intended for the service of the Infantry, he proceeds at once from Addiscombe to India, and learns there how to turn to account the theoretical lessons which have been communicated to him at home.

Another distinction deserves to be noted between the constitution of the school of Addiscombe, and that as well of the Royal Military College as of the Royal Military Academy: Though all alike put from them the eleemosynary element, at Addiscombe alone is strict impartiality in the matter of payments observed. The youth who enters there, whether he be the son of an earl or of a subaltern's widow, must be provided with his £100 a year, besides about £25 more to cover the cost of books, instruments, and uniforms. Both at Woolwich and Sandhurst there is a graduated scale, which exacts more from a general officer than from a subaltern, and more from a civilian than from either. The orphan of an officer dying in poor circumstances is admitted into Woolwich on payment of £20 a year. He pays for similar privileges at Sandhurst £40. The son of a gentleman in civil life pays in both cases £125, a sum more than necessary to cover the expenses of his own board and education, but which is exacted in order that there may be a surplus out of which the deficiencies occasioned by the payments of the sons of officers shall be made good.

PAUPER CHILDREN.—The number of poor children between the ages of three and fifteen, in England and Wales, on July 1, 1856, who were then attending day schools at the cost of their parents or relatives, was 58,243; at the cost of the poor-rates 3,986; at the cost of other parties, comprehending charity and free schools, 39,857; total 102,086. The total number of children not attending any day school at the same period was 53,434. The number of children at work was then 35,827, of whom 10 were between three and four, and 9 between four and five years of age, after which the number for each year of age increases rapidly.

SCHOOLS IN RURAL DISTRICTS.—Under the Minute of the Board of Education of April, 1853, for promoting voluntary assessments towards building schools in places not incorporated, nor containing more than 5,000 inhabitants, there have been established (up to December 31, 1856,) 351 schools at a total cost of £211,502, of which £116,191 were raised by local rates, £17,142 by subscriptions, and £78,169 were contributed from the parliamentary grant.

WORKHOUSE SCHOOLS.—In the half-year ending Lady-day, 1856, the average number of children attending workhouse and district schools was 37,814, of whom 19,114 were boys, and 18,700 girls; 9,804 boys and 10,376 girls were under 10 years of age, and 9,210 boys and 8,324 girls were above that age.

EDUCATIONAL CONFERENCE.

Early in 1857, at the suggestion of the Rev. Canon Moseley, of Bristol, an Educational Conference was projected :—(1.) To ascertain the extent of the evil of the insufficient school attendance of the children of the working classes ; and (2.) To consider the question of remedy. To admit of full latitude of suggestion and discussion, it was determined to adopt a course of proceeding which had proved eminently successful at the Bristol meeting of the National Reformatory Union,—viz., to inaugurate the proceedings by a public meeting ; then to employ a day in the reading and discussion of papers in sections (on the plan of the British Association) ; and to wind up with another public meeting, at which the results of the proceedings of the sections should be discussed, and resolutions, founded thereon, submitted and decided upon.

His Royal Highness the Prince Consort, with the deep interest which he always shows in matters of social improvement, graciously consented to be nominated President of the Conference.

The Conference was accordingly held on the 22nd, 23rd, and 24th of June, 1857. His Royal Highness, in introducing the business, spoke as follows :—

Gentlemen, we have met to-day in the sacred cause of education—of national education. This word, which means no less than the moral and intellectual development of the rising generation, and therefore the national welfare, is well calculated to engross our minds, and opens a question worthy of a nation's deepest interest and most anxious consideration. Gentlemen, the nation is alive to its importance, and our presence here to-day gives further evidence, if such evidence were needed, of its anxiety to give it that consideration. Looking to former times, we find that our forefathers, with their wonted piety and paternal care, had established a system of national education based upon the parish organization, and forming part of parish life, which met the wants of their day, and had in it a certain unity and completeness which we may well envy at the present moment. But in the progress of time our wants have outstripped that system, and the condition of the country has so completely changed, even within these last fifty years, that the old parochial division is no longer adequate for the present population, which has increased, during that period, in England and Wales, from nine millions to eighteen millions in round numbers, and where there formerly existed comparatively small towns and villages, we now see mighty cities like Liverpool, Manchester, Hull, Leeds, Birmingham, and others, with their hundreds of thousands springing up almost as it were by enchantment : London having increased to nearly two and a half millions of souls, and the factory district of Lancashire alone having aggregated a population of nearly three millions within a radius of thirty miles. This change could not escape the watchful eye of a patriotic public ; but how to provide the means of satisfying the new wants could not be a matter of easy solution.

While zeal for the public good, a fervent religious spirit, and true philanthropy are qualities eminently distinguishing our countrymen, the love of liberty, and an aversion to being controlled by the power of the State in matters nearest to their hearts, are feelings which will always most powerfully influence them in action. Thus the common object has been contemplated from the most different points of view, and pursued upon often antagonistic principles. Some have sought the aid of government, others that of the church to which they belong ; some have declared it to be the duty of the State to provide elementary instruction for the people at large ; others have seen in State interference a check to the spontaneous exertions of the people themselves, and an interference with self-government. Some, again, have advocated a plan of compulsory education, based upon local self-government, and others the voluntary system in its widest development. While these have been some of the political subjects of difference, those in

the religious field have not been less marked and potent. We find on the one hand the wish to see secular and religious instruction separated, and the former recognized as an innate and inherent right to which each member of society has a claim, and which ought not to be denied to him if he refuses to take along with it the inculcation of a particular dogma to which he objects as unsound; while we see on the other hand the doctrine asserted that no education can be sound which does not rest on religious instruction, and that religious truth is too sacred to be modified and tampered with, even in the minutest deductions, for the sake of procuring a general agreement. (Cheers.) Gentlemen, if these differences were to have been discussed here to-day, I should not have been able to respond to your invitation to take the chair, as I should have thought it inconsistent with the position which I occupy, and with the duty which I owe to the Queen and the country at large. (Hear, hear.) I see those here before me who have taken a leading part in these important discussions, and I am happy to meet them upon a neutral ground—(loud cheers)—happy to find that there is a neutral ground upon which their varied talents and abilities can be brought to bear in communion upon the common object, and proud and grateful to them that they should have allowed me to preside over them for the purpose of working together in the common vineyard. (Cheers) I feel certain that the greatest benefit must arise to the cause we have all so much at heart by the mere free exchange of your thoughts and various experience.

You may well be proud, gentlemen, of the results hitherto achieved by your moral efforts, and may point to the past, that since the beginning of the century, while the population has doubled itself, the number of schools, both public and private, has been multiplied fourteen times. In 1801, there were in England and Wales—of public schools, 2,876; of private schools, 487; making a total of 3,363. In 1851 (the year of the census), there were in England and Wales—of public schools, 15,518; of private schools, 30,524; making a total of 46,042; giving instruction in all to 2,144,378 scholars, of whom 1,422,982 belong to the public schools, and 721,396 to the private schools. The rate of progress is further illustrated by statistics, which show that in 1818 the proportion of day scholars to the population was one in seventeen; in 1833, one in eleven; and in 1851, one in eight. (Hear.) These are great results, although I hope they may only be received as installments of what has yet to be done. But what must be your feelings when you reflect upon the fact, the inquiry into which has brought us together, that this great boon thus obtained for the mass of the people, and which is freely offered to them, should have been only partially accepted, and upon the whole, so insufficiently applied, as to render its use almost valueless? (Hear, hear.)

We are told that the total population in England and Wales of children between the ages of three and fifteen, being estimated at 4,908,696, only 2,046,848 attend school at all, while 2,861,848 receive no instruction whatever. At the same time, an analysis of the scholars, with reference to the time allowed for their school tuition, shows that forty-two per cent. of them have been at school less than one year; twenty-two per cent. during one year; fifteen per cent., two years; nine per cent., three years; five per cent., four years; four per cent., five years. Therefore, out of the two millions of scholars alluded to, more than one and a half million remain only two years at school. I leave it to you to judge what the results of such an education can be. I find further, that of these two millions of children attending school, only about 600,000 are above the age of nine. Gentlemen, these are startling facts, which render it evident that no extension of the means of education will be of any avail unless this evil, which lies at the root of the whole question, be removed, and that it is high time that the country should become thoroughly awake to its existence and prepared to meet it energetically. To impress this upon the public mind is the object of our conference.

Public opinion is the powerful lever which in these days moves a people for good and for evil, and to public opinion we must, therefore, appeal if we would achieve any lasting and beneficial result. You, gentlemen, will richly add to the services which you have already rendered to the noble cause, if

you will prepare public opinion by your inquiry into this state of things, and by discussing in your sections the causes of it, as well as the remedies which may be within your reach. This will be no easy matter, but even if your labors should not result in the adoption of any immediate practical steps, you will have done great good in preparing for them. It will probably happen that in this instance, as in most others, the cause which produces the evil will be more easily detected than its remedy, and yet a just appreciation of the former must ever be the first and essential condition for the discovery of the latter. You will probably trace the cause to our social condition, perhaps to a state of ignorance and lethargic indifference on the subject among the parents generally; but the root of the evil will, I suspect, also be found to extend into that field on which the political economist exercises his activity—I mean the labor market—demand and supply. (Hear, hear.) To dissipate that ignorance, and rouse from that lethargy, may be difficult; but, with the united and earnest efforts of all who are the friends of the working classes, it ought, after all, to be only a question of time. What measures can be brought to bear upon the other root of the evil is a more delicate question, and will require the nicest care in handling, for there you cut into the very quick of the working man's condition. His children are not only his offspring, to be reared for a future independent position, but they constitute part of his productive power, and work with him for the staff of life. The daughters especially are the hand-maids of the house, the assistants of the mother, the nurses of the younger children, the aged, and the sick. To deprive the laboring family of their help would be almost to paralyze its domestic existence. (Hear, hear.) On the other hand, carefully collected statistics reveal to us the fact that, while almost 60,000 children, between the ages of three and fifteen, are absent from school, but known to be employed, no less than 2,200,000 are not at school, whose absence can not be traced to any ascertained employment, or other legitimate cause. You will have to work, then, upon the minds and hearts of the parents, to place before them the irreparable mischief which they inflict upon those who are intrusted to their care, by keeping them from the light of knowledge—to bring home to their conviction that it is their duty to exert themselves for their children's education, bearing in mind at the same time that it is not only their most sacred duty, but also their highest privilege. Unless they work with you, your work, our work, will be vain; but you will not fail, I feel sure, in obtaining their coöperation if you remind them of their duty to their God and Creator. (Hear, hear.)

Our Heavenly Father, in his boundless goodness, has so made his creatures that they should be happy, and in his wisdom has fitted his means to his ends, giving to all of them different qualities and faculties, in using and developing which they fulfill their destiny, and, running their uniform course according to his prescription, they find that happiness which he has intended for them. (Cheers.) Man alone is born into this world with faculties far nobler than the other creatures, reflecting the image of Him who has willed that there should be beings on-earth to know and worship Him, but endowed with the power of self-determination, having reason given him for his guide. He can develop his faculties, and obtain that happiness which is offered to him on earth to be completed hereafter in entire union with Him through the mercy of Christ. But he can also leave these faculties unimproved, and miss his mission on earth. He will then sink to the level of the lower animals, forfeit happiness, and live separate from his God, whom he did not know how to find. Gentlemen, I say man has no right to do this. He has no right to throw off the task which is laid upon him for his happiness. It is his duty to fulfill his mission to the utmost of his power; but it is our duty, the duty of those whom Providence has removed from this awful struggle, and placed beyond this fearful danger, manfully, unceasingly, and untiringly, to aid by advice, assistance, and example, the great bulk of the people, who, without such aid, must almost inevitably succumb to the difficulty of their task. They will not cast from them any aiding hand, and the Almighty will bless the labors of those who work in his cause. (His Royal Highness sat down amidst loud applause.)

At the close of this address, the Rev. J. G. Lonsdale, of the National Society, read a report, from which we take a single extract :—

There has been expended in Great Britain, since the year 1839, through local and voluntary agencies, aided by the State, a sum of more than £2,000,000 (about \$10,000,000), on the erection of new school buildings, affording the means of education to more than half a million more children than could, before that time, have been educated. A sum exceeding one million and a quarter is moreover annually expended in the support of schools for the working classes. Beyond these amounts large sums have been expended in building and maintaining schools by purely private charity, of which no accurate returns have been furnished. This expenditure of money from private and from public sources, represents, however, but inadequately the interest taken by the people of England in the education of the working classes; for in almost every locality where schools have been established, there are to be found persons who not only contribute money liberally to their support, but devote also to them a large portion of their time and attention. The system of education, based on local sympathies and voluntary agencies, which has thus been provided by the people of England for its working classes, manifests, moreover, at the present time, no signs of exhaustion or decay; on the contrary, there never was, perhaps, a time when the opinions prevalent among the upper and middle classes of society were more generally favorable to it, or when those classes were prepared to make greater sacrifices for its extension and development. But these are not the only parties concerned. The concurrence of the working classes, who are to receive it, is equally necessary.

After addresses by Lord Brougham, the Bishop of Oxford, and Rev. Canon Moseley, the Conference was resolved into five sections, viz. :—

SECTION A.—*Chairman*: THE LORD BISHOP OF OXFORD. *Secretary*: THE REV. B. WATKINS.—To inquire into the fact of the alleged early removal of Children from School in the Agricultural, Manufacturing, and Mining Districts of England, Scotland, and Wales; and to inquire into the causes of such early removal and its results.

SECTION B.—*Chairman*: RT. HON. WM. COWPER, M.P. *Secretary*: REV. J. D. GLENNIE, Jr.—To institute similar inquiries in respect to the Education of Foreign Countries.

SECTION C.—*Chairman*: SIR JAMES KAY SHUTTLEWORTH, Bart. *Secretary*: REV. NASH STEPHENSON.—To consider the expedients which have been proposed for keeping the Children of the "Working Classes" longer at school; under the heads of—*first*, "CERTIFICATE SCHEMES." *Second*, "PRIZE SCHEMES."

SECTION D.—*Chairman*: THE VERY REV. THE DEAN OF SALISBURY. *Secretary*: JOHN THACKRAY BUNCE, Esq.—To inquire into the merits of such other expedients as shall be proposed for the consideration of the Conference, and particularly those known as "HALF-TIME SCHEMES," being schemes for the occupation of children half their time at school, and half at labor; the same arrangement being proposed to be made by parents and employers *voluntarily*, as under the provisions of the Factory Bill is made (in respect to certain children) *compulsorily*.

SECTION E.—Industrial Element in Education.

A final meeting was held on the 24th, at which the Earl of Granville presided.

The proceedings of the Conference have been published in a volume of three hundred and eighty-three pages, of which the following is the table of contents :—

I.—PAPERS CHIEFLY ON THE FACT OF THE NON-ATTENDANCE AND EARLY REMOVAL OF CHILDREN FROM SCHOOL IN THIS COUNTRY.

Rev. M. Mitchell, Her Majesty's Inspector of Schools.—"On the Evidence afforded by the Reports of Her Majesty's Inspectors as to the early Age at which Children are taken from School."

Mr. Flint, late Assistant Diocesan Inspector in Derbyshire, and Organizing Master of the National Society.—"The same Subject, with special Reference to Schools not under Government Inspection."

W. H. Hyett, Esq., F.R.S., of Painswick, Gloucestershire.—"The Educational Statistics of the last Census, in so far as they bear on Children at School, at Work, and at neither : with the Practical Conclusions to which they lead."

Edward Baines, Esq., of Leeds.—"On our past Educational Improvement, and the Means of future Progress, especially in lengthening the Term of Education."

J. D. Goodman, Esq., of the Birmingham Educational Association.—"On the Results of Returns from Birmingham, showing the Degree in which Labor and Idleness respectively interfere with Education."

Rev. S. Earnshaw.—"Upon the State of Education among the Working Classes of the Parish of Sheffield."

II.—PAPERS ON THE ATTENDANCE, ETC., AT SCHOOLS ON THE CONTINENT.

Joseph Kay, Esq.—"On the Comparative Condition of Children in English and Foreign Towns."

M. Eugène Rendu, Paris.—"L'Ecole primaire et le Travail professionnel."

Rev. Dr. Matter, Strasburg, Honorary Inspector-General of Public Instruction in France.—"De l'Education des Enfants des Classes Ouvrières, et spécialement de leur Retrait prématuré de l'Ecole."

Captain Boscawen Ibbotson, F.R.S.—"The Educational System in Germany, and its Advantages."

III.—PAPERS CHIEFLY ON PRIZE AND CERTIFICATE CLAIMS.

Rev. Nash Stephenson, Shirley, Birmingham, Secretary to the Section.—"On the Nature and Administrative Machinery of Prize Schemes."

Rev. H. G. Robinson, Training School, York.—"Suggestions of Plans for retaining the Attendance at School to a more advanced Age."

Seymour Tremenheere, Esq.—"On Certificate and Prize Schemes, with Suggestions for their Improvement and Extension."

Rev. J. P. Norris, Her Majesty's Inspector of Schools.—"On the Working of the Staffordshire Certificate and Registration Scheme, and on the best method for its Extension to all Schools."

IV.—PAPERS ON HALF-TIME SCHEMES, AND EVENING AND FACTORY SCHOOLS.

Alexander Redgrave, Esq., Inspector of Factories.—"On the Operation of the Half-time Scheme in Factories."

Rev. W. J. Kennedy, Her Majesty's Inspector of Schools.—"On the Principles to be observed in promoting School Attendance."

J. Fawcener Winfield, Esq., Birmingham.—"On Factory Schools."

Rev. C. H. Bromby, Cheltenham Training College.—"On Voluntary Half-time Schemes."

Edward Akroyd, Esq., M.P. for Huddersfield.—"On the Plan of Juvenile and Adult Education adopted in the Writer's Manufactory."

John Thackray Bunce, Esq., Birmingham.—"On Feeding and Evening Schools, the former as a Means of prolonging, and the latter as a Means of resuming, Education."

V.—PAPERS NOT FALLING UNDER THE ABOVE HEADS.

Thomas Hare, Esq., Charity Commissioner.—"On Endowments created for the Apprenticeship of Children, and on the Application of such Funds by way of

Premiums or Rewards, as an Encouragement in the Education of the Poor, and for promoting their longer Continuance at School; and on the Employment of other Charities founded for undefined Purposes in Aid of the same Objects."

Jellinger C. Symons, Esq., Inspector of Schools.—"On Industrial Training as an Adjunct to School Teaching."

Miss Mary Carpenter.—"Juvenile Delinquency in its Relation to the Educational Movement."

W. L. Sargant, Esq., Birmingham.—"On the proposed Middle Class Examinations as a means of Stimulating the Education of the Lower Classes."

Rev. J. B. Owen, London.—"On indirect compulsory Schooling."

Rev. Canon Girdlestone, Bristol.—"Will an Improvement in the Dwellings of the Laboring Classes have any Influence upon the Value which they attach to the Education of their Children, and can any Use be made of the Electoral Franchise in the same Direction?"

NATIONAL ASSOCIATION FOR THE PROMOTION OF SOCIAL SCIENCE.

This new association was inaugurated under the presidency of Lord Brougham, and in the presence of a large number of eminent men, at Birmingham, on Monday, October 12, 1857, and continued in session—meeting in five sections during the day, and in general meeting in the evening—through the week. In his opening address, Lord Brougham dwelt on the advantages of association in efforts to promote social improvement, and illustrated his positions by the success of the Society for the Diffusion of Useful Knowledge, the Scientific Association, and the Law Amendment Society, and concluded with this noble peroration:—

Nor let the importance be lightly considered of diffusing among the various classes of the community the knowledge of the subjects to which our inquiries will be directed, and which, though all are alike interested in them, yet are by no means sufficiently understood, or estimated at their just value by the bulk of mankind. The slowness with which the humbler classes of our fellow citizens improve themselves in different branches of science, and, indeed, their reluctance to undergo the labor of studying them, has been often lamented, but without exciting the least surprise in those who duly considered the circumstances of the case. In the attempts that have been made for so many years to overcome such obstacles, and effect the more general diffusion of knowledge, the necessity has been too much overlooked of beginning with the upper classes of society. When these are well imbued with the taste for acquiring knowledge, they have a natural tendency to make those in other ranks partake of the same great benefits. It is not that the whole or even the greater part of one class will become educators, but some will be inspired with the desire, not more benevolent than wise, of bearing the torch to the regions still without those lights which they themselves enjoy. Thus is sound and useful instruction propagated by a sure and natural process. Nor is it more certain that the various layers of the great social structure are bound together by the mighty clamp of justice administered to all, and binding on all from the broad basis of the people upward, through the middle classes and the aristocracy to the Crown itself, on the narrow summit, than it is certain that knowledge pervades the vast pyramid by successively imbuing and disposing the couches of which it is formed. Knowledge thus diffused, but especially knowledge of social interests and rights and duties, even more than the firm and temperate distribution of justice itself, possesses the great, the cardinal virtue of insuring the stability of the social system. It is, to use the language of the day, in the very greatest degree Conservative, and in the highest sense of the phrase. But this diffusion has another and most happy tendency,—it leads to the improvement of the system, because it inspires all classes with the desire of promoting measures shown to be safe as well as effectual—in a word, wholesome reforms. Nor can anything be more ground-

less than the fears of progress entertained by some, affected by more. It is, in truth, ignorance continued, not knowledge advanced, which they have to fear, nay, which, when we come to an explanation with them, they really do fear. Knowledge is power; but its natural ally is the friendly power of virtue, with which its dominion is willingly shared. This is above all true of the knowledge which we shall seek to improve and to impart. The supreme Disposer and Preserver, who "decketh himself with light as it were a garment, but defendeth all the earth as it were with a shield," has provided that the false steps into which we are led by the twilight will be prevented or retraced when the day dawns. If any one is still alarmed at the force which the people seem to gain when their faculties are expanded by cultivation, let him recollect that this happy process can not be continued and further knowledge acquired without a new security being given by that very increase of knowledge against the delusions and the excesses from which the peace of the community has most to fear. We are reminded by the subject, as well as by the place where we are assembled, of the exquisite invention, the happiest perhaps in the history of science, which makes the power of steam provide by its expansion for its own control, the one very nicely proportioned to the other. Knowledge is thus both power and safety—it exercises this self-control; it gives to the mighty social engine both the movement and the governor:—

"Unmeasured strength with perfect art combined,
Awe, serves, amazes, and protects mankind."

But it is not safety alone that we expect; we fondly hope for more; we confidently look higher. Undaunted by the resistance of adversaries, undismayed by the obstructions which the bias of prejudice, or the conflicts of faction, or the strife of controversy, raise to impede social progress or to retard, its friends lift up their view to the loftier heights where religious and moral truth sheds an eternal light. Piercing the darkness of ignorance that shrouds one region, the mists of doubt that obscure, the storms of passion that vex, the instinct of selfishness that chills another, the eye loves to repose on that bright summit where the same beams dispel all doubt from our opinions toward God, and warm our benevolent feelings toward man:—

"As some tall cliff that lifts its awful form,
Swells from the vale, and midway leaves the storm;
Though round its breast the rolling clouds are spread,
Eternal sunshine settles on its head."

On Tuesday, October 13th, the first separate meeting of the several sections, were opened by appropriate addresses, viz.:—that of *Jurisprudence and Law*, by Lord John Russell; that of *Education*, by Sir John Pakington; that of *Punishment and Reformation*, by Hon. M. D. Hill; that of *Public Health*, by Lord Stanley; and that of *Social Economy*, by Sir Benjamin Brodie. We give the order of proceedings for a single day.

ORDER OF PROCEEDINGS ON THURSDAY,

OCTOBER 15, 1857.—Commencing at Half-past Ten A.M.

FIRST DEPARTMENT.—*Jurisprudence and Amendment of the Law.*—(CORAM, LORD J. RUSSELL.)

1. Partnership Registration and Limitation of Liability—by Bristol Chamber of Commerce.
2. On the Recordation of the Law, for purposes of Promulgation, Administration, and Legislation—by Arthur Symonds, Esq.
3. The 17th Section of the Statute of Frauds—by G. W. Hastings, Esq.
4. Legal Education—by Andrew Edgar, Esq.
5. The Further Advancement of the Law—by W. Theobald, Esq.
6. Judicial Statistics—by Professor Levi.
7. Criminal and Accidental Poisoning: its Suppression and Prevention by Legislative Enactment—by Walter Wilson, Esq.
8. Comparative Jurisprudence.
9. Suggestions of a more Speedy, Frequent, and Economical Administration of the Criminal Law.
10. On the Expediency of Establishing a Free Law Conference in the Metropolis—by George Aldam, Esq.
11. Outlines of Jurisprudence: a Report upon Bankruptcy Law Amendment—from the Committee appointed on the 14th.

SECOND DEPARTMENT.—*Education.*—(CORAM, SIR J. PAKINGTON.)

I.—National Education :

1. Present aspects of the Education Question in the three great divisions of the Empire—by Professor Pillans.
2. School Inquiry in Swansea and the Neighborhood—by J. Jenkins, Esq.
3. Instruction to Adults in Evening Schools—by Rev. Dr. Miller.
4. The School and the Manufactory: both sides of the Question—by the Rev. Sydney Gedge.
5. The Difficulties in Promoting Rural Education—By the Rev. J. P. Hastings.
6. A proposal for a Public Examination of Boys upon leaving the Elementary School—by H. Seymour Tremenheere, Esq.
7. Moral Education of the Working Classes—by R. A. Slaney, Esq., M.P.
8. Juvenile Labor and Juvenile Education—by the Rev. W. Gower.
9. Physiology in Common Schools—by George Combe, Esq.
10. State of Education in the Neighborhood of Salford—by D. Chadwick, Esq.
11. Some of the Causes of the Defective Condition of National Education—by Mr. F. Talbot.
12. National Education—by W. W. Nash, Esq.

II.—Miscellaneous :

1. The Manuscript Treasures of this Country, and the best means of rendering them available for the purposes of Education—by F. Harris, Esq.
2. Schools of Design—by George Wallis, Esq.
3. Physiological Influences of certain Methods of Teaching—by R. Carter, Esq.
4. The Power of the Intellect as developed by Education in the business of Life—by A. F. Mayo, Esq.

THIRD DEPARTMENT.—*Punishment and Reformation.*—(CORAM, M. D. HILL, ESQ.)

1. On Prison Punishment—by Dr. E. Smith.
2. On Punishment and Crime—by the Rev. J. T. Burt.
3. On Punishment—by Captain Maconochie, R.N.
4. On the Reformatory and Refuge Union—by the Rev. H. J. Hatch
5. On the National Reformatory Union—by G. W. Hastings, Esq.
6. On Female Reformatories—by Miss Carpenter.
7. On the Restoration of the Criminal to Society—by J. W. Wrey, Esq.

FOURTH DEPARTMENT.—*Public Health.*—(CORAM, LORD STANLEY.)

1. On Public Vaccination—by Dr. Seaton.
2. On the Prolongation of Life in the Eighteenth Century—by Dr. Southwood Smith.
3. Study of Vital Statistics—by Dr. Headlam Greenhow.
4. Mortality of Birmingham—by Mr. Greenhead.
5. On Birmingham and Neighboring Towns, and their Improvement—by R. A. Slaney, Esq., M.P.
6. On Macclesfield—by Mr. May.
7. Adulteration of Food and Drugs—by Mr. Postgate.
8. Drainage of Towns—by Mr. Austin.
9. Drainage of Nine Towns—by Mr. Rawlinson.
10. Sewers of Birmingham—by Mr. Pigott Smith.
11. Tabular Circulation System—by Mr. F. O. Ward.
12. Central and Local Action—by Mr. Tom Taylor.
13. Health of Armies—by Mr. Rawlinson
14. Arsenical Poisonings by Paper Hangings—by Dr. Wade.
15. Sanitary State of Huddersfield—by Mr. Knaggs.
16. Composition of Towns—by Mr. Welton.
17. Rapid Increase of Town Populations—by Dr. Beddoe.

FIFTH DEPARTMENT.—*Social Economy.*—(CORAM, SIR BENJAMIN BRODIE.)

1. Income of the Kingdom—by Charles Bray, Esq.
2. Economic Advantages of Co-operation—by W. Holmes, Esq.
3. Intemperance—by A. Stenthall, Esq.
4. Prostitution—by W. Acton, Esq.
5. Strikes—by A. Edgar, Esq.
6. Early Closing—by J. Lilwall, Esq.
7. Self-supporting Dispensaries—by C. H. Bracebridge, Esq.
8. Baths and Wash Houses—by W. Hawes, Esq.

In the evening a Public Meeting, in support of the Reformatory and Industrial Schools Movement, supported by the National Reformatory Union, and the Reformatory and Refuge Union, will be held at the Town Hall, at half-past seven. The chair to be taken by the Right Hon. W. Cowper.

When we receive the volume of Proceedings and Papers, we will give extracts.

SCOTLAND.

The question of University Reform is now fairly up for discussion in the pamphlet, the daily press, the monthly magazine, and the quarterly review. In the last (Jan., 1858) number of *Blackwood*, as well as in the last number of the *Edinburgh Review*, the subject is ably handled. From the former we copy an account of the present state of the Universities, especially that of Edinburgh.

UNIVERSITY OF EDINBURGH.

In Scotland the words "University" and "College" are synonymous, and are used indiscriminately. Collegiate life, as it exists in the great establishments of England, is utterly unknown. The students do not live together, within bounds, but find their residences, according to their means, in the towns; and as they are for the most part divided into "Faculties," to which separate branches of study are assigned, they have little common intercourse, unless they are fellow-students in the same class. There are four Faculties—these being Arts, Divinity, Law, and Medicine—the two latter being wholly unconnected with the others. It is not required from the Students of Law or Medicine that they shall have previously passed through the Faculty of Arts, or even attended a limited number of the classes of which that Faculty consists. Each Faculty has the power of examining for their degrees, and these examinations are separately conducted; the degrees being nominally conferred by the whole University, but in reality granted by the Faculties. The Faculties of Law and Medicine are therefore strictly professional, and exist for the purpose of imparting to students special instruction in those branches alone; but we repeat that they have no connection whatever with the Faculty of Arts, the nature of which we shall presently explain. The Faculty of Divinity, however, is closely connected with the Faculty of Arts; for it is required that all students, before passing into the former Faculty, must have attended certain classes belonging to the latter—a wise provision, in so far as it goes, because it insures that every clergyman shall have received the advantages of a liberal education, though there may still be room for improvement. And here it is proper to explain that the rules enforced by the Free and United Presbyterian Churches for securing the education of their probationers are very nearly the same with those laid down by the established Church; and that, notwithstanding the various schisms which have afflicted Presbyterian Scotland, the Universities, owing to their unsectarian character, have retained the public confidence. No religious test was ever required from students; and none is now exacted from Professors, with the exception of those who are appointed to chairs of Theology.

It is not so easy to define the character of the Faculty of Arts as it exists in the University of Edinburgh. Nominally it is held to comprehend all the Professors who are not attached to Law, Medicine, or Divinity; but as an operative Faculty for determining degrees in Arts, it is much more limited. Thus, in order to qualify himself for the degree of B.A., the student must have attended the classes of Humanity (that is Latin), Greek, Mathematics, Logic, and Metaphysics, and Moral Philosophy. Before he can present himself for the degree of M.A., he must also undergo an examination in Natural Philosophy, and in Rhetoric and Belles Lettres. Hence, practically, the power of examining for degrees in arts is vested in seven Professors; although there are five others, those of Astronomy, History, Agriculture, Music, and Technology, who are held to belong to the Faculty of Arts, and who all have votes in the Senate. But there is another remarkable peculiarity, that attendance upon one class in the curriculum—that of Rhetoric—is not compulsory upon students who pass from Arts to Divinity, unless they offer themselves for the degree of M.A. As the Rhetoric class is the only one in which the arts of vernacular composition and delivery are systematically taught, this omission, which has the sanction of the Church, may appear a strange one; but the explanation probably is, that in the other Universities of Scot-

land the chair of Rhetoric is combined with that of Logic. None of the Presbyterian Churches require that those presenting themselves for ordination shall be Graduates in Arts.

Any one may become a member of the University by simply enrolling his name in the matriculation books, on payment of a trifling fee. He may then attend any class he pleases, by applying to the Professor for a ticket, which, in the Faculty of Arts, is limited to three guineas. Thus, supposing that he attends three classes during a winter session, reaching from the beginning of November to the end of April, his whole direct College fees do not exceed ten guineas; but more frequently, students restrict themselves to two classes in each session, in which case the expenses are diminished to seven. The number of those who graduate in arts is very small—for this reason, that such a degree confers no privilege whatever; it is a mere barren title. So soon as the student has passed through the curriculum, his connection with the University closes; and this is perhaps the most discouraging feature of Scottish collegiate education.

Until very recently, no entrance examination was made compulsory before matriculation or enrollment in any class; but three years ago the patrons of the University (that is, the Town Council) laid down a rule that there should be an entrance examination in the department of Greek, in so far as regarded the junior class. The immediate effect of that rule was to decrease the attendance; and it is understood to be now abandoned, if not formally rescinded; option being given to the students to take their examination after an attendance of three months.

The annual number of literary students, matriculated as such in the University of Edinburgh, is between five and six hundred, of whom but a small proportion go through the entire curriculum. Except for divinity students, and those who intend to become candidates for degrees, strict entrance to the classes, according to the form of the curriculum, is unnecessary; and, in consequence, a very large number of young men take two or three classes, as may suit their convenience or inclination, without proceeding any further. Also it is a common practice for gentlemen of fortune, officers of the East India Company's service, or others of literary taste, to matriculate for the sole purpose of attending the lectures of some distinguished Professor in the higher branches of philosophy, science, or letters. These are not students in the proper sense of the term, though they enrol themselves as such. Nevertheless, their attendance is a manifest advantage, as it is also a decided compliment to the University.

Next, as to the amount and nature of the work which the students are required to perform. This differs in kind according to the character of the class. In the three classes which rank first in the curriculum of Arts—Latin, Greek, and Mathematics—the business is conducted for the most part by teaching, not by lecturing. Each of the students is brought frequently, though not daily, under the eye of the Professor, and they are examined orally as well as through written exercises. In the other classes—Logic, Moral Philosophy, Natural Philosophy, and Rhetoric—the business is principally conducted by means of lectures; but, in addition, there are examinations upon the lectures, or upon some special subject prescribed for study, and also written exercises. In these latter classes, it almost invariably happens that a certain number of the students do not offer themselves for examination, and do not write the exercises. When this occurs they receive no certificates, beyond a simple one of attendance, at the close of the session; and of course they are not allowed to compete for class honors, which are eagerly coveted by arduous and intelligent students. For this there is no remedy. Once past school, there is an end of coercion; and even at school, coercion, if pushed too far, degenerates into positive cruelty. True is the adage that "though one man can lead a horse to the water, twenty can not force him to drink." The motive power lies with the Professor. If he can invest his subject with interest, and really attract the attention of the students, there is very little fear but that the greater part of them will obey his bidding, and exert themselves to become proficient in that special branch of knowledge or science which it is his duty to explain. If, on the contrary, he

is indolent, tiresome, or monotonous, they turn to something else, and few have the patience to extract profit from his long-winded dissertations.

A stranger, on first visiting Edinburgh, must necessarily be much surprised by the very motley aspect of the crowd which issues from the College gates when the bell tolls the hourly signal for the dismissal and gathering of the classes. Boyhood, adolescence, manhood, and even age, are there represented. Two generations are mingled together; for they may be counted from fourteen to forty. First, perhaps, a group of juniors, full of animal spirits and fun, charges down the steps. Then comes a knot of grave young men, evidently destined for the ministry, to whom education is a serious matter, for their future livelihood depends upon it, and, in the mean time, the resources of their friends, far away in Angus or Dumfries, have been taxed to give them the advantage of a course at the University. Then strides forth an unmistakable native of the north, older than the others, and with the marks of stern determination on his brow, though somewhat uncouth in appearance. That is a specimen of a class of whom Scotland has cause to be proud, and of whom she is sometimes even not sufficiently proud. For the man whom the stranger remarks there, has received no preliminary education which laxity itself could denominate classical. Born of obscure parents, in an exceedingly remote parish, and apparently destined to win his bread by manual labor, he has received, many years ago, the common elementary education of a Scottish peasant, and from that has passed to a handicraft. But something tells him, as he measures himself with his fellows, that he is intended for a higher career; and, accordingly, he has worked double-tides, saved, pinched, almost starved, throughout one or more summers, in order that he might be able, during the winter session, to attend the University classes.

The Tutorial system, as in force at the English Universities, was never part of the Scottish educational scheme. Obviously it could not be so—for this simple reason, that there are no endowments to support tutors independent of casual fees, and but few students who could afford to pay for extra-mural assistance.

At the close of every winter session, seven days are set apart for the examination of candidates who have passed through the curriculum of arts, one day being devoted to each subject in rotation. Papers prepared by the Professors, and containing such questions as they may consider most fit to test knowledge and acquirement, are delivered to the candidates when they enter the examination room; and they are required to write the answers in the presence and under the eye of the examiner, so that there is an effectual check against collusion or extraneous assistance. The answers, when returned, are carefully noted; and each Professor frames a list according to merit, by a system of marks, corresponding in value to the accuracy of each answer. When these lists are prepared, the Professors meet, and the numbers of the marks are counted. In this examination of lists, a certain number represents the minimum for a pass, and if, in any one of the seven examinations necessary for the degree of M.A., or of the five examinations necessary for the degree of B.A., a candidate is below that minimum, the degree is withheld. But there is a further test of acquirement; for the mark system is so constructed that a candidate may be above the minimum in each separate examination, and yet not be entitled to a degree, on account of his not having obtained the aggregate number of marks which are requisite for a pass. This method, which must appear complex when related, is really very simple in practice, and, we venture to think, very efficacious; since, while it requires from the candidate at least a respectable knowledge of every branch of learning upon which he is examined, it excludes him from a degree, if his knowledge with regard to some of them is not far higher than respectable.

UNITED STATES.

REFORMATORY INSTITUTIONS AND EDUCATION.

We have before us the "*Proceedings of the First Convention of Managers and Superintendents of Houses of Refuge and Reformatories in the United States, held in the City of New York, in May, 1857.*" This is a valuable contribution to our knowledge of American Reformatories, and opens up the subjects of improvement in this class of institutions, as well as in preventive agencies, for consideration in future conventions. Some of the points to be discussed are presented in the following communication from Dr. Brockett.

HON. H. BARNARD,

HARTFORD, *March 9th, 1858.*

Dear Sir:—With a view to elicit the results of the practical experience of one who has long been engaged in the Reformatory Institutions of Germany, I addressed, a few weeks since, a letter to Mr. G. C. Holls, now head master of the Orphan Farm School at Zelenople, Butler county, Pennsylvania, and formerly connected with the Rauhe Haus at Horn, and other Houses of Reform in Germany and Poland, proposing several inquiries on the subject. To this letter I have just received the following reply. Yours Truly,

L. P. BROCKETT.

ZELIENOPLE, *Buller Co., Pa., March 3d, 1858.*

Dear Sir:—Your communication dated Feb. 22d, in which you request me to answer certain interrogatories in reference to juvenile reform, has been duly received. If my experience in this great cause, which at the present time occupies the minds of all true friends of humanity, will, in any way, be serviceable to you and others, I most gladly give it as well as my yet imperfect knowledge of the English language, for which I ask your kind forbearance, will permit me.

As the questions which you ask, are of the *greatest* importance, touching the vital points in reference to Houses of Refuge and Schools of Reform, I think it necessary to state beforehand that it would be impossible, within the limits of a letter, to answer them satisfactorily to all possible inquiries which might be made in regard to them.

I shall, therefore, confine myself to the general features of my experience and observation, remarking, however, that I shall be happy, at any time, to give my views on particulars. Let me attempt to give answers to your several interrogatories in the order in which you put them.

Question. Which does your experience and observation lead you to prefer for Reformatory Institutions, the Family or the Congregated System?

Answer. From what I have been able to observe and to experience, within the last fourteen years, during which time, I have become acquainted with the practical working of the "Family System," in such institutions as the Rauhe Haus, Neuhof near Strasburg, Czarkow in Prussian Poland,—in which latter institution I was engaged as house father, I am prepared to say that I am decidedly in favor of the Family System, being convinced that it is the system by which Houses of Refuge, and all similar institutions of a preventive, correctional and reformatory character ought to be managed. The natural ground for the development of youthful life, is in the family. If we were able to trace back each case of degradation and crime to its original cause, we would find in almost all cases, it is the want of that kind, congenial, winning influence and dis-

cipline, which parental government alone affords. All the children which fill our Reformatory Institutions, have been more or less destitute of a family life, family relations, family discipline, as it ought to be according to the divine law. Our institutions, therefore, ought to restore to these poor children, as far as it can be done, what they have been deprived of, or, at least, never enjoyed,—a home, a family, with all its endearments. I know the difficulties connected with such an undertaking. In large institutions, under the congregated system, or in so-called families of fifty, sixty, or more children, I consider it almost impossible. I fully concur with the remarks of Mr. C. L. Brace, of New York, which he made at the first convention, (see Proceed. p. 51,) although I do not think the cost of the Family System will be *double* that of the present system. The main difficulty that presents itself to my mind, in introducing the Family System as existing in the Rauhe Haus, into this country, is the great want of competent persons to take charge of these families. As one of your questions, however, touches this point, I defer expressing my opinion here. If it is possible to remove this difficulty, the introduction of the Family System will doubtless be crowned with great success here, as well as on the continent of Europe.

Q. Have you had an opportunity of comparing the character of the juvenile offenders of our large cities, with those of Hamburg and other continental cities, and if so, do you not find in them some elements which would render the adoption of the Family System more difficult here than in Europe?

A. During seven years of my residence in this country, my opportunities of studying and comparing the character of vicious children, in our large cities, with those of Hamburg and other German cities, has been but limited. Formerly engaged as teacher in an academy, at Pomeroy, Ohio, and for more than two years in my present situation, (an Orphan Institution of the Lutheran church, where we have a different class of boys from those found in our Houses of Refuge,) I have had very few occasions to come in personal contact with that class of society which peoples our Reformatories. Yet, from what I have been able to observe, I venture the assertion, that there are elements of character in the vicious youth of this country, which are different from those found in the German offender. That spirit of independence which is growing up with the one, which exerts such a powerful influence over his character, and, which, wrongfully applied, leads him not only to defy the laws and regulations of Society, but also to repel all efforts made by others to correct him, is, at least, to a considerable degree, unknown to the other, who is sooner taught to submit. It may, therefore, require *greater efforts* to exercise that influence over the youth in this country, which will lead him to a truly religious reformation, but believing in the almighty power of the word of God, the happy effects produced by a kind, just, and firm treatment, and the continual personal intercourse with those children, on the part of the house father, elder brother, or assistant, I believe that those efforts will be crowned with equal success here as elsewhere.

Q. For the adoption of the Family System, a large number of house fathers, elder brothers, &c., will be needed. Can such persons, well qualified for these duties, be obtained in this country, and if so, how? Can it be done without paying large salaries?

A. This question I consider most important; for without a sufficient number of young men, competent to act as house fathers, etc., in an institution where the Family System is to be introduced, this system will prove a

failure. Classes of fifty or more children are no Families. If we intend to produce the greatest amount of good to our children, individually, by the Family System, these families must be small, say from twelve to fifteen each. At that rate the present number of children in the seventeen Houses of Refuge in this country would require from 230 to 250 such persons. This number will become still greater, if we take into consideration that one man is hardly able to be with his family all the time. In Hamburg from four to six young men are connected with each family in order to assist the house father of each family in his duty.

Are these persons obtainable here? and if so, how? Can it be done without paying high salaries? These questions, form the substance of your inquiry, and have together with others, intimately connected with them, occupied my mind for a long time. The persons in view, ought to be truly religious in sentiment and character, who would consider it to be their duty to devote their life, time and talents to this particular work. We must, therefore, waive the idea of enlisting persons into this service, who would do it for the sake of a temporary employment, or in order to make a living. We must have missionaries to labor among the heathen-Christians in the midst of our Christian community.

You will have noticed that in my letter to the Hon. O. S. Strong of New York, I suggested the idea of establishing a normal school in connection with one of the larger Houses of Refuge, where the Family System was to be introduced. My plan was this: Either the State government or private societies, (the latter would be preferable,) would furnish the means to pay for the instruction, boarding, and simple raiment of these young men who would be willing to enter under the following main conditions.

1. To consider their new situation into which they intend to enter as their calling, for at least three or four years.
2. To be willing, as members of the Family of the House of Refuge into which they are received, to submit to all rules and regulations which the superintendent sees fit to make in reference to their study, labor, recreation, etc., not only, but also in reference to the children, *for whose sake alone* they are employed, and among whom they are expected to labor as elder brothers.
3. They should not regard any thing as below them, that is necessary for the welfare and comfort of the children under their care.
4. For their services they shall have free tuition in the normal school connected with the House, at such hours as the superintendent may direct, and which tuition, together with the practical experience they will obtain by laboring among the inmates, will enable them, after they leave the institution, either to take charge of similar institutions, to act as teachers in such, or to become public teachers. In either case they would have the precedence before others who lack their experience, etc., etc.
5. Besides free tuition, they are to have free boarding at the table of the institution, simple clothing, books, etc., to which a small amount of pocket money might be added.

These are the main features of my plan. In order to carry it into effect, it would be necessary that it should be brought before the community at large by some influential man. This field of labor is comparatively new in this country; it ought, therefore, to be discussed from all sides. The veil which yet hangs over the great dangers threatening from below, ought to be lifted, and the Christian community ought to be aroused to meet those dangers, not only with dollars and cents, but by giving the heart, and at least a part of the time of life to this great cause before it will be too late.

Agencies might be established throughout the whole country by means of which young men of a Christian character, who would be suitable and willing to enter the Normal School, might be found and recommended. I have no doubt that a great number of friends of humanity would be willing to act as agents for this cause, and with the help of God we might be able not only to get the means, but above all the proper persons to commence such an institution.

Q. Is a brief separate imprisonment, either at the prison or at the Reformatory itself, as recommended by many of the English writers on Juvenile Reform, desirable?

A. To number four of your questions, I would say, that I am not in favor of a brief imprisonment either in prison or at the Reformatory prior to being admitted as a pupil of the Reformatory. The young offender ought to enter into the Reformatory as an individual who comes from a life of sin and wickedness and crime, and is glad, instead of being imprisoned for his conduct, to have one more chance to commence a new life. The Superintendent ought to acquaint the new comer with the fact that, although his former conduct is known to the Superintendent, it shall be forgiven and forgotten entirely, provided, however, the pupil himself wants to forget it and to try to become a new man. He is forbidden to speak about his former life to any one but to his superiors. He ought to feel that the reason for his confinement to the Reformatory is not to exclude him from the exterior world, but to exclude the latter from him, for such a time as will be required to prepare him to enter into the same again without danger to himself or others. I have known the most happy results from this treatment, and shall always be in favor of it.

Q. Is separate confinement in a cell as a punishment practiced at the Rauhe Haus? Is it advisable as a mode of correction?

A. Separate confinement in a cell is never resorted to at the Rauhe Haus. There never was a cell in that institution, and I think there never will be one. The method of discipline consists chiefly in a thorough instruction in moral and religious principles. The word of God is the foundation and center of the whole work executed there, and to bring the conduct of each child continually under the blessed influence of the same, is the main object. Corporeal punishment is inflicted only when absolutely necessary.

Q. What is the actual percentage of relapses into crime at the Rauhe Haus?

A. The following statistical notices which I copy from the Seventeenth Annual Report of the Rauhe Haus may serve as an answer to number six of your questions.

Of 200 children who had left the institution since its establishment until 1851, only ten had fallen into the hands of the police again, and of this number only two or three were punished for grand larceny, the others for minor offenses.

23 children (17 boys and 6 girls) were then unknown to the institution as to their residences.

22 children (11 boys and 11 girls) behaved badly.

10 children (9 boys and 1 girl) behaved middling well.

145 children (124 boys and 21 girls) behaved very well.

The average period of detention is four years five months. The girls generally have to stay longer than the boys. 173 boys averaged four years two months, while 43 girls were detained five years four months.

Q. Is it advisable or desirable to have the two sexes under training in the same establishment and under the same management, however carefully they may be separated from each other?

A. I deem it not advisable at all to have both sexes together in one institution. Dr. Wichern himself advocates the establishment of different institutions for both sexes under different management. At the Rauhe Haus it has been possible to avoid the difficulties generally arising where *such* boys and girls are brought so near together, only by that thorough system of superintendence and supervision for which this institution is noted. It ought to be stated here also, that the girls at the Rauhe Haus live in a separate building, and are more under the immediate control of the Superintendent and his family and a sufficient number of female assistants.

Q. Is not the extraordinary and unparalleled success of the Rauhe Haus due in a great measure to the remarkable ability and tact of Dr. Wichern, and such as can hardly be hoped for elsewhere?

A. It is true that the extraordinary success of the Rauhe Haus is owing in a great measure to the extraordinary ability and the tact of Dr. Wichern. Yet Dr. Wichern himself acknowledges that, without the assistance derived from the Institution of Brothers, the main object of the Rauhe Haus could not be carried out. He says, Seventeenth Report, page 71: "That number of persons, which the Institution of the Rauhe Haus requires to carry out the superintendence of the different families, to be at the numerous places of employment, to assist in the different classes of instruction, and also to keep up the connection with the parents of the children or their masters, outside of the institution, is taken from the Institution of the Brothers. One of the main conditions on the happy realization of which the whole success of the Rauhe Haus depends, *does not consist* in having a number of competent persons among us, of whom some are teaching, others superintending, others educating, others again directing the technical or the domestic affairs of the house, but it consists in having such men here for our coöperation, of whom every one unites all these faculties within himself, and who thus prepared, work together in the same spirit, having always in view the one main object of the whole, and the particular question which has to be solved in and by each individual. Neither of the two institutions, (for children and for the young men, brothers,) could exist without the other." It is the astonishing and extraordinary power of organization which Dr. Wichern possesses, which has given and continually does give new life to the whole institution. And yet he has managed to be absent for several months, (his new situation at the court of Berlin requires him to reside there six months during the year,—winter,) without causing any disturbance in the affairs of the Rauhe Haus. The many institutions, throughout Germany and other countries where Brothers of the Rauhe Haus are engaged and where they have established similar arrangements as those in the Rauhe Haus, are crowned with success.

Q. Can the Family System and Family influence be maintained successfully where the families or groups are as large as at Mettray?

A. The Family System and Family influence can hardly be maintained successfully in classes as large as those at Mettray, where sixty inmates constitute a family living together in a separate building under the care of a soldier. The main object seems to be to make good soldiers out of the boys. In this they succeed, under a strict military discipline, by which, however, the character of a family is entirely lost. At Red Hill, preparations are made to educate young men for the same purposes for which the Brothers of the Rauhe Haus are employed. I am not aware how far they have succeeded there, but with such assistants and the proper organization, much can be done even in the largest institutions.

Q. Which are preferable in a moral and economical point of view, large or small institutions?

A. This question also is of great importance. I decide in favor of small institutions in a moral as well as in an economical point of view. In institutions with from 300 to 500 and more children, the individuality of the child is lost in a considerable degree, if not entirely. Besides it is exposed to many more temptations, than will be the case in small institutions where the children are more under the immediate supervision and the influence of the adopted parents. In Wirtemberg, Germany, in a population of one million and a half, there are now about twenty-five Houses of Refuge, with an average number of not over fifty children in each. In small institutions the *great want of female influence*, which is felt even where the family system has been carried so far as in the Rauhe Haus, may be supplied by the wife of the house father.

Taking \$100 as the average cost per capita in this country, I venture to say that even in an economical point of view, small institutions will stand a better chance than large ones, provided no such extravagant sums for buildings are spent, in comparison, as has been done in most of our large houses. We have built too costly and not at all in view of the future situation of the children, who do not receive a good impression from those palaces. Much more might be said on this and other questions, but I fear I have already said too much. I am aware that many objections are made by others to the opinions or some of them, expressed above. Whether these opinions will entirely meet your approbation I do not know. They are the results of my personal experience, and in presenting them to you as such, I am far from believing that they will be applicable under all circumstances and in all cases.

I remain yours, very truly,

G. C. HOLLS.

L. P. BROCKETT, M. D., Hartford, Conn.

ART EDUCATION.

The following communication from Prof. Dana will be read with interest.

MR. EDITOR:—I agree so fully with the views of Miss M. A. Dwight with regard to Art Education in your Journal, that I am not willing to appear to differ, and therefore ask the opportunity of correcting her misapprehension (No 10, page 294) of me in my Address on "Science and Scientific Schools." I was aiming to show that the Ancients had not pursued the study of nature far enough to arrive at any of the profound laws which make the foundation of modern science; and I spoke of their proficiency in Architecture and Sculpture as no evidence of such knowledge; it reached its state of perfection without it. The expression, "surface-contact with nature," was used relatively, as contrasting with the deep insight that has since been obtained, and not in the common signification of superficial. It will show our appreciation of Miss Dwight's views, when we say that our scheme of a "Scientific School," printed before that Address was delivered, included a Professor of Drawing, (in all its departments,) another of Architecture, and another of Æsthetics or the History and Criticism of Art, and this we regarded as merely an initial step toward a wider expansion of the Art Department. These topics were associated with the various sciences, so that the Art student, according to the contemplated plan, would have an opportunity to acquire that comprehensive acquaintance with modern science which is necessary to equip him for his best and highest efforts. In an "Appeal

in behalf of the Yale Scientific School," published some months earlier, endeavoring to show what such a school should be, we enumerate the subjects taught in a school for one single department of Art, Architecture alone, at Berlin; and as views regarding the needed studies in such a school are very far below the true mark in this country, it may not be out of place to cite the paragraph here, although it has already appeared in your excellent Journal.

Royal Prussian Architectural Academy.—"Physics, Chemistry, Mineralogy, The Nature of Materials, Descriptive Geometry, Perspective, Analytical Geometry, Statics, Hydrostatics, Mechanics, Hydraulics, Aerodynamics, Machinery, Laws of Constructing all parts of Edifices and Machines; The Monuments of Antiquity and the Comparative History of Architecture, Architectural Machine Drawing in its full extent; The Construction of Roads, Railroads and Canals; Country, City and Ornamental Architecture, The Plans, Calculations and Estimates for all kinds of Building, Higher Geodesy and the Management of Architectural Business."

Permit me to add farther that although my Address was written in behalf of a school at New Haven, and naturally bears marks of a special plea, we have regarded the arguments as equally applicable to other places. We have the interests of the whole country so much in view, that we shall rejoice over any liberal scheme wherever carried out. There is a vast advantage, as regards economy and elevation of standard of scholarship, in concentrating effort for the different departments together, since Professors of General Science and Mathematics, besides Libraries and Cabinets of Science and Art, may as well instruct many as few, and could serve alike for all. This extended country needs many scientific schools; but, as with colleges, there is, for the reason mentioned, a limit to the number that will best subserve the ends of Education.

Very truly yours,

JAMES D. DANA.

YALE COLLEGE, New Haven.

Massachusetts Educational Room.—A few enterprising teachers in Boston and vicinity have opened a large room, (No. 10,) in the Congregational Library Building, in Chauncey Street, Boston, for the accommodation of the Library of the American Institute of Instruction, the publications of the Massachusetts State Teachers' Association, and a Repository of Educational periodicals, books, pamphlets, and appliances generally. It is open every day, (Sundays excepted,) for the free use of teachers and friends of Education. This is one of the Libraries to which a copy of every Educational document should be sent for use and preservation.

Home Education.—A series of interesting and profitable meetings on the subject of Home Education,—the duties of parents,—the non-attendance of children at school, &c.,—were held in the months of December and January last, in Boston,—three of them in the State House, on the call and the general direction of Rev. Warren Burton,

Agricultural Education.—A bill has been introduced into the House of Representatives, appropriating to each State 20,000 acres of the public lands for each Representative and Senator in Congress, for the endowment of institutions for agricultural Education.

XVI. NOTICES OF BOOKS.

The New American Cyclopædia. Vol. I. A—Araguay—Royal 8vo., pp. 752. New York: D. Appleton & Co.

We give to this first installment of this great American enterprise a most hearty and cordial greeting. The New American Cyclopædia occupies a position hitherto unfilled. It does not aim, like the Encyclopædia Metropolitana, to be a collection of scientific essays, exhausting the topics of which it treats, nor like the Encyclopædia Britannica, to give elaborate and extended articles on some topics, to the exclusion of others. Its object is, in the true idea of a Cyclopædia, to give a condensed and popular view of the arts, sciences, biography, history, geography, and religious sentiments of the world,—sufficiently full for the common reader, and indicating to the scholar, the sources whence he may obtain more complete information.

In the accomplishment of this object it has succeeded well. Its scientific articles are comprehensive though brief; its geographical and historical articles are generally accurate and reliable; its biographical sketches, though entering on the very difficult field of living biography, are remarkably able and impartial. The religious articles manifest a fair and Catholic spirit. We have examined the work with considerable care, and have been much gratified in finding so little to condemn, and so much to approve and admire.

The corps of writers engaged upon the work, (more than one hundred in number the publishers informed us,) must, judging from the specimens of their work before us, be generally men of superior ability and attainment. Our attention has been particularly attracted to the educational articles, and we have found these carefully prepared and accurate. In one respect, if in no other, the work exhibits a most gratifying contrast to the English Cyclopædia now issuing, viz., in the recent date of its information. So far as we have been able to notice, every subject, in which recent information was of importance, is posted up to 1857.

But while we are thus pleased with the general character of the work, we deem it necessary to make two suggestions to the publishers in relation to the coming volumes, which we believe will enhance still farther the merits of the work, viz., to give at the close of every important article, a list of the best works on the subject, for those who would pursue it farther, and to print their list of titles before putting a volume to press, and forward them to intelligent and scientific men of every profession and creed, inviting them to suggest any additions which may occur to them. We are aware that this involves considerable labor, but it will render the work far more complete than any thing of the kind ever published. No educated man, and especially no professional man, can afford to be without this Encyclopædia.

The Polylingual Journal: a magazine in five languages,—French, Spanish, Italian, German and English. Feb., 1858. HIRAM C. SPARKS, Editor and Proprietor, 335 Broadway, New York.

A quarterly, intended to facilitate the acquisition of the four first-named languages, to English students. The present number contains a continuation of Fénelon's *Telemaque*, in four parallel columns, agreeing almost line for line. It is intended to furnish an outline grammar and pronouncing tables in a supplementary

form ; with the assistance of which, the Polylingual Journal will be a very convenient manual for acquiring a knowledge of the languages used in it.

The American Educational Year Book. Feb., 1858. Boston: James Robinson & Co.; Albany: J. Cruikshank; Philadelphia: Hayes & Zell.

This is the second number of this exceedingly valuable compend of educational information. It is a compact, handsomely printed duodecimo of 252 pages, containing a vast mass of orderly statistics, history and miscellaneous facts relating to the educational institutions, progress and present condition of the United States, including names of teachers, salaries, school laws, colleges, literary and learned societies, &c.; furnishing in a small compass, a comprehensive and thorough survey of the machinery of the country for the mental and moral improvement of its inhabitants. The labor of gathering the materials for the work has been very great; and the ability shown by the editor, A. M. Gay, not less. We most urgently recommend all teachers to possess the work; it is an indispensable repository of knowledge relating to the past and present of their profession. It would be an extraordinary and not very creditable circumstance, if one such annual as this could not be maintained by the 120,000 professional teachers of the United States, while those of Germany give generous support to six or eight, of some of which five or six thousand copies are sometimes sold within a month after publication.

A General View of the Animal Kingdom. By A. M. REDFIELD. E. B. & E. C. Kellogg, 87 Fulton Street, New York, and 245 Main Street, Hartford.

Mrs. Redfield's ingenious and beautiful "Chart of the Animal Kingdom," has been displayed in our office for a week, and we have had frequent occasions to notice its attractiveness both to the old and the young, and to examine it with teachers and men of science, and explain it to our own and our neighbors' children. We have no hesitation in recommending it as a valuable addition to our means of visible illustration in school and family instruction. It is at once ornamental and useful, picturesque and practical, wonderfully comprehensive and minutely accurate. It is well calculated to make the study of Natural History in our schools, and the reading, both of young and old, in the family, more interesting and profitable than they can possibly be without illustrations, and without a scientific classification.

Tom Brown's School Days. By AN OLD BOY. Boston: Ticknor & Fields, 1858. pp. 405.

This is a vigorous, vivid and faithful picture of the bright side of life at an English Public School, with but little of the experience of the school room, but much of the athletic sports, the rural excursions, and the cultivation of a manly courage and self-reliance in a large boarding school, comprised of boys and youth, from the ages of ten to eighteen years.

The American Almanac and Repository of Useful Knowledge, for the year 1858. Boston: Crosby, Nichols & Co. pp. 376.

We welcome this Annual for 1858 as an indispensable book of reference. We do not see how any one, who wishes to keep up with the times in these days of rotation in office, growing and changing statistics, and the fixed facts of different states and countries, can do without it.

XVIII. OBITUARY.

WILLIAM C. REDFIELD* was born at Middletown, Conn., on the 26th of March, 1789, and died in the city of New York, on the 30th of January, 1858. His early training devolved chiefly on his mother, who was a woman of superior mental endowments and of exalted Christian character.

The slender pecuniary resources of the family would not allow young Redfield any opportunities of school education beyond those of the common schools of Connecticut, which, at that time, taught little more than the simplest rudiments—reading, spelling, writing, and a little arithmetic; and all access to the richer treasures of knowledge seemed to be forever denied him, when, at the early age of fourteen, he was removed to Upper Middletown, now called Cromwell, and apprenticed to a mechanic, whose tasks engrossed every moment of his time except a part of his evenings. These brief opportunities, however, he most diligently spent in the acquisition of knowledge, eagerly devouring every scientific work within his reach. He was denied even a lamp for reading by night much of the time during his apprenticeship, and could command no better light than that of a common wood fire in the chimney corner. Under all these disadvantages, it is evident that, before he was twenty-one years of age, he had acquired no ordinary amount and variety of useful knowledge. During the latter part of his apprenticeship, he united with other young men of the village in forming a debating society, under the name of the "Friendly Association," with which was connected a small but growing library. To this humble literary club Mr. Redfield always ascribed no small agency in inspiring him with a love of knowledge, and a high appreciation of its advantages; and during his future years, he nursed and liberally aided by his contributions this benefactor of his youth.

Fortunately for young Redfield, a distinguished and learned physician, Dr. William Tully, fixed his residence in the same village, and generously opened to him his extensive and well-selected library; and, what must have been equally inspiring to youthful genius, Dr. Tully furnished him with a model of an enthusiastic devotee to knowledge, and of a mind richly stored with intellectual wealth. On his application for a book to occupy such moments as he could redeem from his daily tasks, the Doctor, being then ignorant of his acquirements or his taste, opened different cases of his library, submitting the contents of each to his selection. Among a great variety of authors, that which determined his choice was Sir Humphrey Davy's Elements of Chemistry. As this was one of the earliest systematic works that contained the doctrine of Chemical Equivalents, a subject then considered as peculiarly difficult, and one understood by few readers of the work, the Doctor had little expectation that this young inquirer after knowledge would either understand or relish it. In a short time he returned the book, and surprised the Doctor by evincing a thorough acquaintance with its

* The following particulars are taken from a memoir, read before the American Association for the Advancement of Science, of which he was the first President, by Denison Olmsted, LL. D.

contents, and expressing a high satisfaction, in particular with the doctrine of chemical equivalents, which, he said, he had then met with for the first time.

After serving out his apprenticeship, he traveled, in 1810, on foot, over two thousand miles, on a visit to his mother in Ohio, going out through New York, and returning through parts of Virginia, Maryland and Pennsylvania.

“Returning to his former home in 1811, Mr. Redfield commenced the regular business of life. No circumstances could seem more unpropitious to his eminence as a philosopher, than those in which he was placed for nearly twenty years after his first settlement in business. A small mechanic in a country village, eking out a scanty income by uniting with the products of his trade the sale of a small assortment of merchandise, Mr. Redfield met with obstacles which, in ordinary minds, would have quenched the desire of intellectual progress. Yet every year added largely to his scientific acquisitions, and developed more fully his intellectual and moral energies. Meanwhile his active mind left its impress on the quiet community where he lived, in devising and carrying out various plans for advancing their social comfort and respectability, in the improvement and embellishment of their streets, school houses, and churches, and in promoting the interests of the literary club, from which he himself, in early youth, had derived such signal advantages.

On the third of September, 1821, there occurred, in the eastern part of Connecticut, one of the most violent storms ever known there, and long remembered as the “great September gale.” Shortly after this, Mr. Redfield, being on a journey to the western part of Massachusetts, happened to travel over a region covered by marks of the ravages of the recent storm. He was accompanied by his eldest son, then a young lad, who well remembers these early observations of his father, and the inferences he drew from them. At Middletown, the place of Mr. Redfield’s residence, the gale commenced from the south-east, prostrating the trees toward the north-west; but on reaching the north-western part of Connecticut, and the neighboring parts of Massachusetts, he was surprised to find that there the trees lay with their heads in the opposite direction, or toward the south-east. He was still more surprised to find, that at the very time when the wind was blowing with such violence from the *south-east* at Middletown, a *north-west* wind was blowing with equal violence at a point less than seventy miles distant from that place. On tracing further the course and direction of prostrated objects, and comparing the times when the storm reached different places, the idea flashed upon his mind that the storm was a *progressive whirlwind*. A conviction thus forced upon his mind, after a full survey of the facts, was not likely to lose its grasp. Amid all his cares, it clung to him, and was cherished with the enthusiasm usual to the student of nature, who is conscious of having become the honored medium of a new revelation of her mysteries. Nothing, however, could have been further from his mind than the thought, that the full development of that idea would one day place him among the most distinguished philosophers of his time.

For several years he was deeply engrossed in commercial pursuits in the prosecution of which he removed his residence to the city of New York. During this period he took an active interest in the subject of navigation by steam, devising and securing the enactment of laws for the convenience and safety of passengers, and also in projecting plans of railroad communication between New York and the West and North. But in 1831 Mr. Redfield perfected and

published his theory of storms, of which Professor Olmsted gives the following account:

"I chanced, at that period, to meet him for the first time on board a steamboat on the way from New York to New Haven. A stranger accosted me, and modestly asked leave to make a few inquiries respecting some observations I had recently published in the American Journal of Science on the subject of hail-storms. I was soon sensible that the humble inquirer was himself a proficient in meteorology. In the course of the conversation, he incidentally brought out his theory of the laws of our Atlantic gales, at the same time stating the leading facts on which his conclusions were founded. This doctrine was quite new to me; but it impressed me so favorably that I urged him to communicate it to the world through the medium of the American Journal of Science. He manifested much diffidence at appearing as an author before the scientific world, professing only to be a practical man little versed in scientific discussions, and unaccustomed to write for the press. At length, however, he said he would commit his thoughts to paper, and send them to me on condition that I would revise them manuscript and superintend the press. Accordingly, I soon received the first of a long series of articles on the laws of storms, and hastened to procure its insertion in the Journal of Science. Some few of the statements made in this earliest development of his theory he afterward found reasons for modifying; but the great features of that theory appear there in bold relief. Three years afterward he published, in the 25th volume of the same journal, an elaborate article on the hurricanes of the West Indies, in the course of which he gives a full synopsis of the leading points of his doctrine, as matured by a more extended analysis of the phenomena of storms than he had made when he published his first essay. I understand this theory to be, substantially, as follows:—

That all violent gales or hurricanes are great *whirlwinds*, in which the wind blows in circuits around an axis either vertical or inclined; that the winds do not move in horizontal circles, as the usual forms of his diagrams would seem to indicate, but rather in spirals toward the axis, a descending spiral movement externally, and ascending internally.

That the *direction of revolution* is always uniform, being from right to left, or against the sun, on the north side of the equator, and from left to right, or with the sun, on the south side.

That the *velocity of rotation* increases from the margin toward the centre of the storm.

That the whole body of air subjected to this spiral rotation is, at the same time, *moving forward* in a path, at a variable rate, but always with a velocity much less than its velocity of rotation, being at the minimum, hitherto observed, as low as four miles, and at the maximum, forty-three miles, but more commonly about thirty miles per hour, while the motion of rotation may be not less than from one hundred to three hundred miles per hour.

That in storms of a particular region, as the gales of the Atlantic, or the typhoons of the China seas, *great uniformity exists in regard to the path pursued*, those of the Atlantic, for example, usually issuing from the equatorial regions eastward of the West India islands, pursuing, at first, a course toward the north-west, as far as the latitude of 30° , and then gradually wheeling to the north-east, and following a path nearly parallel to the American coast, to the east of Newfoundland, until they are lost in mid-ocean; the entire path

when delineated, resembling a parabolic curve, whose apex is near the latitude of 30°.

That their *dimensions* are sometimes very great, being not less than one thousand miles in diameter, while their path over the ocean can sometimes be traced for three thousand miles.

That the *barometer*, at any given place, falls with increasing rapidity as the centre of the whirlwind approaches, but rises at a corresponding rate after the centre has passed by; and finally,

That the phenomena are more uniform in large than in small storms, and more uniform on the ocean than on the land.

These laws Mr. Redfield claims as so many *facts* independently of all hypothesis; as facts deduced from the most rigorous induction, which will ever hold true, whatever views may be entertained respecting the origin or causes of storms.

The *method* adopted by the author of this theory, in all his inquiries,—the method which first led him to the discovery of the whirlwind character of storms, and afterward fully confirmed the doctrine,—was first to collect and then to collate as many records as possible of vessels that had been caught in the storm, in various parts of the ocean.

In the character of the researches before us, conducted as they were, not in the shades of philosophic retirement and learned leisure, but in hours redeemed from the pressing avocations of an onerous and responsible business, or borrowed from the season allotted to sleep, we trace qualities of mind that belong only to the true philosopher.

The idea of whirlwinds is indeed much older than Redfield or Reid, being as old as the writings of the Psalmist and the Prophets; and we safely admit further, that the doctrine of ocean gales being sometimes of a rotary character had been hinted at by several writers, as hints of such a principle as gravitation had long preceded the investigations of Newton; but the honor of having established on satisfactory evidence the rotary and progressive character of ocean storms, and determining their modes of action or laws, it is due alike to the memory of the departed, and to our country's fame, to claim for WILLIAM C. REDFIELD.

Various other contributions to science of our departed friend must, for want of space, be passed by with hardly a notice. Such are his published meteorological essays, his reports of meteorological observations, which contain many original hints of much value, his paper on the currents of the Atlantic, and his researches in geology, which occupied much of his attention during the latter years of his life; all of which speak the skillful observer, the judicious philosopher, the lover of science, the lover of his country and of his kind.

Three distinguishing marks of the true philosopher met in William C. Redfield,—originality to devise new things; patience to investigate; and logical powers to draw the proper conclusions. The impress of his originality he left, in early life, upon the village where he resided; he afterward imprinted it still deeper on his professional business, as naval engineer; and most of all on his scientific labors, his observations, and his theories. Originality to invent without patience to investigate, leads to hasty and wild speculation; but united, they lay the deep foundations for a severe logic.

In society he was courteous, sincere, upright, and benevolent; in his family tender, affectionate, wise in counsel, and pure in example; in all his walk and conversation, and especially in the church of God, a devout and humble Christian."

DAVID WATKINSON, (whose bequests in his last Will and Testament to various humane and educational institutions, make him the largest pecuniary benefactor to such objects that the State of Connecticut has yet known,) was born January 17, 1778, in Lavenham, in the county of Suffolk, England. His mother was Miss Sarah Blair, of Ayrshire, Scotland, a pupil of Miss Isabella Graham, afterward so well known in this country for Christian excellencies.

His father, Samuel Watkinson, belonged to the dissenting body, a direct ancestor of his having been a soldier of Cromwell; and his own house was always open to clergymen of this class. He was deeply interested in the war with the American colonies, and sided with Edmund Burke and the other champions of our cause. He was a woolen manufacturer, at a period when wool was combed by hand, given out about the country to be spun, sent to Holland to be woven, and brought back to England to be sold. Influenced by the disposition of his family to emigrate to America, and also by his own predilections for American institutions, he removed to this country with his family in 1795 residing at Middletown, Conn., where he died in 1816, at the age of seventy years, universally respected.

David was one of twelve children, and received his education partly at home, at an endowed grammar school, and partly in a school near Palgrave, kept with the assistance of her husband, by Mrs. Barbauld, whose name has been made so deservedly popular through her writings for children. He acquired a knowledge of business in the counting-room and store of Samuel Corpe, then one of the leading merchants of New York. The death of two brothers of Mr. Watkinson in New York, of yellow fever, gave him a distaste to that city, and in 1799 he removed to Hartford. Here he commenced business, in the fall of 1800, associating with himself his brother William, and a few years later his brother Edward, under the firm of Watkinsons & Co. In 1819 he associated Mr. Ezra Clark in his business, and in 1835, Alfred Gill, and Ezra Clark, Jr., were admitted to the firm. His brother Robert Watkinson was for some time a clerk in the house.

In 1841 Mr. Watkinson retired from active mercantile pursuits, having by his energy, industry and sagacity, achieved a handsome fortune, and by his uprightness, public spirit, and liberality, won the universal respect of the community in which he lived.

Although closely attentive to his own business, and moderate in his own personal expenditures, Mr. Watkinson never withheld his influence, or his purse from any enterprise which promised to advance the general prosperity of his adopted home, or promote its religious, moral and educational interests. His name is found as original subscriber, and frequently as an office-bearer in every association incorporated to open new, or improve old avenues of travel, or increase the facilities of business. He was a liberal subscriber to the funds of the American Asylum for the Deaf and Dumb, of which he was a director and vice-president, to the Connecticut Retreat for the Insane, of which he was treasurer and director, to Trinity College of which he was trustee, to the Hartford Female Seminary, to the Hartford Orphan Asylum, to the Hartford Young Men's Institute, and to the Wadsworth Athenæum.

But Mr. Watkinson's liberality was not confined to these larger and permanent institutions. He was always ready to listen to the daily application for aid to objects local and general, and if the object appeared to him worthy, and the

*Extract from a Memoir read before the Connecticut Historical Society by Henry Barnard, LL. D., on the 2d February, 1858.

agents likely to carry it forward with fidelity and success, he gave cheerfully, and without reference to the contributions of others. He judged each case on its own merits, and gave according to his own ability at the time, in reference to other claims on his means.

Mr. Watkinson was a member, (and at his death the oldest,) of the First Congregational Church of Hartford, and one of those constant and liberal givers to the great religious enterprises of the day, which have made the annual contributions of that church remarkable among the churches of New England.

He married in 1803 Miss Olivia Hudson, daughter of Barzillai Hudson, who died in 1849, leaving no children. Mrs. Watkinson is gratefully remembered for her many Christian virtues, and for her wise and careful administration of several useful charities.

Although not endowed with a strong constitution, yet by his temperate habits, and constant exercise in the open air, he enjoyed almost uninterrupted health to the advanced age of eighty years. He died on the 13th of December, 1857, after an illness of only three days.

After providing liberally for each of his nephews and neices, (thirty-one in all,) and for his pastor and several personal friends, Mr. Watkinson makes the following bequests to the

Hartford Hospital and Dispensary,	\$40,000
Orphan Asylum and Female Beneficent Society,	20,000
Juvenile Asylum and Farm School for neglected and abandoned children,	40,000
Library of Reference in connection with Connecticut Historical Society,	100,000
Widow's Society of Hartford,	5,000
Connecticut Retreat for the Insane, in aid of an Institution for Idiots,	3,000
House of Refuge for Discharged Criminals,	5,000
Wadsworth Athenæum,	1,000
Connecticut Historical Society,	1,000
Hartford Young Men's Institute,	1,000

The will provides that the Trustees of the Library of Reference may appropriate \$500 a year in the purchase of books for the Library of the Hartford Young Men's Institute, (having now 10,000 volumes,) or any other Library of Circulation, on condition that the Library which receives the same, shall appropriate and expend the like amount for the same object. There is a similar provision in favor of the Gallery of Art belonging to the Wadsworth Athenæum.

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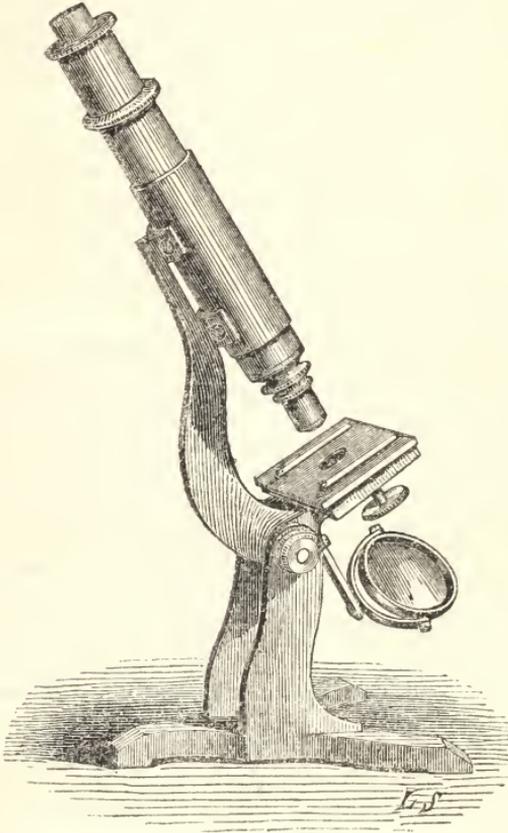
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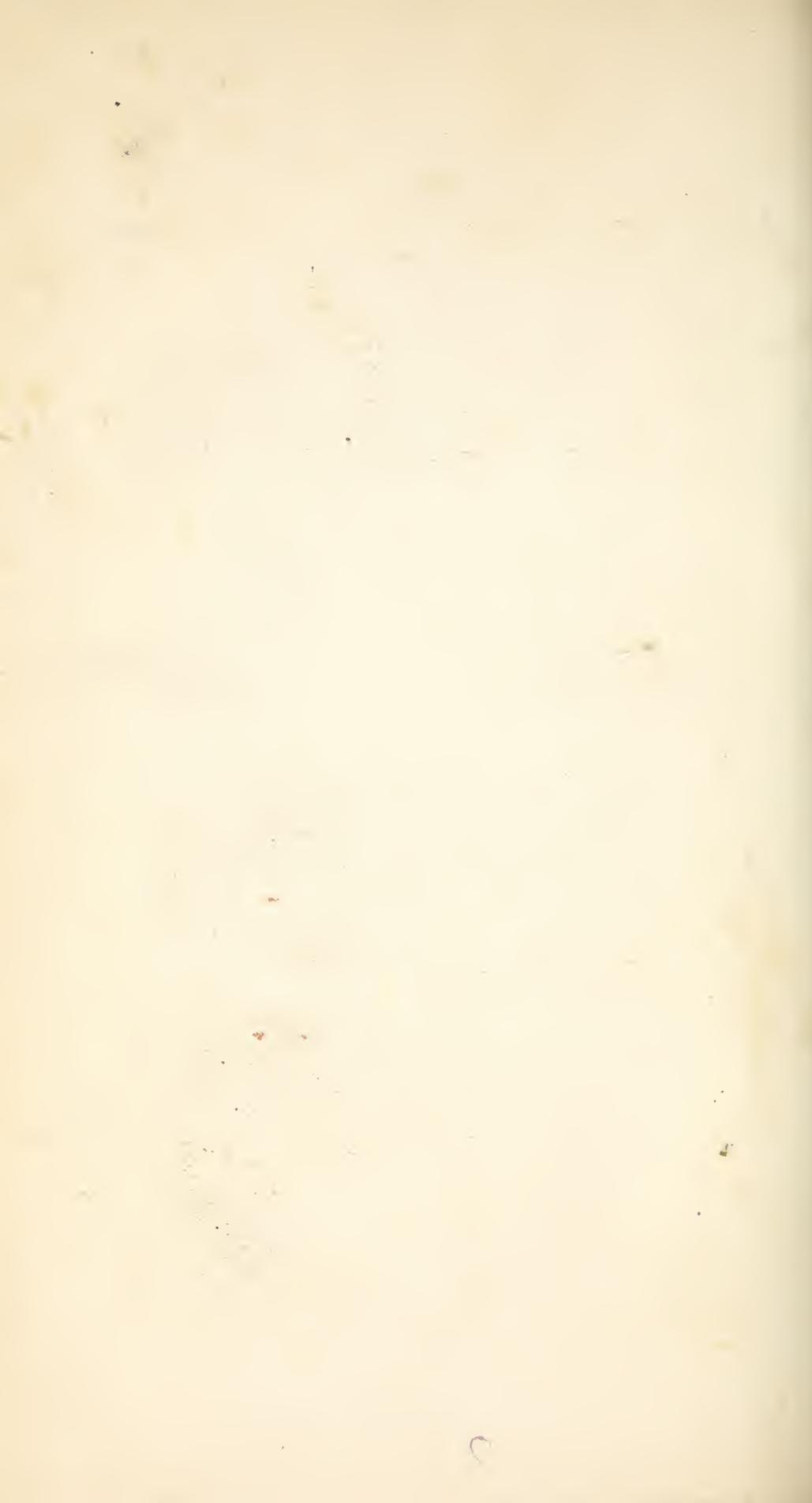
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