SCHOOL LIFE--Volume X

September, 1924 --June, 1925

Complete

Volume X
Number 1

September, 1924

SCHOOL LIFE

LINCOLN MEMORIAL

Published Monthly [except July and August] by the Department of the Interior
Bureau of Education Washington, D. C.

GOVERNMENT PRINTING OFFICE

CONTENTS

AUTHORITY of the Bureau of the Budget has been given for the issue of SCHOOL LIFE in the form of this number. The expense of production is somewhat increased by the change of dress. Simultaneously it becomes necessary to consider the greater cost due to a substantial increase in wages granted by Congress to the employees of the Government Printing Office. Because of these facts, the Superintendent of Documents has found it necessary to fix the subscription price of SCHOOL LIFE at 50 cents per annum. No reduction is possible for clubs, for orders in quantity, or to subscription agencies.

It is well understood that the prices of all Government publications are determined by the cost of printing from plates made at Government expense, but since no advertisements are accepted, one of the principal sources of revenue of private publications is not available to reduce the prices of public documents. Subscriptions should be sent to the Superintendent of Documents, Government Printing Office, Washington, D. C.

FAC SIMILE PRINTS of the Declaration of Independence in the full size of the original (29 x 34 inches) may be purchased of the Superintendent of Documents at 15 cents per copy. The plate was made from a fac simile engraving in the Department of State. Each copy is securely sealed in a mailing tube so it will reach the purchaser in good condition.

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IN PREPARATION for the observance of American Education Week, November 17 to 23, 1924, the Bureau of Education will issue: (1) "Suggestions." Price, 5 cents; in lots of 100 or more, 2 cents each. (2) "Broadside," with material suitable for newspaper articles, addresses, etc. Price, 5 cents; in lots of 100 or more, 1 cent each. (3) "The Quest of Youth," a historical pageant. Price, 10 cents; in lots of 100 or more, 6 cents each. (4) "School and Teacher Day," an illustrated folder. Price, 5 cents; in quantity, 75 cents per hundred. The October number of SCHOOL LIFE will be devoted largely to American Education Week. All orders for these publications should be sent to the Superintendent of Documents. Information will be supplied by the Commissioner of Education.

SCHOOL LIFE

PUBLISHED MONTHLY *by the* DEPARTMENT OF THE INTERIOR, BUREAU OF EDUCATION

Secretary of the Interior, HUBERT WORK - - - - *Commissioner of Education,* JOHN JAMES TIGERT

VOL. X WASHINGTON, D. C., SEPTEMBER, 1924 No. 1

New Importance is Attaching to the Cause of Education

America Turning from Thought of Material Advantage to Appreciation of Cultural Advantage of Learning. Necessary that Education be Handmaid of Citizenship. Large Adult Population Requires Assistance. More Attention to Rural Schools. Unwise for Federal Government to Collect Money from States and Redistribute It for Direct Support of Education. Department of Education and Relief Indorsed

By CALVIN COOLIDGE, *President of the United States*

THE AMERICAN PEOPLE have demonstrated their faith in education and their determination to use the wealth of the Nation for the creation of the highest type of manhood and womanhood. While I believe that educators are under obligation to expend public funds economically it seems obvious that the recent increase in expenses for this purpose is a most wise investment. It is impossible to conceive that there should be any increase in agricultural products, in the production of manufactures, or any other increase in our material wealth, through ignorance. The reaction to using the resources of the country to develop the brains of the country through education has always been greatly to stimulate and increase the power of the people to produce.

Calvin Coolidge

Harris & Ewing photo.

As already indicated, America is turning from the mere thought of the material advantage to a greater appreciation of the cultural advantage of learning. It is coming to be valued more and more for its own sake. People desire not only the intelligence to comprehend economic and social problems, but they are finding increased leisure is little more than time wasted in indulgence, unless an opportunity for self-development and self-expression has been provided in youth by the cultivation of a taste for literature, history, and the fine arts.

It is necessary also that education should be the handmaid of citizenship. Our institutions are constantly and very properly the subject of critical inquiry. Unless their nature is comprehended, and their origin is understood, unless their value be properly assessed, the citizen falls ready prey to those selfish agitators who would exploit his prejudices to promote their own advantage. On this day, of all days, it ought to be made clear that America has had its revolution and placed the power of Government squarely, securely, and entirely in the hands of the people. For all changes which they may desire, for all grievances which they may suffer, the ballot box furnishes a complete method and remedy. Into their hands has been committed complete jurisdiction and control over all the functions of Government.

For the most part our institutions are attacked in the name of social and economic reform. Unless there be some teaching of sound economics in the schools, the voter and taxpayer is in danger of accepting vague theories which lead only to social discontent and public disaster. The body politic has little chance of choosing patriotic officials who can administer its financial affairs with wisdom and safety, unless there is a general diffusion of knowledge and information on elementary economic subjects sufficient to create and adequately to support public opinion. Everyone ought to realize that the sole source of national wealth is thrift and industry, and that the sole supply of the public treasury is the toil of the people. Of course, patriotism is always to be taught. National defense is a necessity and a virtue, but peace with honor is the normal, natural condition of mankind, and must be made the chief end to be sought in human relationship.

Another element must be secured in the training of citizenship, or all else will be in vain. All of our learning and science, our culture and our arts, will be of little avail unless they are supported by high character. Unless there be honor, truth, and justice, unless our material resources are supported by moral and spiritual resources, there is no foundation for progress. A trained intelligence can do much, but there is no substitute

Portion of an address before the National Education Association, Washington, D. C., July 4, 1924.

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for morality, character, and religious convictions. Unless these abide, American citizenship will be found unequal to its task.

It is with some diffidence that I speak of the required facilities of the school in this presence. We are able to give more attention to the schoolhouse than formerly. It ought to be not only convenient, commodious, and sanitary, but it ought to be a work of art which would appeal to the love of the beautiful. The schoolhouse itself ought to impress the scholar with an ideal; it ought to serve as an inspiration.

Teaching Is the Noblest of Professions

But the main factor of every school is the teacher. This is one of the noblest of professions. It requires an adequate preparation and training, patience, devotion, and a deep sense of responsibility. Those who mold the human mind have wrought not for time, but for eternity. The obligation which we all owe to those devoted men and women who have given of their lives to the education of the youth of our country that they might have freedom through coming into a knowledge of the truth is one which can never be discharged. They are entitled not only to adequate rewards for their service, but to the veneration and honor of a grateful people.

It is not alone the youth of the land which needs and seeks education, but we have a large adult population requiring assistance in this direction. Our last census showed nearly 14,000,000 foreign-born white persons residing among us, made up largely of those beyond school age, many of whom nevertheless need the opportunity to learn to read and write the English language, that they may come into more direct contact with the ideals and standards of our life, political and social.

Ignorance a Fruitful Source of Crime

There are likewise over 3,000,000 native illiterates. When it is remembered that ignorance is the most fruitful source of poverty, vice, and crime, it is easy to realize the necessity for removing what is a menace, not only to our social well-being, but to the very existence of the Republic. A failure to meet this obligation registers a serious and inexcusable defect in our Government. Such a condition not only works to a national disadvantage, but directly contradicts all our assertions regarding human rights. One of the chief rights of an American citizen is the right to an education. The opportunity to secure it must not only be provided, but if necessary made compulsory.

It is in this connection that we are coming to give more attention to rural and small village schools, which serve 47 per cent of the children of the Nation. It is significant that less than 70 per cent of these children average to be in attendance on any school day, and that there is a tendency to leave them in charge of undertrained and underpaid teachers. The advent of good roads should do much to improve these conditions. The old one-room country school, such as I attended, ought to give way to the consolidated school, with a modern building, and an adequate teaching force, commensurate with the best advantages that are provided for our urban population. While life in the open country has many advantages that are denied to those reared on the pavements and among crowded buildings, it ought no longer to be handicapped by poor school facilities. The resources exist with which they can be provided, if they are but adequately marshaled and employed.

Proper for States to Aid Education

The encouragement and support of education is peculiarly the function of the several States. While the political units of the district, the township, and the county should not fail to make whatever contribution they are able, nevertheless since the wealth and resources of the different communities vary, while the needs of the youth for education in the rich city and in the poor country are exactly the same, and the obligations of society toward them are exactly the same, it is proper that the State treasury should be called on to supply the needed deficiency. The State must contribute, set the standard, and provide supervision if society is to discharge its full duty not only to the youth of the country, but even to itself.

The cause of education has long had the thoughtful solicitude of the National Government. While it is realized that it is a State affair, rather than a national affair, nevertheless it has provided by law a Bureau of Education. It has not been thought wise to undertake to collect money from the various States into the National Treasury and distribute it again among the various States for the direct support of education. It has seemed a better policy to leave their taxable resources to the States, and permit them to make their own assessments for the support of their own schools in their own way. But for a long time the cause of education has been regarded as so important and so preeminently an American cause, that the National Government has sought to encourage it, scientifically to investigate its needs, and furnish information and advice for its constant advancement. Pending before the Congress is the report of a committee which proposes to establish a Department of Education and Relief, to be presided over by a Cabinet officer. Bearing in mind that this does not mean any interference with the local control, but is rather an attempt to recognize and dignify the importance of educational effort, such proposal has my hearty indorsement and support.

Our Country is in Process of Development

It is thus that our educational system has been and is ministering to our national life. Our country is in process of development. Its physical elements are incomplete. Its institutions have been declared, but they are very far from being adopted and applied. We have not yet arrived at perfection. A scientific investigation of child life has been begun but yet remains to be finished. There is a vast amount of ignorance and misunderstanding, of envy, hatred, and jealousy, with their attendant train of vice and crime. We are not yet free, but we are struggling to become free economically, socially, politically, spiritually.

We have limited our amount of immigration in order that the people who live here, whether of native or foreign origin, might continue to enjoy the economic advantages of our country, and that there might not be any lowering of the standards of our existence, that America might remain American. We have submitted an amendment to the National Constitution designed to protect the child life of the Nation from the unwarranted imposition of toil, that it might have greater opportunity for enlightenment. All of these movements are in the direction of increased national freedom and an advance toward the realization of the vision of Washington and Lincoln.

National Spirit Reasserting Itself

A new importance is attaching to the cause of education. A new realization of its urgent necessity is taking hold of the Nation. A new comprehension that the problem is only beginning to be solved is upon the people. A new determination to meet the requirements of the situation is everywhere apparent. The economic and moral waste of ignorance will little longer be tolerated. This awakening is one of the most significant developments of the times. It indicates that our national spirit is reasserting itself. It is a most reassuring evidence that the country is recovering from the natural exhaustion of the war, and that it is rising to a new life and starting on a new course. It is intent, as never before, upon listening to the word of the teacher, whether it comes from the platform, the schoolhouse, or the pulpit. The power of evil is being broken. The power of the truth is reasserting itself. The Declaration of Independence is continuing to justify itself.

Public Generally Recognizing Need of Museums in Educational Program

Europeans Utilize and Appreciate Accumulations of Objects of Art, Science, and Industry. Failure of Many Americans to Understand Significance of Art Objects Due to Lack of Training, not to Original Sin or Innate Depravity. More General and Better Correlation of Museum and School Must be Worked Out

By JNO. J. TIGERT, *United States Commissioner of Education*

NO OTHER educational agency or medium is so generally undervalued as the museum. At any rate, this is relatively much more true in the United States than in Europe, where the museum is older, better established, more fully developed, and more often

Jno. J. Tigert

definitely organized for educational use than in our country. There are, of course, ample reasons why the museum movement should be better recognized in Europe. The age of the country, the consequently large accumulations of art, science, and industry, the constant visitations of the world's tourists, the commercial value of art, the spoils of many wars, the ease of converting outworn palaces and monasteries into suitable places for exhibition purposes, the finer appreciation of art and science, are only some of the factors that combine to give the Old World a great advantage over the new in the museum movement. The naive American attitude toward the museum is that of a place for the satisfaction of curiosity or diversion rather than profitable instruction, absorbing study, or applied learning.

The American tourist in the European museum is an old and perpetual subject of humor and amusement for the European. Who has not stood, for example, in the Louvre, the Uffizi, or the National Gallery in London and watched the parties, composed almost exclusively of Americans, being conducted through those great collections of the masters by guides who undertake to keep a bored group interested by saying, "Now, I will show you a picture that Mr. Morgan offered a hundred thousand dollars for."

After a four-year course in an American university, where I occasionally read or heard of such places as the Louvre, the British Museum, the Vatican, and other great collections, I went to Europe to study. On my first visit to Paris one of the earliest places I visited was the Louvre. I went thrilled and expectant. I left disappointed, tired, and dejected. I came to be entertained, not to work and study, and hence a great disillusionment.

Fortunately for me, I recalled the words written by Burke in 1791, "Great critics have taught us one essential rule. . . . It is this, that if ever we should find ourselves disposed not to admire those writers or artists, Livy and Virgil for instance, Raphael or Michaelangelo, whom all the learned had admired, not to follow our fancies, but to study them until we know how and what we ought to admire; and if we can not arrive at this combination of admiration with knowledge, rather to believe that we are dull than that the rest of the world has been imposed on." With those words in mind, I subjected myself to long periods of both constant and intermittent exposure to the Louvre and subsequently to many of the collections of Europe. I traveled in a dozen countries and through many cities. If there was time to see only a few things, I always visited the museums and cathedrals, for I found these had much in common, and together were the best and surest means of insight into the art, the life, the history—in a word, the civilization—that I was attempting to study.

One day after the Great War was over and the treasures of the Louvre were once more exposed to view after a long period of seclusion, I stood admiring again the Venus of Melos. Two American officers came hastily into the room, took a hurried look at the celebrated Greek marble, and exchanged comments, "I do not think much of that," said one. "No, I don't either," said the other, "But, I like the ceiling. That is fine!" The humor and pathos of this episode carried me back to my first disappointment and disillusionment in the Louvre. Little had I dreamed after my first tiresome visit there that this and similar places would become some day among my chief sources of inspiration, pleasure, and profit.

Colonnade of the Louvre

No one can doubt the immense educational value of the museum. What we need is a more effective organization for the educational use of museums. Experience has demonstrated over and over again that

Address before the American Association of Museums, Washington, May 13, 1924.

Entrance to the Luxembourg Palace

the American when properly prepared will respond to the æsthetic, the cultural, and the educational in the museum as readily as the European. How to get this preparation is our great problem. I am quite familiar with the efforts that have been made to bring the museum and the school into more effective correlation in this country. I know of the various efforts made in the museums to instruct by lectures, by publications, by extension, by traveling museums, etc.

The Bureau of Education has published a bulletin describing the educational museum of the St. Louis public schools. We have familiarized ourselves with the work of the Children's Museum under the auspices of the Brooklyn Institute of Arts and Sciences. We have seen the children from the schools of Chicago studying the pictures of the Art Institute under the supervision of their teachers. These and other things are being done to utilize more fully the museum for educational purposes. We are making progress, but public appreciation of the educational value of the museum has not been fully realized except in a few places. There is a somewhat general neglect of the matter of education through museums. There is no definite policy for general attack upon the problem in this country.

Sometimes we find the boards of education, the schools, the colleges, and universities attempting to develop the museum as a definite part of the educational program. Again, we find the museums organized separately and more especially for the general benefit of the public and serving the schools only incidentally. We realize that there is need of the two types of service. There can be no question of the desirability of the independence and great service to the public of an institution like the Metropolitan Museum of Art, rendering at the same time invaluable aid to the students and schools of New York City.

From the moment we became acquainted with Oxford University and its collections, such as the Ashmolean and even the Bodleian Library, we were convinced that no institution of higher learning could offer the best facilities for research and study in history, in science, in art, in literature, or æsthetic appreciation which did not have such eollections as a part of its equipment or which was not so situated as to be able to make available such materials for the use of its students.

Many times our educational system has been criticized because it lacks the proper articulation with life and things. Too much emphasis has been laid in the past upon abstractions and memoriter processes. There has been too little of the actual contact of the child with the real world while in the school. Hence often the boy or girl must fight his or her way back to the world of life and things after leaving school.

Froebel, Pestalozzi, Comenius, and other great educationists have stressed the need of realities and of sense perception in education. John Locke boldly taught in the "Essay on the Human Understanding" that all our knowledge comes through sensation. Mr. Rathmann, director of the Educational Museum of St. Louis, said in a paper read before this association: "Telling the child or having him read about our earth, about the great changes produced on its surface through the activity of nature and man, about the people, their life and work and their adjustment to their environment—appealing to his imagination only—will not give the child vivid or lasting impressions or arouse in him the desire and develop the power to do his own exploring and discovering. To make the child acquainted with the world in which he lives, we must bring him into personal contact with the world, European teachers say." [1]

In a recent article in School Life, published by the Bureau of Education, Mr. Coleman, secretary of this association, said: "Objects that can be seen and felt are to the child the realities of life. His fabric of sound understanding must be woven from strands of sense perception and largely, too, his emotional life must be shaped by objective experience and unfolded by the play of the senses. Of necessity, therefore, objects, which are the roots of sense perception, are of prime importance to the teacher."

Museum of Art and History, Vienna

In these statements we find the educational philosophy which lies back of the museum as an agency for teaching and

[1] The Museum and the Schools in Europe, by C. G. Rathmann, reprinted from the Proceedings of the American Association of Museums, 1914.

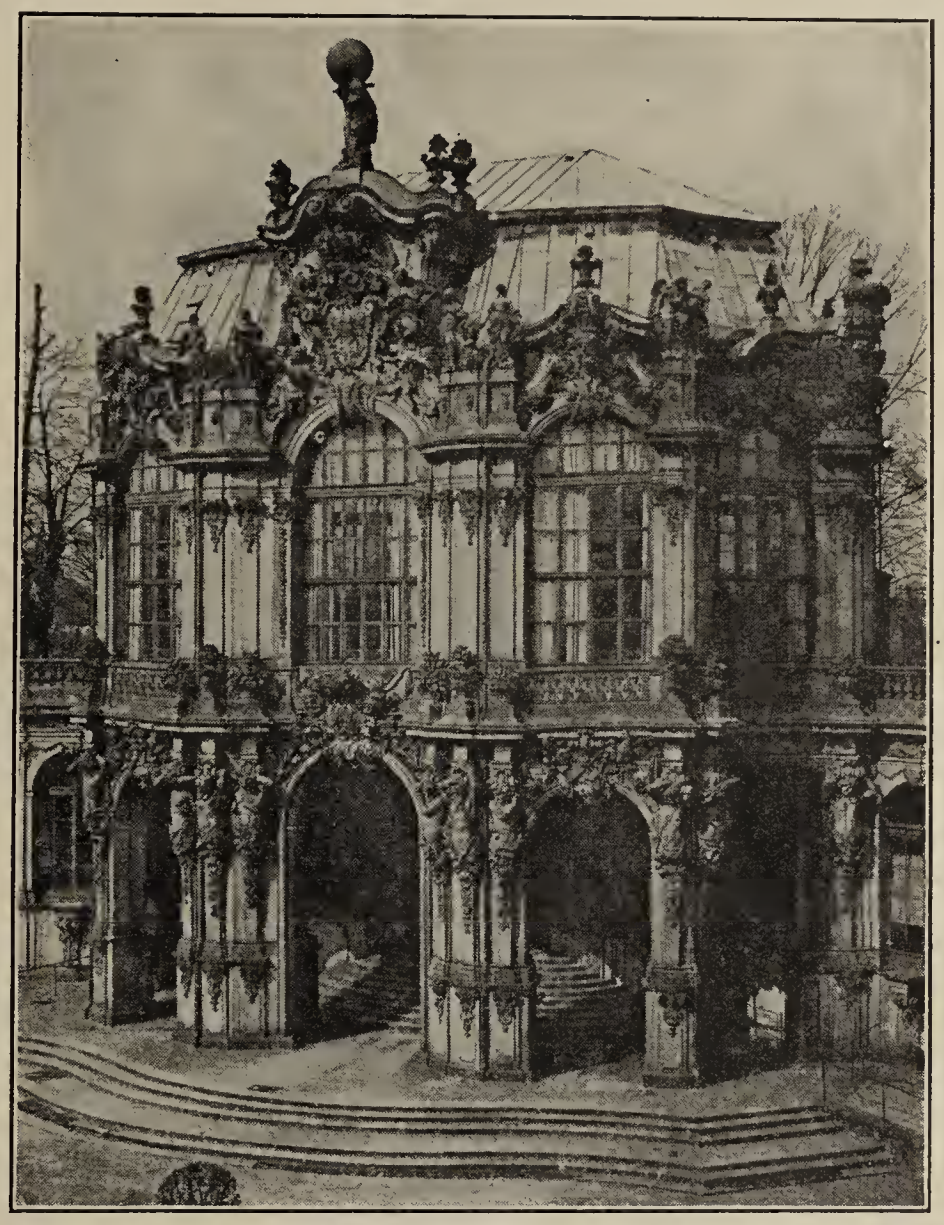
instruction. In Europe, the educational system has laid hold upon these principles more fully than we have in America and has worked out a more general and a better correlation of the museum and the school.

The educational world and the public generally have become more fully cognizant of the need of the museum in the educational program. In England, for example, we find some of the greatest museums, such as the Albert and Victoria Museum in South Kensington, visited annually by thousands of tourists, are under the control of the board of education.

The superior appreciation of the average European for art, whether fine or industrial, is due more largely we believe to education than to any difference in native ability. The American can and will profit by the same methods and processes as the European. The pitiable spectacle of the bored or unappreciative American in the European museums is a result of defective education and not to original sin or innate depravity. When given the proper preparation and channel of approach, the American soldier in Europe became highly appreciative of art and museums. I remember an incident in Dijon, France, after the armistice. Thousands of American soldiers were located there with little opportunity for self-improvement and many opportunities for wasting time. The Dijon Museum, one of the finest in France, had been closed during the war. An American educator, who happened to be located in Dijon in the service of the Y. M. C. A., got permission to take American soldiers through the museum. With the aid of a splendid lecture, these visits became the most popular thing in the demand of the soldiers situated at Dijon. Twice daily a limited number were taken through the museum and always crowds were turned away.

I had the same kind of experience in taking American soldiers through museums in England and Scotland during the war. At Oxford, where a large number of our men were attached to the British aerodromes in that vicinity, American lads displayed great interest in the varied and rich collections and antiquities of this English seat of learning.

All learning depends upon attention. Attention is either spontaneous or forced. It either arises freely or must be secured by an exertion of the will. The fact that so much book study is of a kind to require effort is what makes the school irksome to many children. The museum, with its abundance of definite and concrete things, its element of wonder, its æsthetic appeal and lure of interesting things has a great advantage as an educational agency because of the spontaneous attention that naturally attaches to it. The modern exhibition, in attractive setting and beautiful architecture, has a tremendous educational advantage over the old-fashioned museum, often housed in dingy quarters with crowded and dusty cases. The architecture, the setting of the paintings, the environment, the color scheme, and furnishings of the Frear collection in this city have an educational value quite comparable to the collection of paintings, ceramics, reliefs, and other objects displayed there. Compare the new National Museum with the old Smithsonian for example. The latter was the kind of thing that must have inspired the oft-told story about the little girl who looked in a museum and said, "Mother, this looks like a dead circus."



"Zwingerpavillon" (Museum), Dresden

The museum may be made alive with interest. I have two small children who prefer the National Museum as a place of visit to anything else in Washington and one of them even prefers it to a circus. Indeed, the capacity for spontaneous interest is the greatest educational advantage that a museum possesses.

The schools of this country are coming more and more to emphasize the need of contact with things. The value of perception and of doing are being realized more than ever before. Field trips, tours of inspection, visits to city halls, court rooms, health departments, factories, museums, and every kind of contact with life are becoming daily more popular. The project method, now so widely in use in our schools, gives ample opportunity for the school to carry out all kinds of constructive enterprises—to grow gardens, to improve the school appearance, to promote sanitation and a hundred other things. To collect materials for a school museum is a basis for a most helpful project which can be expanded almost indefinitely in any community. Those interested in museums can be of great help to the teachers and the schools in working out projects. The possibilities are unlimited.

Education is not confined to children. Education lasts as long as life. The value that is derived from the study of art and science, as made possible by the museum, lends itself particularly to growing interest as we become old. If our boys and girls can get this kind of opportunity during the school years, they will never cease to derive pleasure and profit from the studies thus begun.

Newell Dwight Hillis somewhere tells of an incident in the Vatican one day. Michaelangelo, old and blind, was seen lingering by a torso of Phidias, groping over the marble with his feeble hands. The old man muttered, "Great is this marble; greater is the hand that made it; greater still is the God that made the sculptor. I still learn! I still learn!" and the aged artist went on his way inspired and sustained by a vision of more perfect beauty.

Education for the Vocation of Agriculture

Farmer Need No Longer Be the Toilworn Craftsman Described by Carlyle. Modern American Farmers with Vocational Education, Which is Easily Accessible, are Equal in Bearing and Culture to Professional Men

By EUSTACE E. WINDES
Associate Specialist in Rural Education, Bureau of Education

"TWO MEN I honor, and no third. First, the toilworn craftsman that with earth-made implement laboriously conquers the earth and makes her man's. Venerable to me is the hard hand; crooked, coarse; wherein notwithstanding lies a cunning virtue, indefeasibly royal, as of the scepter of this plant. Venerable, too, is the rugged face, all weather-tanned, besoiled, with its rude intelligence; for it is the force of a man living manlike. O, but the more venerable for thy rudeness, and even because we must pity as well as love thee! Hardly entreated brother! For us was thy back so bent, for us were thy straight limbs and fingers so deformed. Thou wert our conscript, on whom the lot fell, and fighting our battles wert so marred."

E. E. Windes

Thus the great preacher of the gospel of work, Carlyle, voices his veneration for the farmer, accords him high place because his hands have been roughened, frame bowed, joints stiffened, gait and bearing made awkward because he has given unstintingly of his physical energy that the race might be fed and clothed and that others might be freed from physical toil to minister to the spiritual life of the race.

Escape Lies in Education for Vocation

Thus also the great master of words paints as vivid a picture as has ever been painted of him who labors with crude tools and unsharpened intelligence to wrest by physical force a meager return from a reluctant nature. It is a word picture of the pioneer American farmer. We see his counterpart to-day. All sane men accord to him the veneration of Carlyle. All sane men also to-day pity his lot and know that it is not necessarily so. There is an escape. The farmer to-day can serve so as to command veneration and he can at the same time avoid the dull deadening drudgery with crude tools. The escape lies through education for vocation. Specifically the escape lies through education in vocational agriculture.

Education for vocation has proven its worth. It is not chance that gives to the agricultural college graduate who is farming a higher yearly income than that received by the high-school graduate. It is not chance in turn that gives the high-school graduate in vocational agriculture who is farming a higher yearly income than that received by the farmer who never attended high school. It is the law of increased output which follows working with sharpened tools.

Americans Excel Farmers of Old World

The picture drawn by Carlyle applies particularly well to the peasant farmer of the Old World to-day. He still labors with crude tools to produce a meager return. He still is uneducated either from a cultural or from a vocational viewpoint. The mass of farmers of the United States to-day, however, after approximately sixty years of agricultural education fostered by the National Government and by States through the Federal Department of Agriculture, State Agricultural Colleges and Experiment Stations and through instruction in public schools are quite different. They produce per worker 2.3 times what the farmer of the United Kingdom produces, 2.5 times what the German farmer produces, 3.2 times what the French farmer produces, and 6.5 times what the Italian farmer produces.

The increased production comes through education in productive processes and particularly through education in the use of labor-saving tools. The American farmer to-day expends less than 20 per cent of the labor in producing the nine principal crops of the country that he expended in producing the same quantity of these crops in 1850. The American farmer to-day is not necessarily the toil caloused, broken laborer that Carlyle pictures. Often he can not be distinguished from the brainworker in bearing or in breadth of scholarship. He labors less hardly with his hands. He produces more abundantly of food and clothing. He contributes to that which is best in governmental life. He adds to our storehouse of spiritual possessions. It is the miracle of education in vocation.

However, there are ways in which vocational education for the farmer may be improved. Many yet are not reached by an effective type of vocational training, and the training has not yet provided a satisfactory solution of some of his problems which are pressing. Although as a whole the American farmer is an effective producer because agricultural science has dealt largely with the science of production, he yet does not receive his just share of the rewards due him from his labors. He is managing to live. Many are accumulating wealth, a goodly percentage maintain standards of living in keeping with the best of American ideals, but a majority yet do not realize a satisfactory income and succeed financially only through exploiting their wives and children and through adopting undesirably low standards of living.

Former Conditions of Agricultural Education

Specifically, agricultural education in the past has concerned itself with such matters as the right use of machinery, control of pests, tillage practices, conservation of soil fertility, supply of food through commercial fertilizers, improvements of plants and animals, and economical farm layout, to the exclusion of problems of distribution of agricultural products through which the farmer realizes or fails to realize a just return for the commodities he has to sell.

This failure to secure a just return for effort in agriculture is shown by the fact that the 28 per cent of occupational workers which are agricultural secure only 17.4 per cent of the national income, whereas the 32 per cent which belong to the professional and commercial classes secure 40 per cent of the national income.

There is general agreement that the failure of farmers to secure just returns for labor is due primarily to the fact that the farm group is attempting to compete on an individual basis with other organized vocational groups.

Government through Vocational Group Representation

Many of us hesitate to advise vocational group organization. The fact of vocational group organization is responsible for the most serious problems confronting the Nation. It seems that we are rapidly approaching government through vocational group representation. Legislation is sought or opposed because of its effect upon a certain group. Group contends with group, and the vigor of contention is in proportion to the strength of the contending groups. Government thus becomes the tool of special interests, and general social and national welfare is forgotten. It is inevitable that government reacting always to pressure for economic advantage from organized groups must breed discontent. The complete collapse

of government is easily possible under such a state.

However, we are confronted with the fact of vocational group organization in the United States, and dangerous as the tendency may be no alternative seems left the farm group. Farmers must be taught the advantages and methods of group organization. It seems the only way to secure the just rewards due. Farmers must be taught the methods of securing legislation. They must be taught to read aright the influence of the legislative program of other groups upon the farm group and the social order as a whole and to react accordingly. They must be taught to use to good advantage the credit machinery with which the Nation has provided them. They must be taught the law, and the agencies for buying and selling, transporting and storing. They must be taught the sources of information and the proper use of information concerning world and domestic demand for the commodities they produce.

It seems well to realize that these phases of education for agricultural pursuits are as definitely vocational as the skill involved in operating a farm tractor.

It is to be hoped also that in teaching the farm group the methods and principles of group organization we can teach at the same time that organization is for cooperation and not for competition; that the aim is to secure advantages derived through pooled effort and pooled resources and not advantages derived through using the agencies set up by the social order in such a way as to levy tribute upon other groups; and that a decided public service may be rendered if the farm group can find a means of impressing the cooperative rather than the competitive function of organization upon other groups.

A final aspect of vocational education for farmers to which I invite attention is the matter of guiding the proper persons into the occupation.

Past effort in rural education has sought to give the boy a bias toward the farm. It has been assumed that the national well-being depended upon keeping a higher percentage of farm boys on the farm through stopping the drift to cities. Educational programs were projected which frankly aimed at painting such a rosy picture of country life on the one hand and such a dark picture of city life on the other that the boy would elect to stay on the farm. Educational materials were so selected also that the farm boy was trained for farm life, but not for any other occupation. Recently men have seen the real significance of such a program. We have begun to realize that just to the extent that such a program is successful, congestion in the farming occupations becomes more acute, competition of farmer with farmer more intense, and returns for effort thereby reduced to the point where little or no profit is derived. Secretary Wallace has recognized the bad effect of such a program and announced in his late 1922 report to the President that—

A typical Eskimo family. One of the duties of the Bureau of Education is to educate these children

"The greatly accelerated movement of farmers, and especially farmers' sons, from the farms to cities and industrial centers is one of the hopeful signs."

There is another side to such an educational program which is serious in its consequences. Such a program is sending large numbers of young men into farming occupations who never should have entered the occupation. Not every one is fitted by temperament, ability, or interests for farming occupations. A program in vocational agriculture should begin with an effort to acquaint boys with the real possibilities of the vocation, to determine the boys' fitness for the life of a farmer, and to guide those who are fitted for farming into the occupation and to guide those unfitted for farming into other occupations.

Colleges Require Women Students to Swim

Swimming for women in colleges and universities was studied during the past year by Miss Kate Staley, of Sayner, Wis. A questionnaire was sent to 131 colleges recognized by the American Association of University Women. Sixty-four of these responded. The following 22 stated that they required swimming as a part of the students' work in college:

Agnes Scott College.
Cornell College.
*Cornell University.
Bryn Mawr College.
Florida State College for Women.
Goucher College.
*Iowa State Agricultural College.
*Rockford College.
*Syracuse University.
Chicago University.
*Cincinnati University.
University of Iowa.
University of Montana.
University of Nebraska.
*University of Wisconsin.
Upper Canada College.
Vassar College.
Washington University.
*Wells College.
*Western Reserve.
Wheaton College.
*Wooster College.

Those marked with an asterisk (*) refuse to grant a degree to a student who fails to pass a fixed swimming requirement, such as 50 feet, strokes in good form, swimming for two years, 120 yards, and diving. The most frequent requirement, however, was 50 yards.

Boys and girls who have been cultivating gardens in the southern part of the Brooklyn Botanic Garden are reaping the rewards of scientific agriculture. One point emphasized by their instructors is frequent and shallow cultivation of the soil to conserve moisture and keep down weeds and it has resulted in an abundant yield of high-grade vegetables in spite of dry weather.

Bill Before Congress for Department of Education and Relief

Complete Bill Provides for Reorganization of Executive Departments and Classification of Bureaus According to Function. Drawn by Joint Committee on Reorganization and Indorsed by President Coolidge. Bureau of Education, Vocational Education Board, Certain Local Institutions, Public Health Service, Pension Bureau, and Veterans' Bureau Grouped to Form New Department

By WILLIAM R. HOOD

Assistant Specialist in School Legislation, Bureau of Education

IN the May number of SCHOOL LIFE an outline was given of the main provisions of three important educational measures before the Sixty-eighth Congress. These were the Sterling-Reed bill (sometimes called the "N. E. A. bill"), to create a Department of Education; the Dallinger bill, to establish a Department of Education and Welfare; and another bill bearing Representative Dallinger's name and proposing to extend the purpose and duties of the Bureau of Education. At the time of publication of the outline of these proposed measures, the educational bill which has received the President's indorsement had not been introduced. This was the bill reported in the Senate by Mr. Smoot and in the House by Mr. Mapes, both from the Joint Committee on the Reorganization of the Executive Departments. The report was submitted on June 3 and the bill was one "To provide for the reorganization and more effective coordination of the executive branch of the Government, to create the Department of Education and Relief, and for other purposes."

Outline of Main Provisions

This bill relates to several executive departments and independent establishments and affects them as follows:

Title I.—A Department of Education and Relief is established. A brief summary of the provisions of this title is given in later paragraphs.

Title II.—Two additional Assistant Secretaries are provided in the Department of Commerce. The Bureau of Mines and the Patent Office are transferred to this department from the Department of the Interior. The National Advisory Committee for Aeronautics is made a part of the Department of Commerce, which also receives by transfer the Lake Survey Office from the War Department. Control of inland waterway transportation facilities as provided in sections 201 and 500 of the transportation act of 1920 is transferred from the Secretary of War to the Secretary of Commerce. The Bureau of the Census becomes the Bureau of Federal Statistics. A Bureau of Transportation is established.

Title III.—Department of the Interior.—The Assistant Secretaries in this department are hereafter to be known as the Assistant Secretary for Public Domain and the Assistant Secretary for Public Works. The Bureau of Public Roads of the Department of Agriculture and the Office of the Supervising Architect of the Treasury Department are transferred to the Department of the Interior. The Board of Road Commissioners for Alaska, now under the War Department, is abolished and its functions transferred to the Secretary of the Interior.

Title IV.—A Bureau of Purchase and Supply is created to contract for, purchase, and distribute supplies for the executive departments and independent establishments and for the municipal government of the District of Columbia.

Title V.—The Office of Public Buildings and Parks in the District of Columbia is established.

Title VI.—The Solicitor of the Treasury, the Solicitor of Internal Revenue, and the several solicitors for the Departments of State, Interior, Commerce, and Labor, all of whom are at present officers of the Department of Justice, are transferred to the respective departments where now assigned, and their several subordinate officers and employees of the Department of Justice are likewise transferred.

Title VII.—The Bureau of the Budget is made independent of any executive department.

Title VIII.—This act is to take effect March 4, 1925, but provisions relating to transfers, abolishment of existing agencies, and like changes are to become operative July 1, 1925.

Department of Education and Relief

Readers of SCHOOL LIFE will probably be most interested in the provisions of Title I of the bill. Briefly stated, these provisions are as follows:

1. It creates a Department of Education and Relief with a Secretary in the President's Cabinet.

2. Provides for three Assistant Secretaries, to be known respectively as the Assistant Secretary for Education, the Assistant Secretary for Public Health, and the Assistant Secretary for Veteran Relief, each of whom is to perform his duties under the general direction of the Secretary.

3. Makes it the duty of the department to foster and promote public education and health and the interests of persons separated from the military or naval forces of the United States.

4. (*a*) Transfers the Bureau of Pensions, the Bureau of Education, St. Elizabeths Hospital, Howard University, and Freedmen's Hospital from the Department of the Interior to the Department of Education and Relief.

(*b*) Transfers the Public Health Service from the Treasury Department.

(*c*) Abolishes the Federal Board for Vocational Education and transfers its functions to the Assistant Secretary for Education.

(*d*) Abolishes the office of Commissioner of Education and transfers his functions to the Assistant Secretary for Education.

(*e*) Provides that the Assistant Secretary for Veteran Relief shall be a member *ex officio* of the Board of Managers of the National Home for Disabled Volunteer Soldiers and requires reports of this board to the Secretary of Education and Relief.

(*f*) Transfers the functions of the Secretary of the Interior in respect to the Columbia Institution for the Deaf to the Secretary of Education and Relief; provides that the Assistant Secretary for Education shall be *ex officio* a member of the board of directors of said institution.

(*g*) Transfers the United States Veterans' Bureau to the Department of Education and Relief. Abolishes the office of Director of the Veterans' Bureau and transfers his functions to the Assistant Secretary for Veteran Relief.

5. Official records and papers and furniture and equipment are transferred with the respective bureaus and offices.

6. Secretary to have charge of property of department; office room provided for; employees transferred with their respective offices.

7. Existing powers of Secretaries over transferred bureaus and offices are transferred to and vested in the Secretary of Education and Relief.

8. Secretary to report annually to Congress.

Brief Comparison with Other Bills

The provision for a Department of Education and Relief may perhaps be better understood if a brief comparison is made with the other three important educational bills now before Congress.

When compared with the Sterling-Reed bill for a Department of Education, the bill here considered, which may be called the Smoot-Mapes bill, presents several important differences: (1) It seeks to coordinate the Government's educational activities, whereas the Sterling-Reed bill does not specify bureaus and offices to be transferred, except that the latter bill names the Bureau of Education as a part of the Department of Education. (2) The Sterling-Reed bill provides for only one Assistant Secretary and makes no statutory provision for divisions of the department; the Department of Education and Relief is to comprise three major divisions each under an Assistant Secretary appointed especially for it. (3) The Sterling-Reed bill authorizes an appropriation of $500,000 for administration and an additional $100,000,000 as direct national aid to the States for educational purposes; in this respect it proposes to change the policy of the Government with regard to aiding education in the States. In contrast with this, the Smoot-Mapes bill authorizes no additional appropriation and leaves as at present the policy of restricting the Government's educational concerns almost wholly to the subvention of special types of education, the provision of school facilities for dependent peoples such as Indians and Eskimos, and the general promotion of education through information-giving and the like.

The Dallinger bill for a Department of Education and Welfare and the Smoot-Mapes bill for a Department of Education and Relief are essentially the same in principle. Both seek to coordinate the Government's educational activities, but neither of them authorizes a large appropriation of money or materially changes the Government's policy with respect to aiding education in the States. There is, however, an important difference as regards organization. The Dallinger bill provides for a department with four major divisions, while the Department of Education and Relief is to have only three. In the former measure there is provision for a Division of Social Service, which would be composed of the Children's Bureau and the Women's Bureau transferred from the Department of Labor. The Department of Education and Relief will have no such division, the Department of Labor being left intact.

Comparison of the bill for a Department of Education and Relief with the Dallinger bill for the extension of the purpose and duties of the Bureau of Education would seem unnecessary. The latter bill is not inconsistent with any of the other three important educational measures now before Congress.

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To determine a student's fitness for entering an institution of higher learning, Chicago, Princeton, Minnesota, and Northwestern Universities and Dartmouth College are cooperating under the direction of the American Council on Education in preparing psychological tests. These tests will be given to freshmen of more than 100 colleges and universities.

Practical Field Geology in Summer Quarter

Numerous courses in field geology were given in the summer quarter at the University of Chicago this year, one of which was a study of igneous and sedimentary rocks and varied phases of glacial drift near Devils Lake, Wis. At the Missouri field station in Ste. Genevieve County, Mo., each member of the class prepared a finished geological map of the area studied, showing the stratigraphy and structure of the region. One class studied fossil plants and their use in coal geology in the Des Moines formation in southern and central Iowa, another made a field expedition for research in vertebrate paleontology in western Nebraska and the adjacent portions of Wyoming, and a party of 12 men made an expedition in the Telocaset Quadrangle of the Blue Mountains of Oregon, the geology of which has never been mapped.

A stairway in the Interior Department Building

· SCHOOL LIFE ·

Issued Monthly, except July and August
By THE DEPARTMENT OF THE INTERIOR, BUREAU OF EDUCATION

Editor - - - - - - James C. Boykin
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Terms: Subscription, 50 cents per year, in advance. Foreign (not including Canada, Mexico, Cuba), 75 cents. *Remittance* should be made to the Superintendent of Documents, Government Printing Office, Washington, D. C., and should be by cash or money order

SEPTEMBER, 1924

Announcement

Subscription to School Life will in future be 50 cents a year, the increase being necessary to cover increased cost of production, which includes an increase of 25 per cent in the salaries of employees of the Government Printing Office. Single copies will be supplied at 5 cents each. No reduction will be made for subscriptions or purchases in quantity.

This price, like the prices of all other governmental publications, is fixed to cover only actual costs of paper and a portion of the mechanical work involved. It does not include any provision for editorial work, nor for the mechanical processes which precede printing from plates previously made at the expense of printing funds allotted to the Bureau of Education nor for "overhead" except in distribution.

Bureau's Attitude Toward Immigrant Education

PUBLIC EDUCATION is not a matter of age, sex, nor race. Ignorance is an evil no matter where it exists nor whence it comes. The education of immigrants who reside in this country in compliance with its laws is the duty of the States of the Union for precisely the same reasons and in precisely the same manner as the education of those whose ancestors came here generations ago from Europe, Asia, or Africa.

The 23,000,000 children of the Nation demand first consideration as a matter of course. Childhood is the best time for teaching, and every effort must be made to train the youth of the land for efficient and patriotic citizenship. If the full duty of the States had been done from the beginning, there would be now no problem of adult illiteracy, so far as native citizens are concerned. But nearly 3,000,000 native-born adult illiterates tell a story of wasted opportunity and of duty unperformed. That stigma upon American civilization must be removed, and that quickly. It is the duty of the States to wipe out that blot of ignorance which in their heedlessness they permitted to accumulate.

Just as the States of the Nation allowed nearly 3,000,000 of their own people to enter upon full adult citizenship without education, so the Nation as a whole has permitted nearly 2,000,000 adults of foreign birth to become American citizens equally without the minimum of education.

The problem which must be solved, therefore, is to provide education in some degree for nearly 5,000,000 adults. It is immaterial for practical purposes how they happened to be here—whether they grew here or came here. The duty is the same. The mass of ignorance is with us, and it is hanging over us like a pall. It must be removed.

The only difference in dealing with the parts of the problem is in the manner of procedure. To teach an adult who speaks no English differs in detail from teaching an adult who does speak it. It involves time, patience, and skill, but it is a duty that must be performed nevertheless, difficult though it may be. Even those new citizens who have been educated in their own countries must learn our language and become imbued with our traditions and ideals. Many of them have come to us for economic opportunities which were denied to them in European countries. We have no occupational castes; we desire none. Elementary education gives the tools for occupational freedom, among which the basic ones are language and number. We desire that our new citizens have access to secondary education as well, including both academic and vocational opportunities. The better education of immigrants is a cause worthy of our best efforts and presents problems whose solution tests the mettle of the best of American educators.

The attitude of the United States Bureau of Education toward the education of immigrants differs in no particular from its attitude toward the removal of ignorance in any other form. It is prepared to go to the full extent of its abilities in rendering that aid. In accordance with its traditions its aid must be confined to suggestion and information.

In the past a division of immigrant education was maintained, and specialists were employed to give personal assistance when it was demanded, but that service was discontinued after the close of the war seemed to make it less necessary. To reestablish it would require congressional action. We have, however, published from time to time bulletins intended to help those engaged in this specialized work, and we are prepared to continue to do this as appropriate manuscripts are presented to us and as funds are available for the purpose. As much more will be done as the Congress will permit us to do. It is a proper function of the Bureau to undertake this work, and we are anxious to do it.

The Proposed Department of Education and Relief

Reorganization of the administrative branch of the Government, not the establishment of a single new agency alone, is contemplated by the bill which includes provision for a new executive department to be known as the Department of Education and Relief. It was this to which the President referred with approval in his address before the National Education Association. The character of this measure is shown by the fact that it is to be cited as the "Departmental reorganization act, 1924."

From the beginning of the Government the organization of the departments has been according to temporary expediency. Bureaus newly organized have been assigned to the departments which at the moment seemed best able to receive them. The Patent Office, for example, was at one time in the State Department, the primary duty of which concerns the relations of the Nation with foreign governments. The Indian Bureau was formerly in the War Department. The Treasury Department, which manages the national finances, has long been burdened with duties that had no relation to its principal function; the Public Health Service and the Supervising Architect have little in common with fiscal matters, but they are bureaus of the Treasury nevertheless.

From time to time efforts have been made to remedy this incongruous organization. The Department of the Interior was constituted in 1846 for the direction of "home" affairs, and several bureaus have been developed and assigned to it, more or less appropriately, since that time. Similarly the Department of Agriculture, formerly an independent establishment, was made an executive department, and later the Department of Commerce and Labor came into being, only to be divided after a short time into the Department of Commerce and the Department of Labor.

These new departments had the effect of partially simplifying the complex organization, but with the rapid development of new governmental agencies during the past few years that simplification did not last long; the situation is now at least as bad in this respect as at any period in the past.

The first comprehensive effort at improvement was made during the administration of President Harding. A Joint Congressional Committee on the Reorganization of the Administrative Branch of the Government was constituted under a chairman designated by the President, and the result of its labors was a proposal, approved by the President and the Cabinet, for a thoroughgoing reclassifica-

tion of the Government's activities and a realignment of its bureaus. This proposal was presented to the Congress only a few days before the close of the last session of the Sixty-seventh Congress. There was no time for action then, and it became necessary for the Sixty-eighth Congress to begin all over again.

A new measure with similar purpose but omitting some of the features of the original proposal which had aroused sharp discussion was "reported" from the joint committee to the Senate by Senator Smoot and to the House of Representatives by Mr. Mapes during the recent session of the Congress, and the bill is now on the calendar of both Houses. It is described briefly upon another page by Mr. William R. Hood.

In that bill the demand for a Department of Education was recognized, but history was repeated in the suggestion to join with it several bureaus which could not by any possibility be made to fit into the plan of any other department. There is nothing in foreign relations nor in fiscal management, nor in military and naval affairs, nor in the administration of justice, nor in the post office, nor in public works and the public domain, nor in agriculture, nor in commerce, nor in labor to which matters which concern personal relief and rehabilitation of civilians can be logically joined. Education comes more nearly to it than any other subject assigned to a department. Therefore, as Commerce and Labor were joined when one new department was created, so Education and Relief were joined in the plan for this new department. Commerce and Labor were not long together. It is possible that the union of Education and Relief will likewise be sundered within a reasonable time.

Let it be remembered that this bill relates only to organization. No question of appropriations enters into it. It is purely a practical measure of administration and the policy of Federal aid to education in the several States is in nowise involved. It is not open to any objection on the ground of changes in national policy, for it involves none.

Nearly Three-Quarters of a Million Teachers

The total number of public school teachers in the United States in 1923 is estimated by the Bureau of Education to have been 729,426. This estimate does not include superintendents, supervisors, and principals. Forty-three per cent of these teachers, or approximately 313,805, are classed as rural teachers. In this classification rural is interpreted to include open country, country villages, and towns not maintaining independent city systems.

Latin-American Engineers and Professors of Engineering Inspect Highways

Under Auspices of Highway Education Board, Pan American Highway Commission Visit Nine States. Establish Pan American Confederation of Highway Education Boards. Influence of Good Roads Upon Schools

ON BEHALF of the Highway Education Board the United States Commissioner of Education in April, 1924, extended invitation to leading representatives of the departments of publie works and directors general of roads, deans and professors of engineering education, and certain financiers in Latin America to participate in an intensive study of highway problems in the United States. The invitation was generally accepted, and 38 persons arrived in Washington on June 1.

Welcomed by National and State Officers

They were formally received and cordially welcomed in Washington by the President, the Secretary of State, the Secretary of the Interior, the Secretary of Agriculture, the Secretary of Commerce, and in the several States by the governors thereof or their representatives. On the grounds of the Pan American Union a tree was planted in honor of the occasion, and before leaving the country the delegates voted a substantial sum for a bronze memorial to be placed in the building of the Pan American Union.

The group of visitors became known as the Pan American Highway Commission. They were invited to come to this country primarily to study highway problems, but they were also asked by the Pan American Union to formulate the program of the Pan American Highway Motor Conference which is to be held in Buenos Aires in May, 1925.

The commission spent more than a month in visiting the highway systems of North Carolina, Kentucky, Illinois, Minnesota, Wisconsin, Ohio, Michigan, Pennsylvania, and New Jersey. They were received with great enthusiasm not only officially but by the people at large as they drove through the States. Three thousand miles of their journey was by automobile and 3,000 miles by rail.

Visits to Highway Laboratories

They spent considerable time in visiting the highway laboratories of the universities of the States which were in the itinerary. A special banquet was given in their honor at the University of Michigan, where they were addressed by President Burton and Dr. John J. Tigert, commissioner of education, who joined the commission at this point.

The commission had the pleasure of visiting a large number of industrial establishments of the United States, including those of the iron and steel industry in Cincinnati, the iron mines of northern Minnesota, and the docking plants at Duluth. A number of the leading automobile plants in Detroit were inspected, and special welcome was given to them by leaders in the automotive industry. Nearly a day was spent at Akron in the factories of the rubber industry, and some time was given to investigating the filtration plants in Cleveland.

Relatively Cheap Type of Construction Practicable

During the trip the members of the commission had the opportunity of witnessing the construction of typical highways, particularly those which would be best suited to their respective countries. The delegates found that it is possible to build successfully a much cheaper type of road than they had thought practicable. Consequently it is expected that large rural districts in the Latin American countries will be opened up, facilitating the establishment of rural schools and in every way encouraging more advanced civilization.

On returning to Washington the commission resolved itself into a committee of the whole to prepare a tentative program for the Buenos Aires conference.

One of the final acts of the conference was to establish a Pan-American Confederation of Highway Education Boards, with a constituent board in each country, to develop a better appreciation of values in improved highways and better education for highway engineering in the engineering schools.

Government Officials Accompany Visitors

The commission was accompanied by representatives of the Federal and State Governments, of the National Automotive Chamber of Commerce, of the Highway Education Board, and of publications devoted to engineering. S. T. Henry, of New York City, and W. C. John, of the United States Bureau of Education, were the executives in charge of the tour.

One of the most important lessons that seemed to be fixed in the minds of the delegates is the extent to which the United States has been able to attain fairly even development of its rural schools by means of its excellent highways.

No Recognized Line between High School and College Subjects

Research Committee of Colorado State Teachers College Finds Condition Little Short of Chaotic in Standards of Higher Institutions. Teacher-Preparing Institutions More at Fault Than Colleges and Universities

NO SYSTEM is now in operation for classifying subjects as to collegiate rank which will stand any scientific test. This is the conclusion reached by the research committee of the Colorado State Teachers College after an exhaustive study of the standards used in colleges, universities, and teacher-training institutions.

Attempting to revise the curricula of the college, the faculty could not agree as to whether certain subjects should be given college credit or be classed as secondary. Since the course-of-study committee was unable to furnish any specific statement for classification of subjects, the research committee was asked to formulate standards for that purpose. To ascertain the current practice and belief prevailing in the higher institutions of the country a questionnaire was sent out. Although the replies did not furnish all the information desired, the committee did learn a great deal about the situation.

Associations of Colleges Operate Accrediting Systems

In setting up standards for determining entrance credits, it was found that the universities and colleges have done more than the teachers' colleges and normal schools. The college entrance examination board defines the scope and content of secondary subjects, and the various associations of colleges and secondary schools operate accrediting systems for ascertaining the quality of this preparatory work. Some colleges allow from four to nine units to be offered in subjects not required. The University of Illinois mentions 36 subjects, in which nine units may be offered. Ten of these subjects lie in the field of agriculture, home economics, music, commerce, and manual training.

Students who continue in college the work which they began in high school get along very well, it is reported, but students who shift to college courses for which they have not specifically prepared find it a stiff climb. For these students the colleges have learned to provide some plan for the necessary work in the prerequisite secondary grades of subjects.

While some universities do hold very strict entrance requirements, the committee reports great variations in determining collegiate grade of subjects. Some of the teachers of the newer subjects take the attitude that "college work is work done in college, and secondary school work is work done in secondary schools." They would urge further extension of collegiate credit. As a rule, however, certain subjects are considered elementary in character and can not, under any conditions, receive college credit.

Eight Years for Secondary School and College

A plan intermediate between these two was found in the University of Chicago. Finding it difficult to draw a sharp line between secondary school and college work, they define the requirement for the bachelor's degree in terms of an eight-year curriculum covering secondary school and college. Students entering direct from a secondary school are required to take up advanced work in at least one department, besides English, in which they have completed two or more units in the secondary school. Likewise, they place certain restrictions on students as to the number of courses of elementary nature which they may take in college.

That the chaotic condition existing in colleges and universities is also found in teacher-training institutions is the opinion of the committee after reading such replies as: "The college should do the best it can with the material it gets"; "Any kind of work taken by a student who has completed four years of high-school work should be regarded as collegiate work"; and "There is no defense for giving college credit for private music lessons, typewriting, beginning foreign language, review subjects, and home economics."

"None" is what most of the colleges say when asked what credit should be given for private lessons in music. A few would give credit, but "only for music majors." As for typewriting and shorthand, some schools see full value in one, others in both, while some schools would give no credit unless the two subjects are taken together.

That no credit should be given for review subjects, such as grammar and arithmetic, is the opinion of a very strong majority. Greater favor is given work in home economics, but several cautions appear that the course must be properly given and must have a scientific basis.

Finding so little uniformity of opinion as to the value of the newer subjects, the research committee of Colorado State Teachers College recommends and urges that collegiate institutions of various kinds undertake concerted action to establish uniform standards for determining collegiate rank of subjects.

Worth of Legion's Essay Contest Demonstrated

School Children of Nation are Stirred to Keener Patriotism. Three Winners of Second Competition are Announced

Increasing interest is being shown by the school children of the Nation in the National Essay Contest sponsored by the American Legion to encourage higher education and stir a keener patriotism in the citizens of to-morrow. The number of manuscripts submitted for the third competition, which closed recently, is estimated to be 40 or 50 per cent greater than that for the preceding year.

Subjects chosen are such as will lead the contestants to focus their thought upon questions of practical national policy. The topic for the second contest was "Why America Should Prohibit Immigration for Five Years." That for the third competition was "Why Communism is a Menace to Americanism."

Announcement was made about the time the third competition closed that two girls and a boy, all three high-school students, had been selected as the winners in the second competition. Sara Heysham, 18, of Norristown, Pa., won first prize of $750. To Florence Sweetnam, 16, of Rochester, N. Y., was awarded second prize of $500. Byron Hill, 18, of Jackson, Tenn., took third honors with an award of $250.

The awards are to be used by the winners, under the terms of the contest, in continuing their education at some recognized college or university. Miss Heysham and young Hill, who have been graduated from high school, plan to enter college this fall. Miss Sweetnam begins her senior year in high school. The two girls are preparing for the teaching profession. The boy's ambitions are drawn toward the law.

"The worth of the essay contest sponsored by the Legion is demonstrated," a Government official who comes in close contact with educational problems has said, "by the high character and large number of the contestants. The value of this competition is in building up a better type of citizenship and in stirring these young people to take thought during the formative years of their lives for their country's future and for the questions which it must meet can not be doubted."

Twenty Years' Progress in London Schools

London County Council Became Local Education Authority in 1903, and Has Effected Marked Improvements. Children May Proceed Easily From Nursery to Graduation From University.

By A LONDON CORRESPONDENT

WHEN the London County Council became the local education authority in London, it inherited a system which had little coordination. The London School Board had been responsible for elementary and evening schools, while the Technical Education Board had been the authority delegated by Parliament to advance technical, and inferentially, secondary education. To-day a coordinated education machine has been evolved responsible for the education of the Londoner from the nursery to the university. It is probably the largest—or at least the second largest—municipal instrument in the world, and although, like every other machine, it may creak here and there in its working, on the whole it is doing what Parliament requires it to do, namely, to secure the orderly and progressive development of education in London.

Dramatization of Longfellow's Hiawatha by children of Standard I.

Growth of Medical Inspection

In 1903 there was no medical inspection or treatment of school children. To-day there are in London 85 school doctors, 53 school dentists, and more than 300 school nurses, who are responsible for the medical examination of every child during school life, for treating school children for minor ailments and for passing them on to the hospitals and other institutions for graver defects. More than 5,000 voluntary care-committee workers have been recruited for the purpose of watching over the child during school life and for advising the council on all matters relating to the social and physical well-being of the children of London. School meals are now given to necessitous children; in fact, it may be said that every school, by means of its school care committee has become, not only an educational, but also a welfare center.

Twelve years ago the London County Council gave great attention to improving the educational opportunity of clever children in the upper standards of elementary schools. The scholarship scheme skimmed the cleverest of them into the secondary schools, but there were left many clever children who, just failing to obtain a scholarship, were found to be marking time by being retained at an elementary school. These facts gave birth to the London central schools, which have been the model of similar schools throughout this country. Fifty-nine central schools accommodating 20,000 pupils are to-day provided for clever children between the ages of 11 and 15. Special schools for tuberculous children, open-air and seaside schools for the debilitated, and classes for stammering children are other features which have been initiated during the past twenty years.

Ten Million Dollars for Remodeling Buildings

The war interrupted the building scheme for converting all old-fashioned classrooms into smaller classrooms for 40 boys or girls or 48 infants, but up to the present about £2,000,000 has been spent in remodelling schools.

There were no county secondary schools in 1903; to-day there are 24, attended by more than 10,000 pupils. The grants in aid of the endowed schools, which require rate assistance to enable them to balance their budgets, have increased from £33,000 in 1904 to £210,000 in the present year. The number of London County Council technical institutes has increased from 11 to 30, while the grants in aid given to polytechnics and so on have risen from £83,000 to £331,000.

Schoolboys making a map by the use of a plane table

Twenty-one professional "chairs" have been established by the London County Council in the University of London and the modernization of university buildings has been largely achieved by grants from the County Council. The London School of Economics and Political Science, for example, is erected on land acquired at a peppercorn rent in connection with the Kingsway improvement. In 1903 there was an educational ladder whereby the clever child could proceed by means of rate or State aid from the elementary school to the universities. To-day, however, this ascent is not the steep and difficult ladder that it was in 1903; it has become an escalator which picks up the clever child at any different stage in his educational career and passes him on to a higher level.

A school journey

Teachers in Contact with Distinguished Experts

Marked improvement is evidenced in the teaching staff of 30,000 teachers who form the backbone of the London education service. Every year thousands of these have attended lectures organized by the London County Council with the idea of bringing them (and through them the children) in contact with the greatest experts. Consultative committees enable teachers' opinions to be ascertained on questions of educational technique, while many conferences have been convened to discuss how educational methods may be improved. The work of these conferences has attracted universal interest in the educational world and their reports are in constant demand from overseas dominions.

In technical education the main achievements have been those of consolidation. Slowly but effectively overlapping between different sections has been eliminated and missing links added, until practically every trade in London has to-day its own educational resources behind it. Commercial teaching has been concentrated in commercial institutes while the polytechnics have been left free to expand along technological lines. The effect of this has undoubtedly been to intensify trade and commercial training in London.

It may be true that the London child to-day has not so much precise knowledge in the three R's as perhaps he had 20 years ago, but no impartial observer would fail to admit that his intelligence and interest in life have been greatly stimulated by modern and improved methods.

A critic who had returned to England after an absence of 20 years in the United States said that she was astounded at the developments which had been made in the London schools from the time she was first a manager of them. The thing that impressed her most was the freedom for educational experiment and research. "Your London schoolchildren," she added "are the cheeriest and brightest I have ever seen."

Twenty years ago parents were still hostile to the enforcement of compulsory elementary education; to-day few complaints are received. Parents in greater numbers come to the Education Department, but the tenor of their conversation is "What can I get for my children?" The increasing popularity of the London elementary schools is, no doubt, due to the more sympathetic methods of teaching. The little Londoner to-day no longer dreads his school, but rather looks upon it as a place where pleasant things are pleasantly done.

Kansas Claims Leadership in Educational Broadcasting

A $20,000 radio broadcasting station is to be erected at Kansas State Agricultural College, Manhattan. With the University of Kansas building a similar station, the State is claiming first place in broadcasting stations in State institutions. It is expected by staging "contests in the air" that listeners-in will experience some of the thrills of the onlookers and that it may be one of the means of bridging the gap between the "town and the gown."

A miniature representation of the Thames Valley, set up in the court of a London school

National Education Association Meets at the Nation's Capital

Comprehensive Program Apparently Included Everything that Relates to Welfare of Mind or Body. Million Members Predicted for Association. Meetings Unusually Free from Levity and Personal Compliment. Growing Membership Makes General Meetings Less Effective and Emphasizes Wisdom of Group Organization

A NARROW view of the profession of teaching is wholly incompatible with attendance upon a convention of the National Education Association. No teacher can spend a week in such an atmosphere without realizing that the work of teaching is a tremendous task with unlimited ramifications. Apparently every item which pertains to the welfare of the mind or the body could be found within the scope of the program which the association provided for its members at the sixty-second annual meeting in Washington, June 29 to July 4.

Teacher's Task Constantly Enlarged

One does not often nowadays hear the aphorism "What you would put into the life of a nation you must first put into its schools"; but the believers in that dictum never grow fewer nor their enthusiasm less. At every convention, including this, new appeals have been made for the enlargement of the teacher's task.

With Jno. J. Tigert, United States Commissioner of Education, delivering the address of welcome and President Olive M. Jones the keynote speech, the formal opening session of the National Education Association set a pace for interest and discussion paralleled only by the evening sessions which were to follow.

Pointing to the progress made in the past 26 years, Doctor Tigert declared that in that time "we have become an organized profession instead of a group of individuals holding jobs" and predicted that the next 26 years will see the National Education Association with a membership of more than a million.

Demands Recognition of Education by Government

In an impassioned appeal to the teachers of the Nation to launch a concerted movement to secure the passage of the Sterling-Reed bill for a department of education, Miss Jones scored the enemies of the education bill and admonished the teachers that "the time has come when educators of the country must stand solidly and united and resolved to obtain rightful recognition of education in our Government."

Called together at 8.30 every morning for the general program, a few minutes were spent in singing national anthems. Each morning State delegations came forward and sang their State songs, the other teachers of the States joining in the chorus, but when the Iowans came forward the whole assembly arose and sang with them of the land "where the tall corn grows." This short season of song, however, marked the end of all merriment and the convention settled down for business and serious consideration of the problems of their profession.

General Meetings Conducted Under Difficulty

Because of the large membership, a distinct advantage was seen in the effective organization which has been in force in the past few years. With persons entering and leaving the general meetings as frequently as they are wont to do in lengthy sessions, it was impossible to follow the reading of the reports, but with the representative organization this was unnecessary as printed copies of all reports were in the hands of the delegates. Although relieved of the voting responsibility teachers filled the gallery most of the time, their presence signifying an interest too eager to wait for the press reports of the convention's progress.

Probably no meeting place ever held the inspiring element that was furnished the vesper service Sunday afternoon on the steps and lawn of the east front of the Capitol as the thousand or more teachers assembled there. Directed by George H. Gartlan, director of music, New York City, they raised their voices in "America, the Beautiful" and other patriotic hymns, accompanied by the United States Army Band. On this historic spot, the scene of so many memorable events, the wide plaza with its ancient elms and the Library of Congress in the background, this group of teachers gained new inspiration for the teaching of patriotism.

Amplifyers Make Stadium Ideal Meeting Place

With a seating capacity of 15,000 the stadium of Central High School provided an ideal place for the general meetings held in the evening. The public speech system of amplification installed in the stadium carried the voices from the platform to listeners seated in the remotest corners of the big oval, and those who came late and found it necessary to take end seats heard as distinctly as those who sat directly in front of the speaker's platform.

Remarkable Panorama As Background

Not the least of its delightful features is its elevation. Facing southward, it receives full benefit of the evening breezes off the Potomac. Located in the center of the stadium is the speaker's platform with the wonderful panorama of the National Capital, as a "back curtain," with the Washington Monument, the Capitol, and other public buildings in the distance.

Contributing greatly to the enjoyment of the evening meetings were the concerts by the United States Navy Band under the direction of Charles Benter, the United States Army Band, directed by W. J. Stannard, and the United States Marine Band with William H. Santelmann, leader. In this and other ways the Government officers showed every courtesy to the teachers while they were in the city.

Afternoon sessions were devoted entirely to sectional or departmental meetings on varying subjects studied by interested groups. On two afternoons 15 such meetings were held at school auditoriums, churches, and other points where assembly rooms were available, and 11 other meetings held by allied organizations were in session at the same time. Among these were listed the Junior Red Cross, National Geographic Society, School Garden Association of America, National Council of Primary Education, Visual Instruction Association of America, and National Congress of Parents and Teachers. Remarkably successful were those meetings held in conjunction with luncheons at the hotels where pleasant surroundings seemed conducive to undivided attention and sustained interest in the topics under discussion.

Receptions For Visiting Teachers

Relieving the grind of business and professional meetings were the cultural-recreational features provided for the visiting teachers. "Open house" to delegates and teachers was held by Washington's leading institutions and organizations, including the National Academy of Sciences, Daughters of the American

Revolution, American Red Cross, Corcoran Gallery of Art, National League of Women Voters, United States Bureau of Education, George Washington University, New National Museum, National Education Association, and the National Geographic Society. Thousands of teachers took advantage of these privileges, carrying away with them a deeper impression of Washington, the beautiful.

Educational Achievements of Interior Department

An exhibit showing remarkable educational achievements of American schools was open to visitors in the Interior Building throughout the week. This exhibit was prepared by the Bureau of Education with the cooperation of other bureaus of the Interior Department engaged in educational work, including the Bureau of Mines, Bureau of Indian Affairs, Bureau of Reclamation, Geological Survey, General Land Office, and the National Park Service.

A reception by Secretary of the Interior, Dr. Hubert Work, and the Commissioner of Education, Dr. John J. Tigert, in the offices of the Secretary was largely attended.

As one of the avowed purposes in calling the convention was to "mark out the broad lines of the educational advance in such enterprises as the education bill (Sterling-Reed) and the financing of public education generally" the resolutions adopted show marked progress toward that end, the first resolution including the clause that "we reaffirm our devoted and unqualified support of the education bill now pending in Congress."

Referring to character education, it was resolved that "Honesty, integrity, and truthfulness should be emphasized in all the work of the schools. Everything should be done to inspire in our children a love for other nations. We therefore indorse the efforts to secure help through the American children for the destitute and orphan children of foreign lands."

American Education Week Indorsed

Further indorsements were: Narcotic education service to be established by the Bureau of Education; the child-labor amendment, urging prompt ratification by the States; American Education Week, urging widest observance in schools, churches, and civic centers; a literacy test of "ability to read and write English understandingly, as an additional qualification for citizenship, and that such a test be administered by the Federal agencies already in existence in conjunction with the Bureau of Education;" the National Conference on Outdoor Recreation as an agency for the proper development of our youth physically and morally; that the Constitution be taught in all the upper grades of the elementary schools, and that in the schools instruction should be given in the history and ideals of our public-school system. It was also recommended that a special committee be appointed to prepare a national code of ethics for the teaching profession.

Seeking to take the 1927 convention to Hawaii, the Hawaiian delegation Thursday night gave to each person of the audience of more than 10,000 an Hawaiian lei made by the pupils of the Hawaiian public schools. These paper chains of gay yellows and orange about the necks of every one gave a touch of color to the meeting, making the high-school stadium at night a place comparing in beauty with the city's flower gardens.

Hawaiians are Conspicuous Group

A solid mahogany gavel and block, the gift of school children and teachers of Hawaii, was presented to Miss Jones, the retiring president. In conclusion a group of seven delegates, teachers in Hawaiian schools, gaily adorned with the "chains of friendship," sang native Hawaiian songs to the accompaniment of a ukulele.

The crowning feature of the big convention was the address of President Coolidge on the morning of July 4. This was distinctly heard with the aid of amplifiers and was warmly applauded by an audience of 15,000 in the high-school stadium. It is said that only one other President, Theodore Roosevelt, ever addressed the National Education Association.

Jesse H. Newlon, superintendent of Denver schools, was elected president of the association for the coming year.

Philadelphia Schools Cooperate with Industrial Establishments

Half-time cooperative courses of Central High School, Philadelphia, have placed about 100 boys with some 40 firms in alternate two-week periods of shop and school during the past year, says the president of the board of education of that city. Evening trade instruction has afforded about 3,500 men and boys the opportunity to extend their knowledge and skill. Cooperation of employers is especially effective in the evening plumbing courses, in which have been enrolled over 500 employed plumbers and apprentices.

In the day high schools more than 5,000 boys, practically one-third of the total number, study shop subjects, either as mechanic arts for general education or as industrial courses for entrance to the trades; and in the evening high schools about the same proportion of the male enrollment is in the trade courses.

Teachers in Impressive Exercises at National Shrines

Pilgrimages to the shrines of historic interest in and near Washington comprised the National Education Association program for Friday afternoon, and patriotic exercises were held at each place. The arrangements were as follows:

Lincoln Memorial: R. E. Williams, Louisville, presiding, and an address by Francis G. Blair, of Springfield, Ill.

Memorial Continental Hall: Mrs. Anthony Wayne Cook presided and Homer H. Seerley, Iowa State Teachers' College, made the address.

American Red Cross: Mary McSkimmon, Brookline, Mass., acted as chairman, with R. G. Jones, of Cleveland, as speaker.

Walter Reed Hospital: Hon. Hubert Work, Secretary of the Interior, was chairman and Joseph M. Gwinn, San Francisco, gave the address.

Tomb of Woodrow Wilson: Anna Laura Force, Denver, Colo., conducted the exercises and James R. Joyner and Mary C. C. Bradford made addresses.

Mount Vernon: Mrs. Horace Van Deventer, of Knoxville, Tenn., was the chairman and John J. Maddox, St. Louis, Mo., the speaker.

Frederick Douglass Memorial Home: M. Grant Lucas, Washington, D. C., was the chairman and Garnet C. Wilkinson, of Washington, D. C., the speaker.

National Cemetery, Gettysburg: William M. Davidson, of Pittsburgh, was the chairman and Frank P. Graves, Albany, N. Y., the speaker.

Tomb of the Unknown Soldier: Ambrose Cort, New York City, presiding; John F. O'Ryan, New York City, speaker.

Home of Thomas Jefferson: Charles G. Maphis, University of Virginia, was the speaker.

Twenty-three States Provide for Teaching Humaneness

Some form of legislation providing for the teaching of humaneness in the public schools, according to a leaflet recently issued by the American Society for the Prevention of Cruelty to Animals, has been enacted in the following States:

Alabama, California, Colorado, Connecticut, Florida, Illinois, Kentucky, Maine, Massachusetts, Michigan, Nevada, New Hampshire, New York, North Dakota, Oklahoma, Oregon, Pennsylvania, South Dakota, Texas, Utah, Washington, Wisconsin, and Wyoming.

During the past five years appropriations have been made for a new training school building in each of the State normal schools of Alabama.

Service to Kindergarten Training Schools and Teachers

Study of Institutions for Preparing Kindergartners First Task Undertaken by Kindergarten Section. Many Changes Have Come From Better Knowledge of Childrens Progressive Development.

By NINA C. VANDEWALKER
Specialist in Kindergarten Education, Bureau of Education

THE AID that the bureau has given to the kindergarten training schools has been as definite a response to an expressed need as that given to the kindergarten teachers as such. Among the many requests for help that the bureau receives are many from training teachers concerning their problems. These inquiries call for the best thought that the bureau specialists can give, since the training that prospective teachers receive determines the quality of the work done by them after their graduation. If the bureau is to aid in promoting the cause of kindergarten education, the kindergarten specialists must give the problems of kindergarten training a large share of their time and thought.

Nina C. Vandewalker

Early Recognition of Importance of Training Schools

The fact that a study of kindergarten training schools was one of the first tasks to be undertaken after the organization of the Kindergarten Section in 1913 shows that the importance of this phase of work was recognized from the beginning. One of the purposes in this study was to gain a body of facts concerning these institutions that would enable the specialists to answer intelligently the inquiries that were made concerning them. The large purpose, however, was to note the nature and content of the curricula of the schools in order to give suggestions concerning their improvement. The results of this study were published in 1916 in a bulletin entitled "Kindergarten Training Schools." It showed that there were at that time 126 such institutions. Of these one half were private or supported by private organizations, and the other half were supported by city or State funds. The courses that they gave differed widely in length, scope, and quality. It was therefore evident that many courses were decidedly in need of improvement.

The organization of the bulletin itself furnished by its statistical tables an indirect stimulus to the improvement needed. These tables enabled every teacher to see her own work in comparison with that of every other. Another feature, "a suggested two-year course of study," was a direct means to that end. This embodied certain principles fundamental to the making of a good curriculum such as the proper balance between the class work and practice teaching, the proportion of academic and professional subjects, the organization of these upon the basis of observation and experiment and the sequence of all of these in their relation to the course as a whole. The bulletin stimulated thought and discussion and enabled training teachers to sense the problems involved in teacher-training courses as they had not done before. The bulletin is now out of print, but it had a definite part in bringing about the better type of training that now prevails.

During the past few years many changes have taken place in the work of the schools as a result of a better knowledge of children's progressive development. The emphasis on health and physical development has given a great impetus to play, games, and to the use of hand work of different kinds. This implies a different equipment. The recognition that children's work must be motivated to be truly educational implies the necessity for individual observation and experiment and opportunities for working out individual or group projects, in the kindergarten and primary field in particular. These new methods make a new educational literature necessary.

New Methods and Types of Work

The lack of adequate literature explaining the new methods and types of work is one of the handicaps to the progress of the teacher in the field and to the training teacher with her students. In this series the bureau specialists have written a number of circulars and bulletins to help meet the immediate need for help for the kindergarten teachers in the field. In the absence of more adequate material many training teachers are using these also. The "Kindergarten Curriculum," the "Kindergarten-First Grade Curriculum," the "Housing and Equipment Bulletin," "Applications of the Project Method," and several others are used as textbooks in a number of training schools. The fact that these meet a current need is shown in the increasing demand for all the bureau's publications.

The current movement for combining the training of kindergarten and primary teachers in a single course as a means of unifying the work of the kindergarten and first grade is one that contains great promise for the strengthening of the beginnings of school work. Such courses are still in the experimental stage, however, and the bureau has received many requests for suggestions concerning their organization and content. These inquiries showed the need of a new study of training school courses to enable the kindergarten specialists to know the problems of the field and to see how these are being met. Such a study was made in 1923, and the results have just been issued in a bulletin entitled "An Evaluation of Kindergarten-Primary Courses of Study in Teacher Training Institutions." Its official designation is Education Bulletin 1924, No. 3.

Wide Differences in Courses of Study

The statements made in this bulletin were based on the study of more than 100 catalogues of institutions that give such courses. The majority of these were two-year courses, but some were three and four years in length. One of the purposes of this study was to discover whether the courses were true to their name, i. e., whether the students taking them were really prepared to teach both the kindergarten and primary groups. As was to be expected the courses differed widely in this and other respects, and it is hoped that the suggestions made in the bulletin may aid in strengthening those that need strengthening.

The suggesti ons in question have been made in a different form from those in the earlier bulletins. To make the suggestions as practical as possible three groups of courses have been selected and presented as they appear in their own catalogues. The courses in each of these groups are then analyzed on the basis of certain tests; the lines of strength and weakness pointed out; and certain conclusions drawn concerning the courses in the group under consideration. The first group consists of two year courses; the second of three year courses; and the third of four year courses. In each case one of the courses in each group is a state teacher training course; the second a city training course; and the third a private training course. The last group contains but two courses, however, since no four year city training school course could be procured.

By the adoption of this plan of procedure the suggestions made can be easily

applied to courses of different length and type. The study as a whole therefore will help training teachers to evolve from existing courses standards for the organization of kindergarten-primary courses. The adoption of the standards which this bulletin implies on the part of training teachers is essential to the improvement of the work in the kindergarten-primary field. It is essential also to the most effective supervision. The bulletin will therefore be of value to kindergarten supervisors also.

There are still other ways in which the bureau is of service to training teachers. One of these is in furnishing them with data concerning the progress of the kindergarten movement. Requests for information on different phases of this progress are frequent. Some of this information is furnished by the statistical bulletins. Other portions must come from other sources. One of the evidences of this progress of special interest to training teachers is the increase in the number and the improvement in the quality of the training schools during the past decade.

The bulletin "Kindergarten Training Schools," already mentioned was based on data collected in 1913. It listed 126 institutions that gave kindergarten training courses. At present there are 157 such institutions. The increase in number tells but part of the story, however. In 1913 one half of the 126 institutions were private and the other half public. Since that time several of the small private institutions have been discontinued. The State institutions that give kindergarten or kindergarten-primary courses, on the other hand, have increased from 40 to 75. In 1913 but 63 of the 126 institutions were supported by city or State funds; at present 97 of the 157 are so supported. This increase in the proportion of State and city institutions that give kindergarten or kindergarten-primary training is one of the evidences that the kindergarten is recognized as a part of the system of public education.

Dutch University is Host to Americans

"American Week" at the University of Leyden, Holland, was observed July 7 to 12 with an attractive program. Educational trips and lectures by some of Holland's most distinguished scholars provided an opportunity for students to study the history, art, and characteristics of the people. It was attended by about 60 students, representing 21 of the leading universities and colleges of the United States. The event will be made an annual affair.—*Richard M. Tobin, American minister at The Hague.*

Putting Present-day Knowledge Into Practice

Service of the Childrens Foundation, of Valparaiso, Ind., Collects, Classifies, and Disseminates Knowledge Concerning Well-Being of Children.

By JOHN D. WOLCOTT

DURING recent years many investigators have been at work upon problems relating to the nature and needs of children, with the result of greatly increasing our knowledge of the facts and principles of child life. Within this period, also, much legislation for child welfare and training has been enacted, and various institutions have been conducting experiments in service to the young. These investigations and experiments deal with special aspects of child nature, training, and education, and their results have not been coordinated and made available for the use of parents, teachers, and other practitioners in the care and training of the young.

A Corporation not for Profit

To meet the need of coordination, interpretation, and application of the material resulting from investigations and experiments dealing with the nature, well-being, and education of the child, the Childrens Foundation has been established, with headquarters at Valparaiso, Ind. The founder and president of the foundation is Lewis E. Myers; the vice president is Lorne W. Barclay. The board of trustees of the organization has five members, including the president and Mrs. Myers. The Childrens Foundation was chartered by the State of Indiana in December, 1921, as a corporation not for profit. The charter empowers the foundation to conduct and promote investigations into matters relating to childhood and child life, and to collect, classify, and disseminate the knowledge which has been anywhere acquired subserving the well-being of children, with the purpose of bridging the gap between knowledge and practice in our present methods of child care, training, and education.

First Publication a Comprehensive Document

In order to carry out its function of making available our present-day knowledge of child nature and culture, the Childrens Foundation plans to issue a series of publications, of which the first has recently appeared as an illustrated volume of 516 pages, entitled "The Child, His Nature and His Needs." In this work the general aspects of the nature and needs of childhood and youth are summarized and applied by 15 specialists in their respective subjects, in addition to contributions by the editor of the volume, Prof. M. V. O'Shea, of the University of Wisconsin. The book is divided into three parts, giving the present status of knowledge of child nature, of child well-being, and of education, respectively. The contributor of the initial paper for part 1 is Prof. Bird T. Baldwin, of the State university of Iowa; for part 2, Prof. H. H. Goddard, of the Ohio State university; and for part 3, Dr. Jno. J. Tigert, United States Commissioner of Education.

"The Child, His Nature and His Needs" presents the most important of the assured results of research into the problems of childhood, in understandable forms for the practical use of nontechnical readers who in the home, school, or elsewhere are directing the physical, intellectual, social, and moral development of children. The book may be obtained at a nominal price from the Childrens Foundation, Valparaiso, Ind. A second volume dealing with the problem of the child and the home is expected to appear in the spring of 1925.

American Library Association Meets at Saratoga Springs

Adult education was the dominant topic at the 1924 conference of the American Library Association, held at Saratoga Springs, N. Y., during the week of June 30. The president's address, entitled "Sticking to our last," advised librarians to concentrate their energies upon their own institutions and develop them as agencies of educational extension among the population beyond school age. The Carnegie Corporation of New York has appropriated to the American Library Association $12,000 for a study of libraries and adult education to be made during 1924–25. A special committee and an executive director have been appointed to have charge of this investigation.

One Hundred Years of Honorable Achievement

Franklin Institute, Philadelphia, will celebrate the centenary of its founding and the inauguration of the Bartol Research Foundation, on September 17, 18, and 19. Throughout the century the institute has promoted mechanic arts, doing this largely by encouraging research and disseminating knowledge. Through a recent bequest of Henry W. Bartol, a former member of the institute, it is now enabled to maintain excellent laboratories for physical and chemical research. The three-day program will consist of addresses and lectures by a number of distinguished foreign scientists and men identified with scientific, technical, and industrial work in this country.

New Books in Education

By JOHN D. WOLCOTT
Librarian Bureau of Education

Books on the Junior High School

CHICAGO. BOARD OF EDUCATION. Course of lectures on the junior high school. May, 1924. Chicago, Board of education, 1924. 160 p. 8°.

The nine lectures here published on various aspects of the junior high school and its work were delivered by college experts to Chicago school principals under arrangement by Superintendent William McAndrew. The opening lecture, on the Development of the junior high school movement, is by Dr. Charles H. Judd, of the School of education, University of Chicago.

HAWLEY, HATTIE L. Teaching English in junior high schools; a study of methods and devices. Boston, New York [etc.]. Houghton Mifflin company [1924] viii, 142 p. 12°. (Riverside educational monographs, ed. by H. Suzzallo.)

An attempt to combine in a unified and useful form some of the devices for effective teaching of junior high school English, which the writer has learned from experience, from the practices of successful teachers, and from reading. Recognizing that courses of study necessarily vary, she does not attempt to tell what to teach.

HINES, HARLAN CAMERON. Junior high school curricula. New York, The Macmillan company, 1924. xii, 188 p. 12°. (American teachers' college series. J. A. H. Keith and W. C. Bagley, editors.)

What subjects shall be taught in the junior high school, and what preparation is required for the teachers giving these courses? The author undertakes to solve these problems by collecting, evaluating, and classifying the most important investigations and proposals bearing on them. After presenting general preliminary considerations, the book takes up the particular groups of studies individually, and then closes with a summary and conclusions.

PECHSTEIN, L. A. *and* MCGREGOR, A. LAURA. Psychology of the junior high school pupil. Boston, New York [etc.] Houghton Mifflin company [1924] xxi, 280 p. tables, diagrs. 12°. (Riverside textbooks in education, ed. by E. P. Cubberley.)

The procedure of the junior high school should be based on a correct understanding of the psychology of its pupils, who are in general of the early adolescent age. From the experience and experimentation of the authors in the Washington junior high school, of Rochester, N. Y., and related institutions, this volume has been produced, which applies the behavioristic psychology to the junior high school pupil. Taking up first the different phases of growth, response, mental development, and personality of the pupil of junior high school age, the writers have presented the fundamental elements needed for an understanding of early adolescent physical, mental, and social development. They have then applied the principles laid down to the organization and conduct of a junior high school, as it finds expression in the work of instruction, socialization, and educational, moral, social, and physical guidance. The use of guidance in handling adolescent pupils is especially stressed.

THOMAS-TINDAL, EMMA V. *and* MYERS, JESSIE DUVAL. Junior high school life. New York, The Macmillan company, 1924. xix, 287 p. front., plates. 12°.

This book discusses fully and authoritatively the junior high school in action, since it is a record of growth in both thought and experience in a particular school—the Holmes junior high school in Philadelphia, written by its principal and one of its instructors. The junior high school in this work is conceived as an institution especially characteristic of democracy and equal opportunity in education, with unique opportunities for imbuing its pupils with the democratic ideals inherent in the phrases: life more abundant, freedom within law, and joy in attainment and in service. Special consideration is given to guidance, which is called the fundamental idea on which all junior high school theory and practice is based. The operation of guidance is described, according as it is physical, curricular, social, vocational, civic, avocational, and ethical, respectively. Other features are an account of the school clubs, which are very active in the Holmes school, and a list of intracurricular activities in various departments.

Books on Miscellaneous Subjects

ALEXANDER, CARTER. Bibliography on educational finance; reviewed and presented by the educational finance inquiry commission, under the auspices of the American council on education, Washington, D. C. New York, The Macmillan company, 1924. vi, 257 p. 8°. (The Educational finance inquiry, volume IV.)

This bibliography, which is classified and indexed, undertakes to include only usable materials and aims to stimulate progress in financing education by affording ready access to the necessary discussions and data.

BEVIER, ISABEL. Home economics in education. Philadelphia, London, Chicago, J. B. Lippincott company [1924] 226 p. 12°. (Books on the home, ed. by B. R. Andrews.)

The three parts into which this book is divided deal with the evolution of educational ideals, the development of the education of women, and the development of home economics. The first two divisions of the text are designed to secure background and perspective by general sketches of the history of educational ideals and of the education of women. The book as a whole is largely concerned with home economics in relation to the higher education of women.

KOOS, LEONARD VINCENT. The junior college. Minneapolis, University of Minnesota, 1924. 2 v. tables (partly fold.) diagrs. 4°. (Research publications of the University of Minnesota. Education series, no. 5.)

This is a comprehensive study of the junior college movement in all its phases, including an evaluation of the movement as a whole and of its several forms of manifestation, and a forecast of appropriate lines of future development. A mass of data is presented descriptive of present-day junior colleges, as well as of institutions bearing some important relationship to them, and an effort is made to give an adequate understanding of current junior college practices and conditions.

LINCOLN, LILLIAN I. Practical projects for elementary schools. Boston, New York [etc.]. Ginn and company [1924] vii, 312 p. 12°.

A series of projects are here given suitable for teaching lessons in health and behavior to children. A number of other projects of more general scope are also outlined.

PAYNE, ARTHUR F. Administration of vocational education, with special emphasis on the administration of vocational industrial education under the Federal vocational education law. New York, McGraw-Hill book company, inc., 1924. xiii, 354 p. tables, diagrs. 8°.

The tasks which the author sets before him to accomplish in these pages are as follows: (1) the justification of vocational education in our public school system; (2) the placing—for the present—of the major responsibility for vocational education on our secondary schools; (3) methods of organizing and conducting the various forms of vocational industrial education in our schools; (4) an intensive study of the methods and results of the Federal Board for Vocational Education in regard to vocational industrial education; (5) the formulation of the results of this study and practical administrative experience in a form designed to assist educational administrators. Considerable space is devoted to discussing and clarifying the terminology currently employed to designate the various forms of practical work in education.

SUZZALLO, HENRY. Our faith in education. Philadelphia and London, J. B. Lippincott company [1924] 108 p. 12°.

An expansion of an address delivered by the author at the University of California, July 4, 1923, at a patriotic meeting arranged by the American council on education and the National education association. The design especially is to reassure teachers in their confidence that schools and education are essential to democracy and freedom, notwithstanding the hostile criticism arising from various quarters.

WILSON, HARRY B.; KYTE, GEORGE C. *and* LULL, HERBERT G. Modern methods in teaching; a concrete consideration of the teacher's classroom problems. New York, Newark [etc.] Silver, Burdett and company [1924] v, 286 p. tables. 12°.

The three parts into which this treatise is divided give respectively the philosophical background of modern classroom procedure, the nature of the work in a modern socialized school, showing how it may be motivated, and the organization of teaching procedure so as effectively to promote the education and socialization of children. In order to help the teacher to an enlarged grasp and solution of her daily detailed task, the emphasis in this book is placed upon fundamental principles, with less attention to routine matters and the details of teaching procedure, which are left to be worked out in the classroom on the basis here given.

Educational Bills Before Sixty-Eighth Congress

By WILLIAM R HOOD

Assistant Specialist in School Legislation, Bureau of Education

(*Continued from June number, page 256*)

V. Health and Education

The provision for national cooperation with the States in providing for physical education and the proposed investigation of "diploma mills" are important measures.

1. S. 1409, Fess.—To provide for the promotion of physical education in the United States through cooperation with the States in the preparation and payment of supervisors and teachers of physical education, including health supervisors and school nurses, to appropriate money and regulate its expenditure, and for other purposes.

(*a*) Provides for Federal cooperation with the States in the promotion of physical education.

(*b*) Authorizes an appropriation of $10,000,000 for the fiscal year ending June 30, 1922, and for each succeeding year, $1 for each person of school age in the several States. (School age defined as 6 to 18.)

(*c*) Provides for the purpose of administration, for a division of physical education in the Bureau of Education, and authorizes an appropriation of $300,000 to said bureau.

(*d*) Provides that the Public Health Service shall cooperate in making studies, investigations, and demonstrations, and authorizes an appropriation of $200,000 to the Public Health Service.

(*e*) Provides for acceptance of the provisions of this act by the several States.

2. H. R. 4800, Bacon.—Is similar to S. 1409, but provides for a smaller annual appropriation ($5,000,000) for the use of the States, and also for a smaller sum ($200,000) for administration in the Bureau of Education.

3. H. R. 463, Clark, of Florida.—To extend the franking privilege to literature published by boards of health of States and Territories in the United States.

4. S. Res. 61, Copeland.—Authorizing the Senate Committee on Education and Labor to investigate self-styled medical institutions and organizations popularly known as "diploma mills."

VI. Amendments of Existing Laws

Two proposed measures here are of more than ordinary importance. One of these enlarges the scope of the home economics work under the "Smith-Hughes Act" and increases the Federal appropriations for this work. The other is the bill to continue for four years the appropriation for industrial rehabilitation.

1. S. 1408, Fess.—To amend an act entitled "An act to provide for the promotion of vocational education, * * *" approved February 23, 1917.

(*a*) Adds new sections 19 and 20 to the Vocational Education Act known as the "Smith-Hughes act."

(*b*) Provides for cooperation with the States in paying the salaries of teachers, supervisors, or directors of home economics subjects appropriation, $500,000 for fiscal year ending June 30, 1921. Subsequent appropriations for nine years, an amount each year equal to the amount for the preceding year increased by $250,000. Annual appropriation after June 30, 1930, $3,000,000. This is intended to be in lieu of appropriation for home economics in section 3 of the original act.

(*c*) Provides that the appropriation in section 3 of the original act for "paying the salaries of teachers of trade, home economics, and industrial subjects" shall hereafter be available for teachers of trade and industrial subjects.

2. S. 1836, Jones of Washington.—To amend "An act donating public lands to the several States and Territories which may provide colleges for the benefit of agriculture and the mechanic arts." approved July 2, 1862, as amended by act approved March 3, 1883.

(*a*) Relates to investment of funds accruing under Morrill Act of 1862. Substitutes word "bonds" for word "stocks" in reference to bonds of the United States and the several States. Eliminates requirement that the investment yield 5 per cent or more.

3. H.R. 4165, Dallinger (by request).—To amend sections 1, 3, and 6 of an act entitled "An act to provide for the promotion of vocational rehabilitation of persons disabled in industry or otherwise and their return to civil employment."

(*a*) Continues for the fiscal year ending June 30, 1925, and for three years thereafter the annual appropriation of $1,000,000.

(*b*) Provides that any State having prior to June 30, 1924, accepted and complied with the provisions of the amended Act shall be deemed to have accepted this amendment.

(*c*) Continues annual appropriation of $75,000 for studies and investigations and for administration of the act. Strikes out limitations placed on salaries.

VII. Miscellaneous Educational Measures

1. S. 430, McKellar.—Regarding the education and naturalization of aliens and the children of aliens, and for other purposes.

(*a*) Provides that no alien shall reside in the United States longer than five years without becoming naturalized; that no alien shall be admitted to citizenship without being able to speak enough English to make his desire to become a citizen intelligible.

(*b*) Requires that every employer of 30 or more aliens provide therefor instruction in the English language, unless the public authorities are providing such instruction. All aliens and children of aliens must be taught in English-speaking schools and in the English language.

2. S. 694, Keyes (by request).—To provide for the world-wide extension of education by the cooperation of national governments.

3. H. R. 119, Raker.—To amend "An act to establish postal savings depositories for depositing savings at interest with security of the Government for the repayment thereof, and for other purposes," approved June 25, 1910.

(*a*) Authorizes the investment of the postal savings fund in school district bonds.

4. H. R. 129, Raker.—To authorize entry of the public lands by school districts for schoolhouse sites and grounds.

5. H. R. 3248, McLeod.—Declaring November 11 a legal public holiday, to be known as Armistice Day.

6. H.R. 6537, Stephens.—Authorizing the continuance of schools on certain naval reservations.

(*a*) Authorizes the Secretary of the Navy to continue the schools on the naval reservations at Indianhead, Md.; Dahlgren, Va., and South Charleston, W. Va., and to maintain the same from funds arising from the rental and operation of naval housing projects.

Interior Department's Duplicating, Addressing, Sealing, and Folding Machines

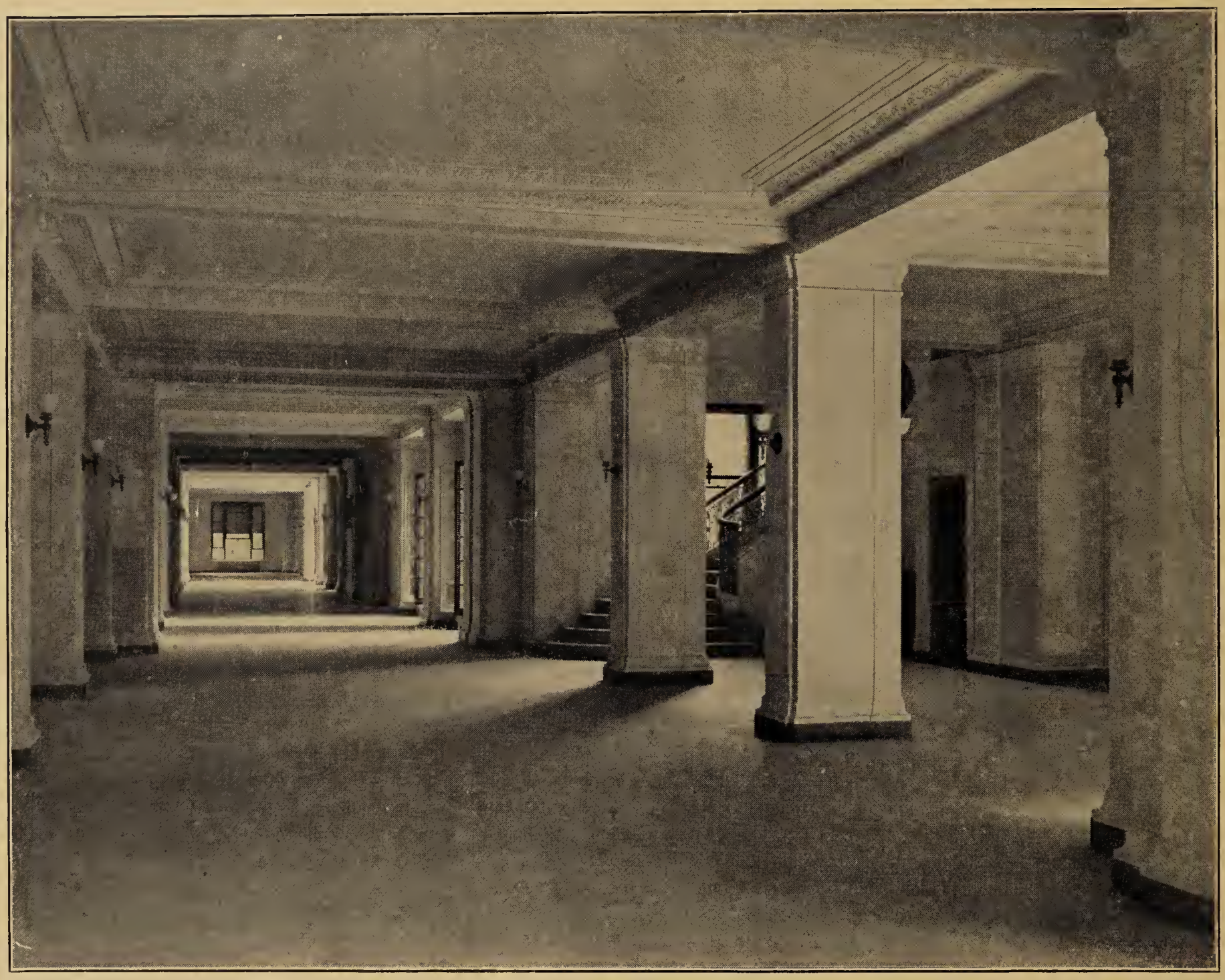
WASHINGTON : GOVERNMENT PRINTING OFFICE : 1924

THE BRIDGE BUILDER

AN old man, going a lone highway,
Came at evening, cold and gray,
To a chasm vast, and deep, and wide.
The old man crossed in the twilight dim;
The sullen stream had no fear for him;
But he turned, when safe on the other side,
And built a bridge to span the tide.

"Old man," said a fellow pilgrim near,
"You are wasting your strength with building here;
You never again will pass this way;
You've crossed the chasm deep and wide,
Why build you this bridge at evening tide?"

The builder lifted his old gray head,
'Good friend, in the path I have come," he said,
"There followeth after me to-day
A youth whose feet must pass this way.
This chasm that has been as naught to me
To that fair-haired youth may a pitfall be;
He, too, must cross in the twilight dim;
Good friend, I am building this bridge for him."



MAIN CORRIDOR
INTERIOR DEPARTMENT

Observe American Education Week · November 17–23

SCHOOL LIFE

Volume X
Number 2

October, 1924

IF WE WORK UPON MARBLE, IT WILL PERISH; IF WE WORK UPON BRASS, TIME WILL EFFACE IT; IF WE REAR TEMPLES, THEY WILL CRUMBLE INTO DUST; BUT IF WE WORK UPON IMMORTAL SOULS, IF WE IMBUE THEM WITH PRINCIPLES, WITH THE FEAR OF GOD AND LOVE OF FELLOW MEN, WE ENGRAVE ON THOSE TABLETS SOMETHING WHICH BRIGHTENS ALL ETERNITY.—*Daniel Webster.*

Published Monthly [except July and August] by the Department of the Interior
Bureau of Education · · · · · · · · Washington, D. C.

GOVERNMENT PRINTING OFFICE

CONTENTS

TO OBSERVE American Education Week appropriately requires active preparation. It is not always easy to devise effective methods or to find suitable material. Repeated requests have been made upon the Bureau of Education for suggestions as to what to do and where to obtain the necessary literature. In response to such requests the following documents have been issued. They may be purchased from the Superintendent of Documents, Government Printing Office, Washington, D. C., at the prices stated: (1) "Suggestions." Price, 5 cents; in lots of 100 or more, 2 cents each. (2) "Broadside," with material suitable for newspaper articles, addresses, etc. Price, 5 cents; in lots of 100 or more, 1 cent each. (3) "The Quest of Youth," a historical pageant. Price 10 cents; in lots of 100 or more, 6 cents each. (4) "School and Teacher Day," an illustrated folder. Price 5 cents; in quantity, 75 cents per hundred. Additional copies of this number of SCHOOL LIFE may be purchased at 5 cents each.

THE AMERICAN LEGION and the National Education Association are joint sponsors with the United States Bureau of Education in promoting American Education Week. Local and national officers of the American Legion should be consulted freely by school officers who are planning to observe the occasion.

The October and November numbers of the Journal of the National Education Association will contain many appropriate articles, and in addition the Association will publish a "research bulletin" entitled "Facts on the Public Schools for American Education Week." Information concerning these publications may be obtained from Dr. J. W. Crabtree, Secretary, 1201 Sixteenth Street, Washington, D. C.

AN INDEX TO SCHOOL LIFE, Volume IX, September, 1923, to June, 1924, has been issued, and it may be obtained without charge upon application to the Commissioner of Education, Washington, D. C., as long as the supply lasts.

SCHOOL LIFE

PUBLISHED MONTHLY *by the* DEPARTMENT OF THE INTERIOR, BUREAU OF EDUCATION

Secretary of the Interior, HUBERT WORK - - - - *Commissioner of Education,* JOHN JAMES TIGERT

VOL. X WASHINGTON, D. C., OCTOBER, 1924 NO. 2

Trained Minds Are Sources of Untold Benefit to All Mankind

University Research Has Revolutionized American Agriculture. Fumes From Smelters Transformed to Save Instead of Ruining Industries. Success of Lighter-than-Air Craft Assured by Discovery of Abundant Sources of Helium. Out of Universities Have Come Discoveries in Medicine that Removed Obstacles to Prosperous Civilization. Value of Achievements in Chemistry Beyond Computation

By JAMES F. ABEL

Assistant Specialist in Rural Education, Bureau of Education

EDUCATION pays both the individual and society. Trained minds are sources of wealth in endless ways. They create, discover, invent. They save labor, material, time, and land. They lessen the waste of disease, deterioration, and decay. They produce more serviceable and attractive articles and help to make life more complete and happy.

The public and private universities of America have received about four billions of dollars in bequests, gifts, and appropriations. They are returning to humanity every year in skilled workers and in the discovery of scientific truths that benefit all mankind certainly 100 per cent on the total of all the money ever used by them.

Colleges Actually Developed Science of Agriculture

Our annual production of crops has been increased immeasurably by discoveries made by men working in agricultural colleges and experimental stations. Stephen M. Babcock, while in the University of Wisconsin, invented the milk tester to determine accurately the per cent of butterfat in milk. It revolutionized dairying and really made the great dairy industry possible. Doctor Babcock gave his invention free to the public, though he could easily have made a fortune from it. Charles E. Saunders, of the Ontario Agricultural College, created Marquis wheat, a high-yielding, resistant variety that is grown over most of the northern section of the United States and southern Canada. Albert Dickens and L. E. Coll, of the Kansas State Agricultural College, created Kansas red wheat, a kind very resistant to rust and one that has greatly increased the yield of the fields of the southern plains.

Keeping up the fertility of soils largely through rotation of crops owes much of its development to Dr. C. G. Hopkins, of the University of Illinois. His vision of worn-out soils restored to fertility and agricultural areas of the earth never depleted is now recognized as a possibility. Large areas of alkali land have been made productive through methods devised by Dr. E. W. Hilgard, a worker in the University of California.

Worth More Than Entire Cost of Education

The United States is the greatest fruit-producing nation of the world largely because Doctor Bailey, of Cornell, organized and brought to bear the principles of science on horticultural problems. The pioneer work in using arsenic compounds to protect fruit from injurious insects was done by H. A. Cook, in the University of Michigan. While at the University of Illinois Doctor Burrill discovered the cause of pear blight, which led to finding the causes of many other plant diseases and subsequently to methods of prevention or cure. Dr. E. D. Ball, of the University of Utah, practically saved the apple industry of the West by initiating the driving method of applying sprays to kill the codling moth. Prof. Wilmont Newell, of the Agricultural College of Louisiana, first made use of lead arsenate in successfully combating the boll weevil. These are only a few of the remarkable achievements of university men in the field of agriculture. The honor roll is a long one, and the wealth that has been produced because of their work would more than pay for all our schools.

In mining the story is no less wonderful. Much of it reads like a romance. The universities provide housing and library and laboratory facilities for 11 of the 13 Federal mining experiment stations. Dr. F. G. Cottrell, while assistant professor of physical chemistry in the University of California, developed the idea of electrical precipitation of dusts. His main purpose was to remove from smelter fumes the poisons that were killing the plant life near the large smelters and causing endless litigation, trouble, and expense. His principle, when applied to the smelters, not only did that but saved considerable amounts of gold, silver, and other metals. The arsenic procured in this way is sold in large quantities as an insecticide to save the plants it would have destroyed.

Cement Kilns Fertilize, Not Destroy, Oranges

Cement kilns in southern California were almost compelled to close because the dust from them was damaging the oranges. By the use of Doctor Cottrell's discovery the dust was precipitated and potash taken from it to fertilize the land in the orange orchards. In these cases by-products were turned into valuable aids for the very things to which they were most harmful. By the application of Cottrell's principle of electrification to the oil industry more than $100,000,000 worth of oil is saved annually from otherwise worthless oil emulsions. Doctor Cottrell patented his discoveries, but he assigned the patents to the Smithsonian Institution.

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and the royalties from them are used to pay the expenses of further research by a foundation formed for that purpose.

C. E. Williams, working in the mining experiment station of the University of Washington, developed an electrical process for making synthetic gray iron from scraps of thin steel, a waste of automobile factories. Those scraps were worth $4 a ton. Saved and made into gray iron they have a value of about $75 a ton to the auto factories themselves for making castings.

University Professors Aid National Government

The success of the large lighter-than-air craft is almost wholly dependent upon the use of helium because it is a non-explosive gas, and though the initial cost is greater it is in the long run less expensive than hydrogen. Professor Cady, of the University of Kansas, discovered that there was a considerable supply of helium in the natural gases of that State. His report to the National Government led it to call on several other university professors for investigations, and the result is the discovery of sources of supply and methods of production that make possible the maintenance of the *Shenandoah* and any other large aircraft that we may wish to have.

Edward Orton, jr., a professor in the University of Ohio, is known to the mining world as the father of modern ceramics in the United States. Before he began his work, making brick, tile, pottery, etc., was largely a matter of guess. The industry had little or no scientific foundation. He took the lead in the careful study of the processes of ceramics and so established its principles that we now have a number of schools training men for that work. The traveling laboratory from the University of Ohio made tests of actual work in ceramic plants and suggested changes that in nine months paid in the saving of fuel alone the entire cost of the testing trip.

During the war Professor Gibbs, of Columbia University, devised an oxygen-breathing apparatus for use in mine rescue work. Modifications of it have been adopted by fire departments and in submarines. The consequent saving of life and property has been enormous.

Methods of Science Save Coal and Oil

Processes of washing coal have been worked out in the Universities of Washington and Illinois, and in a single instance 200,000 tons of coal were saved from what would have been nothing but waste. The oils found in western Ohio, Indiana, and Texas were sulphur bearing and of low value until Doctor Mabry, of the Case School of Applied Science, found ways of refining them, and making them as useful as the high-grade oils of Pennsylvania and eastern Ohio.

As for geology, the university professors have done a major part of the work, and some of them rank among the highest in that field of science. Talk to any geologist and he will name offhand a dozen or more "splendid fellows" who occupied chairs in universities and not only endeared themselves to their students by their fine classroom work but led in geological investigation and made inestimably valuable contributions in research and writing.

T. C. Chamberlin, for five years president of the University of Wisconsin, and later in charge of the geological department of the University of Chicago, studied modern glaciers, published much new material on the glacial deposits of the Northeastern States, was geologist of the Peary Arctic relief expedition, and formulated the planetesimal hypothesis as an explanation of the origin of the planetary system.

Reduce Pure Science to Practical Uses

Louis Agassiz, professor of natural history at Harvard, contributed as only a small part of his work the theory of the glacial epoch, and by studies in the Alps, confirmed his generalizations in regard to it.

Joseph Le Conte, one of the long list of noted men whom Agassiz trained, while professor in the University of California did more perhaps than any other one man to popularize geology in America and hasten its translation into the everyday life and thought of people.

James Dwight Dana, professor of natural history at Yale, was a member of the Wilkes exploring exposition sent by the National Government to little-known parts of the Pacific Ocean and later gave 13 years to almost constant study of the materials collected. He wrote several texts on geology and mineralogy, and his discussions of the origin of the continents, mountain building, and volcanoes are among the most valuable contributions to scientific literature.

Benjamin Silliman, for 62 years a professor of natural science at Yale, was one of the foremost lecturers of the world, especially on geology. He, with Doctor Hare, constructed the compound blowpipe. He established the American Journal of Science, and members of his family held the editorship of it for years.

Geology the Handmaid of Mineral Development

John Branner, professor of geology at the University of Indiana, and later vice president of Stanford University, was for six years State geologist of Arkansas and did an important work in developing the mineral wealth of the State. He directed two geological expeditions to Brazil and was special assistant in a geological survey of that country.

Organized Effort Essential in Medical Advance

Though many of the important early discoveries in medicine were made by individuals working independently, the great continuous advance in medical science in the past 90 years has been made by organized laboratory effort, most of it carried on in the universities of Europe and America. Individuals as a rule have not the means or equipment to do research in medicine. They must work in the universities or with some of the various foundations. The latter have excited the rivalry and stimulated the effort of the medical schools; States and cities have always felt at liberty to call on universities for help in medical problems; and the public demands university leadership and advice in the health affairs of the community. Out of the universities have come discoveries in medicine that have removed some of the greatest obstacles to higher and more prosperous civilization.

The story of Professor Pasteur's brilliant discoveries has no parallel in any science. He studied tartaric acid and opened a new field of crystallography; demonstrated the reasons for fermentation of alcohol, vinegar, lactic acid, and butyric acid, found the causes of disease by germ infection, and explained the principle of cure or prevention by vaccination. He saved the silk industry of France by overcoming a germ disease of the silkworms, put its wine industry on a scientific basis by Pasteurization, and through vaccination for anthrax is credited with a money value saving in the livestock of France sufficient to cover the war indemnity paid by France to Germany in 1879. All canning and preserving is based on his discoveries. Civilization's debt to this professor of chemistry at Lille is almost beyond imagination.

Modern Surgery Originated in University Laboratory

Another professor, Joseph Lister, of Edinburgh University, taking his idea from Pasteur's theory of germ infection, conceived the plan of keeping wounds free from infection by applying antiseptics. He is known as the founder of modern surgery, and the British Medical Journal said he saved more lives by the introduction of his system than all the wars of the nineteenth century together had sacrificed.

Emil Behring, a professor at the University of Halle, discovered the diphtheria antitoxin. By its use fatalities from diphtheria have been reduced from 45 per cent to less than 10 per cent, and one of the most dreaded diseases of childhood has been practically conquered.

Robert Koch, professor in the University of Berlin, discovered the tubercle ba-

cillus and the cholera spirillum. His work has done much to aid in the control of these and other diseases.

Among the more recent very valuable offerings of university professors is the prone-pressure method of artificial respiration developed by Prof. E. A. Schafer, of the University of Edinburgh. It is the best method known for reviving persons near death from drowning, electric shock, or asphyxiation, and has been the means of saving many lives.

Stimulated Breathing Saves Many Lives

For the treatment of these and related cases, Prof. Yandell Henderson, of Yale, has lately announced the plan of stimulating breathing by inhalation of a mixture of carbon dioxide and oxygen. It is known to be of great value in carbon monoxide or methyl alcohol poisoning and in hastening recovery from the effects of anesthetics.

When Dr. F. G. Banting wished to work out his theories regarding diabetes, he turned to his alma mater, the University of Toronto, and was given the help he needed in extracting insulin and proving its efficiency. Diabetes caused about 1½ per cent of all the deaths in the United States in 1921. It has been increasing rapidly in recent years, and its victims are usually young adults. Before the discovery of insulin by Doctors Banting and McLeod the only hope for the sufferer lay in a most rigid course of dieting. These two university men have already saved thousands of lives and returned many thousands more of invalids and semi-invalids to comparative health and usefulness. Here again is a contribution so great that there is no way of estimating it.

In the field of chemistry a single instance will serve to show something of university leadership and the debt we owe to it. Joseph Liebig, professor of chemistry at Giessen, made chemistry a real science and was the founder of organic chemistry. He discovered chloroform, chloral, and aldehyde. He was first to trace the transformation of inorganic to organic substances. Most of our work in soil study and fertilization is directly attributable to the results of his research.

Investigators of Only Five Classes Cited

It is not possible to compute in dollars and cents, pounds and pence, or in any other mere metal measure of value the wealth that has been produced because the few university professors mentioned lived and worked and gave freely to the world the best of their thought. And remember that these are only a very few names chosen more or less at random out of the very long list of high-grade university workers in only five fields of endeavor. If we were to try to tell all that the universities have done in all fields, it would be an attempt at multiplying the immeasurable.

Set aside for a minute consideration of what these great men of the universities have done and consider the value of education in the more ordinary walks of life. A study made at Cornell University shows that farmers with high-school training are tenants two years younger and farm owners four years younger than men trained only in elementary schools. Of 1,237 farmers in Kansas, those with a common-school education earned yearly $422; those with high-school education, $554; partial college education, $859; complete college, $1,452. The results of studies in nine other States were the same. The educated farmer earned more and lived better than the uneducated one.

Education Adds Greatly to Earning Power

A former president of the American Society of Engineers was authority for the statement some 10 years ago that 100,000 common laborers in Alabama were worth as producers about one million dollars; if trained in shops, more than one and one-half millions; if trained in trade schools, two and one-half millions; and if trained in technical colleges, nearly four and one-half millions. The Brooklyn Teachers' Association calculated in 1909 that for each day spent in school there was an added life income of between $9 and $10. Each day in school is now considered to be worth $16 or $17.

There is no use to argue further that education pays. Of course, it costs—all good things do—but it pays such enormous dividends in all sorts of ways that the wonder is we do not invest more money in it.

♔

The United States Bureau of Education has been asked to conduct home economics conferences at the Bay section and at the Southern section of the California State Teachers' Association.

♔

All-year schools have been discontinued in Newark, N. J. The attendance at summer sessions does not warrant the additional expense.

EDUCATION, to accomplish the ends of good government, should be universally diffused. Open the doors of the schoolhouse to all the children in the land. Let no man have the excuse of poverty for not educating his own offspring. Place the means of education within his reach, and if they remain in ignorance, be it his own reproach. . . On the diffusion of education among the people rests the preservation and perpetuation of our free institutions.—*Daniel Webster.*

Expenses for Education Relatively One-Third Less

Notwithstanding Rapidly Mounting Costs, Other Expenditures Have Surpassed Those for Education

IN SPITE of its rapidly mounting cost, education is receiving a noticeably smaller proportion of total governmental expenditures than formerly, declares Mabel Newcomer, of the Educational Finance Inquiry Commission, in "Financial Statistics of Public Education in the United States."

The percentage of total governmental expenditures devoted to education decreased from 17.6 per cent in 1910 to 11.8 per cent in 1920, or about one-third, Miss Newcomer states. The percentage of national governmental expenditures devoted to education decreased from 1.3 per cent to 1 per cent, or about one-fourth. In the same period the percentage of State governmental expenditures devoted to education decreased one-fifth. Only in the case of total local governmental expenditures did the percentage for education increase and then only one-ninth.

Highways Absorb Increasing Proportion of Expense

The best (because the largest) single item for comparison with the increasing educational costs is the cost of highways, says the author. The costs of education and highways, although increasing rapidly in amounts, together comprised only 19.8 per cent of the total governmental budget in 1920, as against 28.6 per cent in 1910 and 31.6 per cent in 1915. The cost for highways was increasing at a far greater rate than the cost for education. Of total State governmental expenditures, the percentage for education in 1920 had decreased to only four-fifths of what it had been in 1910, while the percentage for highways in 1920 had increased to five times what it was in 1910. Of total local governmental expenditures, the percentage for education increased about one-ninth from 1910 to 1920, while the percentage for highways increased only about one-thirtieth.

Of the per capita governmental expenditures, those for education and for highways in the country as a whole approximately doubled between 1910 and 1920, as did also State expenditures for education, local expenditures for education, and local expenditures for highways. The per capitas for national expenditures for education and for highways, and for State expenditures for highways, increased at a much faster rate, the item for highways in both instances being far ahead of the corresponding item for education.

Reflections on Education in President Coolidge's Recent Addresses

"Do the Day's Work" Contains the Essence of Good Citizenship. Education in the Use of Leisure. Inculcation of Sound Ideals only Assurance Against Machinations of Extremists. Market for Trained Intelligence

Take up the Burden where It Is

WE are not all permitted the privilege of a university training. We can not all enter the professions. What is the great need of American citizenship? To my mind it is this, that each should take up the burden where he is. "Do the day's work" I have said, and it should be done in the remembrance that all work is dignified.—*At Howard University, Washington, June 6, 1924.*

Land of Wholesome Enjoyment and Perennial Gladness

I want to see all Americans have a reasonable amount of leisure. Then I want to see them educated to use such leisure for their own enjoyment and betterment, and the strengthening of the quality of their citizenship. We can go a long way in that direction by getting them out of doors and really interested in nature. We can make still further progress by engaging them in games and sports. Our country is a land of cultured men and women. It is a land of agriculture, of industries, of schools, and of places of religious worship. It is a land of varied climes and scenery, of mountain and plain, of lake and river. It is the American heritage. We must make it a land of vision, a land of work, of sincere striving for the good, but we must add to all these, in order to round out the full stature of the people, an ample effort to make it a land of wholesome enjoyment and perennial gladness.—*At National Conference on Outdoor Recreation, Washington, May 22, 1924.*

Obligation of Reasonableness and Moderation

If we accept this postulate of the eternal mutability of institutions, then we will be able to realize how great a service is that of the men and women who would train the youth of the Nation to understanding of and to interest in these institutions of ours. There is no greater obligation upon the community than that of properly educating its youth, of training its future citizens for the duties which in their time they must assume. The world has always contained a dangerously large proportion of people who have believed that the way of progress was by way of destruction. They are commonly in a minority, but a distressingly active and determined minority. They would begin the reconstruction of human affairs by tearing down everything that has thus far been erected. It seems as if well-nigh every generation in modern times is destined to try some of these experiments in reorganization by the process of utter disorganization. The eagerness of the extremists, the revolutionists, is unquenchable. The only assurance against their machinations is to be found in the inculcation among the people of sound ideals of government. If we, in our generation, shall succeed in establishing among those who are to come after us the full conception of the obligation to reasonableness and to moderation, the next generation may find reason to thank us for making its way of life easier than ours has been. That, I take it, is the greatest collective wish of humanity in every generation, as it looks to the generations that are to follow.—*At the National Oratorical Contest, Washington, June 6, 1924.*

Greater Spirit of Loyalty an Urgent Need

We have all known people who were disposed to view with concern the rapid advance of education. They fear that when everybody is assured a measure of general education nobody will be left to look after the less agreeable tasks which must always be performed. Fortunately such misgivings have never been justified by the event. The advancement of intelligence has been marked by a continual elimination or amelioration of the more undesirable tasks. Just about the time when it is found that there is a shortage of workers willing to do unpleasant things somebody with a trained intelligence discovers a process or invents a machine that performs the task more efficiently, or makes its performance unnecessary. This has happened so many times that it seems safe to assume it will keep on happening. If there remain some undesirable tasks that neither science nor invention can eliminate, a more productive society will at least be able to pay more liberally—in fact, is now doing so—and thus get them done.

Such a continuing elimination of the uncomfortable tasks of course means a corresponding increase in human happiness. But this will not be possible unless intellectual progress keeps step with the demand for higher technical, scientific, and social capabilities. That is why the progress of education must always be a primary concern to us. The market for trained intelligence will never be overstocked. We hear of a possible saturation point in the demand for particular products; but there will never be a saturation point, a danger of overproduction, in good, working, capable brains. It may be that our educational methods are not so far perfected as to give us full returns on all our investments in them. No doubt some expensive college educations are invested in people incapable of making them return a going rate of interest. But that need not greatly worry us. The world keeps on increasing its wealth despite a deal of bad investments and sheer waste. No doubt it will keep on growing wiser if it continues to extend its educational processes, even though some mistakes mark the effort. * * *

I would not venture to say what our country needs most from its educated young men and women, but one of its urgent needs is a greater spirit of loyalty, which can only come from reverence for constituted authority, from faith in the things that are. There must be loyalty to the family; loyalty to the various civic organizations of society; loyalty to the Government, which means first of all the observance of its laws; and loyalty to religion. These are fundamental virtues. They are the chief characteristics of faith. If education has not given that clearer insight into all that touches our life, whether it come from our relationship to the physical world or our relationship to mankind, it will be a disappointment and a failure. If it has given that insight, it will be a success; it will be the source of that power through which alone has been, and can be, "wrought many wonderful works."—*At Georgetown University commencement, Washington, June 9, 1924.*

Eyesight of school children is neglected, according to a report of the Eye Sight Conservation Council of America, which states that only 4,227,702 of the 24,000,000 school children of the United States received eye tests in 1923. Children in city schools are receiving more attention than those in the rural districts.

The attorney general of New Mexico has ruled that the section in the new school code providing for appointment of county superintendents by the county boards of education is unconstitutional.

Possibilities of Summer Camps for Children Beginning to Appear

Most Important Step in Education that America Has Given to the World. Experience Expands the Mind as Exercise Develops the Body. Massachusetts Legislature Has Authorized Expenditure of Public Money for Health Camps. Sunshine in Childhood Better than Sanitariums in Mature Life

By MARIE M. READY

Assistant Specialist in Physical Education, United States Bureau of Education

"THE organized summer camp is the most important step in education that America has given to the world." President-Emeritus Eliot, of Harvard University has said it, and the children who have enjoyed its pleasures and benefits agree with him without reservation. They have learned the joy of climbing hills, exploring forests, swimming in lakes and streams. They have seen wonderful clear colored sunsets, unmarred by city dust or smoke. They have been out in the open and have felt the joy of stretching their minds, which can only be compared with the relaxation one gets from stretching his body. They have experienced a wonderful feeling when climbing a mountain and realized that each step upward gave a larger horizon for the eye and a wider outlook for the mind.

Teaching methods of resuscitation at Camp Bradley, Md.

Educators have long appreciated the immense value of the organized summer camps, but little has yet been done to link them with the public-school systems. Many, however, are operated as community charities, some by health boards, others by organizations like the Boy Scouts, Girl Scouts, Camp-Fire Girls, Young Women's Christian Association, and Young Men's Christian Association, Sunday schools, and churches. A few cities have established camps for their underweight children. There are more than 500 private camps throughout the country where children may spend a summer vacation.

The State legislators of Massachusetts recently passed a bill allowing cities to spend money for establishing health camps and the State department of education at Boston has under consideration a plan for placing in summer camps all the underweight children of the State within 10 years. At present Massachusetts probably leads in health camps, and many cities have established these camps with the idea that if plenty of sunshine and fresh air and proper food are given to sickly children the cost will be much less than that of sanitariums for the same individuals when they become adults.

Mattapan, South Braintree, Lowell, Springfield, and Malden, Mass., have experimented along this line for several years. The cost of the work has been met by various local organizations interested in child welfare. At the camps in these places the children have been wearing only bathing suits and taking sun baths for treatment. They have had careful supervision by nurses and their recreation has been supervised so that their play was not too tiring. This experimental work has proved beyond a doubt that an outdoor life is a health producer. The average child gains a pound a week, while the average germ, dizzy with fresh air and sunshine, must either hunt a dark hole or commit suicide.

A place which offers a great number and variety of camps is the Palisades Inter-State Park at Bear Mountain, N. Y. In 40 miles square of park domain there are between 15 and 20 mountains ranging in elevation from 1,200 to 1,400 feet and many others are more than 1,000 feet high. "This is a wilderness of wooded mountains touched by human genius to conserve its wildwood aspects and to utilize them for well-directed purposes of

A camp hut in Palisades Interstate Park, New York

rational recreation and education.'' Over 100 species of birds live there in summer; a few deer remain; chipmunks are common; woodchucks, muskrats, and rabbits are numerous, and there is wonderful fishing. The purpose of the park is to promote health and recreation but at the same time to preserve the natural beauty of the region.

A class in basketry at a Girl Scouts' camp

The buildings are made of chestnut trees. There is a system of reservoirs which supplies water for all the camps. Rowboats and canoes are placed on all the lakes. There is also a community kitchen which supplies cooked meals daily to the camps if ordered.

Among the organizations having camps here are the Scouts, Camp Fire Girls, Young Women's Christian Association, Young Men's Christian Association, Jewish Welfare, Catholic Welfare, and many churches and charity organizations. The New York City Association for the Blind has a camp here where a visitor sees a program very similar to that of other camps. The New York Life Insurance Co. has established a camp in this park where its employees may go for a vacation and restore their health.

There is also a camp for deaf and dumb children, called Camp Mendes. Mr. D. Kavow, the director, states that games are enjoyed only when the councillors enter into them with enthusiasm, but he noticed a great desire for carving, whittling, and nature study. There was one group of boys whose favorite occupation was looking for salamanders, turtles, and frogs. In this camp dramatics were out of the question except in pantomime.

In one of the welfare camps was a councillor who claims that he owes the use of one leg to swimming. Up to the age of 16 he could scarcely walk on account of infantile paralysis, but, having had a chance to try swimming, he improved greatly in the use of the lame leg. This young man was a nature study councillor, and few healthy councillors could put half as much enthusiasm into their work as did this lame boy.

In general the development of the Palisades Inter-State Park into camps for summer vacations is the work of Miss Ruby M. Joliffe, park commissioner. Miss Joliffe opened the first camp there in 1911, with 60 girls, and since then there has been constant development. During the past summer 8,000 children spent a summer in the organized camps, and there were numerous family camps besides. This park might well be studied and duplicated in other States. The only fault is that in general the children stay for too short a time. June and September would be a glorious time to live in the woods.

Camps in other parts of America might be mentioned, such as the boys' forestry camps in Wisconsin, recreation camps in North Carolina, the municipal recreation camps of California and Michigan, and those in the national parks.

The summer camp movement is like a snowball rolling down a mountain side, gaining size and impetus each season. Every camper is a booster for camping, for he has learned that Mother Nature is a wonderful friend to all who make her acquaintance. She makes people over, giving them new souls and new bodies. She has an inexhaustible supply of good complexions, healthy appetites, good dispositions, and she proves this to all who visit her. Her benefits can not be delivered in C. O. D. packages to people staying in cities.

A private recreation camp in the Tennessee Mountains

School Journeys a Feature of English Schools

So profitable and popular are school journeys in English schools that the teachers have formed a School Journey Association, 500 to 600 strong, which works with the board of education, the London County Council, and railways to promote this means of education.

Before a journey is undertaken a "guide book" is prepared for reference during the journey. This book includes a railway map and notes; geological notes and simple geological map; natural history notes; notes on the scenery and how it was made; architecture notes; notes on places of interest visited; music of grace and evening hymn; a register of marks for personal cleanliness, conduct, and observations, and a page for a detailed report on the child's use of the journey.

The Law of Life Is Interdependence

Community Day Offers Opportunity for Neighborliness, and "Neighbors" Embrace all Our Fellow Citizens

By JAMES F. ABEL
Assistant Specialist in Rural Education, Bureau of Education

REMEMBER that November 22 of American Education Week is "Community Day" and that its purpose is to help you to become better acquainted with your neighbor.

Your neighbor—the person who is near to you—what his pleasures are, how you can help him, and what you can learn from him, all must be a part of your life. For the law of life is interdependence. When we stop giving and receiving we stop living and growing. Time was when one's neighbors were those that *lived* near him, had their homes within a few miles of his; but that is changed. Now you in Arizona may know from the morning paper what your neighbor in Maine was doing the day before. In a few hours the mail will carry your letter to him. In a few minutes the telegraph will take your message of news, cheer, or regret. You may talk to him by wire. You and he may listen at the same time to the concert by your community orchestra in Chicago. You may go quickly and easily to visit him.

Getting acquainted with your neighbor now means that you shall know, help, and live kindly with those with whom you mingle every day; and more than that, that you shall know and feel the life of all your neighbors, citizens of your nation. Science and invention have made it possible for you to have near by more than a hundred millions of people, and you are not measuring up to your own individual worth and dignity if you do not get acquainted with and take your part in both your smaller and your greater neighborhood.

Girl scouts cheerfully perform the duties of camp life

Londoners Pay for Information Concerning Schools

Persons attending school in London outnumber the total population of Birmingham, the second largest city in Great Britain, according to one of a series of handbooks issued by the London County Council entitled "The Londoner's Education, Its History and Development." The London County Council educates 1,000,000 people, employs 30,000 teachers and officials, and expends £12,600,000 a year, this handbook states.

Aside from the contents, these handbooks themselves are of interest to municipal officials in America, for they are a novel method of bringing the activities of public officers to the attention of their constituents. The facts are in such attractive style and the illustrations and covers are so artistic that the pamphlets are actually sold at a profit from news stands all over the city. Besides education, pamphlets are issued covering public health, housing, parks and open spaces, and other subjects relating to public welfare.

Learn to Conduct Community Recreational Programs

At the Grange Community Leadership School, at Pennsylvania State College, August 21 to 27, demonstrations and talks were given in the planning and conducting of rural community programs, play and other social and recreational activities. Students of the course actually staged the plays, planned the stage lighting, and made the costumes, using only such equipment and facilities as are found in the ordinary rural community. One hour each day was given to talks by prominent rural leaders.

Needless To Waste Tears for the Unattainable

Children are Like Adults in Being Unwilling to Waste Their Efforts. Reasonableness of Decisions Must be Plain

By MARY G. WAITE
Assistant Specialist in Kindergarten Education, Bureau of Education

"NO, TOMMY, you can't play with that glass bowl."

"Then I'll cry, Aunt Belle." And he did. He also kicked, bumped his head on the floor, stamped his foot, held his breath, pulled his hair. For an hour he did everything he had found successful with the invalid mother who was at that time in the hospital. But Aunt Belle was obdurate.

Then with blazing cheeks and tear-wet eyes he demanded, "Aunt Belle, tell me what I can do to make you let me." So Aunt Belle won the day.

As she was anxious to have Tommy's affection and respect as well as his obedience she told him some of the reasons why he could not play with everything he wanted in her house. She also talked with him of the probability that there would be things he wanted to do that he could not while he was under her care, and that when she said he could not there would be little use in his trying to make her say he could. So in all the weeks Tommy was with her there never was a question in his mind about trying it.

Like Tommy, all of us feel that many things are worth working for if there is any possible way of getting them, but if we know that they can not be had and see the reasons why they can not, we turn our attention to what we can have. We are not willing to waste our efforts. With children it is the same, but it is often hard to help them to see the reasonableness of adult decisions. Their limited experience makes it all the more necessary for them to feel this reasonableness in the people who have the responsibility of saying yes or no.

Los Angeles Children Taught Use of Books

Every child in Los Angeles upon entering the third grade is taught how to borrow books from the library and how to take care of books. The children's librarian visits each third-grade room and explains to the pupils the use of the library. Her aim is to arouse an interest in reading and teach the children to care for the books. Following this a letter is written to the parents urging their cooperation in the correct use of the library. In addition a leaflet, entitled "How to Borrow Books," is distributed among the library's patrons.

Art objects produced in five New York City schools exhibited in the Metropolitan Museum of Art

Exhibition of Drawings by New York Art Pupils

Drawings and designs made by pupils of five art schools of New York City were recently exhibited in the Metropolitan Museum of Art. Twenty examples of unusual excellence were contributed by each of the schools, namely, New York School of Fine and Applied Arts; Pratt Institute; School of Design and Liberal Arts; Teachers College, Columbia University; and Washington Irving School. All the work was done in the museum. The subjects of the drawings included, among other things, interior decoration, costume design, decorative panels, surface patterns for silks, ceramics, posters with illuminated text, and the drama.

Manage the Schools on Business Principles

A business enterprise can not be managed successfully unless the board of directors and the president have accurate and ample information regarding every department of the business. Likewise a school system, whether it be a village, county, or city system, can not be effectively managed unless the board of education and the superintendent of schools know all the facts and base their conclusion upon these facts.

So complex have city school systems become that city school superintendents can not themselves collect and compile the data needed for their own and the school board's guidance. As a consequence boards of education in many of the larger and some of the smaller cities have organized departments or bureaus of educational research to collect and compile data regarding practically every phase of their respective school systems.

About 50 city school boards report to the Bureau of Education that they have organized research departments.—*W. S. Deffenbaugh.*

THE GOOD EDUCATION of youth has been esteemed by wise men in all ages as the surest foundation of the happiness both of private families and of commonwealths. Almost all governments have therefore made it a principal object of their attention to establish and endow with proper revenues such seminaries of learning as might supply the succeeding age with men qualified to serve the public with honor to themselves and to their country.—*Benjamin Franklin.*

Farm Children are Attending High Schools

In the States of Maine, New Hampshire, North Dakota, Montana, and Oregon 3.15 per cent of the total farm population are enrolled in high schools as compared with 3.55 per cent for the nonfarm population. In three of the five States—Maine, New Hampshire, and Oregon—higher percentages of the farm population are enrolled in high school than in the nonfarm population. In these States it is significant that through centralization of high schools more than 80 per cent of all high schools serving farm children are comprehensive four-year high schools, while in the two States where lower percentages of the farm population are enrolled more than 50 per cent of all high schools serving farm children are small one, two, or three year high schools. Decidedly higher percentages of girls are enrolled from both farm and nonfarm groups. On an average the percentages of girls enrolled are more than one-third higher than for boys. If education is worth anything for productive work, either we must depend more and more upon our women to do the productive work of the world or we must find some solution for the problem of keeping our boys in school.—*E. E. Windes.*

The Consolidated School as the Community Center

The Rural Social Unit no Longer Confined to the School District. Modern Inventions Have Greatly Widened the Neighborhood. Parent-Teacher Associations an Important Element in Enlarging the Circle

By EDITH A. LATHROP

Assistant Specialist in Rural Education, Bureau of Education

FIFTY years ago the activities of the rural community centered about the district school. Often the building and sometimes the furniture was the product of coopertaive labor. The debating society was the open forum for the neighborhood and the singing school was its song festival. In pioneer days the schoolhouse was often the religious as well as the literary center.

The membership of community organizations is not now confined within the borders of the small school district, and the one-teacher schoolhouse is no longer the social center of the neighborhood.

Many factors have contributed to the passing of the little red schoolhouse as a literary, social, and religious center. The telephone, the rural mail delivery, the automobile, and radio have widened the neighborhood circle far beyond the confines of the local school district. The growth of towns and the ease with which farmers can reach them have drawn heavily upon the social resources of the small rural communities. It is so easy, because of the automobile, to go to town on Saturday night, do the family trading and visit a "movie" besides. The opportunity to exchange gossip with the neighbors is also a great incentive for the Saturday night visit. This idea was well expressed by one countrywoman, who said, "I didn't have much to come to town for, but I wanted to see the folks."

The schoolhouse should still be the center for the community activities of the neighborhood. The one-teacher school will never again, to such an extent, be that center because of modern inventions. From data received by the Bureau of Education it appears that the rural school that is becoming the center of community interest is the consolidated school.

Parent-teacher associations and other community meetings are held in the fine auditoriums of the consolidated school buildings which are found in Montgomery County, Ala.

The Hand Consolidated School, in Connecticut, which is located in a village, reports that the school is the permanent meeting place for the American Legion post, that through the activities of the public health nurse it is a community health center for adults and children of preschool age, that a lyceum course and a community field day are held there.

The Hudson Consolidated School, at Hudson, Iowa, lists the following community activities that are carried on at the school: Club meetings, a farmers' short course, motion-picture programs, picnics, Christmas programs, community volley ball, and a lecture course.

Lakeview Consolidated School, an open-country consolidated school in Michigan, names a community club, parent-teacher association, dramatic club, boys' and girls' clubs, Boy Scouts, Girl Reserves, a glee club, athletic association, and gymnasium club as neighborhood activities associated with the school.

Auditorium in a consolidated school in Montgomery County, Ala. A center for community activities

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Professional Supervision—A Right of Teachers, Pupils, and Patrons

Every teacher who enters a school building to take up teaching as a vocation has a right to expect the kind of help which will develop her into a strong and capable teacher and keep alive within her a desire for professional growth.

Every pupil who enters a school building to secure an education has a right to expect that his teacher may turn to some one with wider experience and broader outlook for sympathy, guidance, and encouragement in adapting the course of study, selecting reference books and classroom materials, and for help in acquainting herself with new ideas and methods.

Every community which desires a progressive school program, characterized by effective and economical teaching, with better results in less time, should be willing to provide professional supervision, thus making such a program possible.

Proper supervision is something more than the occasional brief visits paid by most superintendents. Although many superintendents are qualified to supervise and are interested in supervision, they rarely have time for it. It is generally true that "administration crowds out supervision when they compete for the time and attention of one who has both responsibilities." Every school system needs not only professional administration but also professional supervision. The latter is indispensable.—*Annie Reynolds.*

How Public High Schools Have Grown

The growth of the public high school has been phenomenal. In 1900 only .68 per cent of the total population were enrolled in the public high schools of the country, but in 1922, 22 years later, 2.63 per cent were enrolled. In 1900 only 3.3 per cent of the total number of children enrolled in the elementary and high school grades were in high school; in 1922, 12.3 per cent of the total were enrolled in the public high schools.

Of the pupils enrolled in secondary schools, both public and private, the per cent enrolled in public high schools increased from 82.4 per cent in 1900 to 92.7 per cent in 1922. The relative change is not due to a decrease in the enrollment in the private high schools but to the phenomenal growth of the public high schools. In 1900 the enrollment in public high schools was 519,251 and in private high schools 110,797. In 1922 the enrollment in public high schools was 2,873,009 and in private high schools 225,873.—*W. S. Deffenbaugh.*

· SCHOOL LIFE ·

Issued Monthly, except July and August
By THE DEPARTMENT OF THE INTERIOR, BUREAU OF EDUCATION

Editor - - - - - - James C. Boykin
Assistant Editor - - Edith F. Holmes

Terms: Subscription, 50 cents per year, in advance. Foreign (not including Canada, Mexico, Cuba), 75 cents. *Remittance* should be made to the Superintendent of Documents, Government Printing Office, Washington, D. C., and should be by cash or money order

OCTOBER, 1924

Another Period of Educational Stimulation in Prospect

AGAIN the time approaches for the observance of American Education Week, the time of renewing the faith of the people of the land in that institution which is most distinctly American and most productive of good to the country—the common school.

Americans have a peculiar affection for the public school system. It was not ordained by higher authority, and allotted part by part to the several classes of "subjects" like the schools of many of the European states. It is their own, open equally to all, established in accord with their wish by their legislative representatives, and maintained under superintendents and teachers who delight in their cooperation.

Mere complacent satisfaction is not enough. That is too apt to subside into indifference. It does not respond readily enough to the unusual demands for funds and for those other forms of support that are inevitably necessary from time to time to maintain the highest efficiency. Keen enthusiasm, not smug complacency, is the thing. And it must be always ready to respond when the need arises.

There is but one way to keep up that enthusiasm, and that is by frequent agitation. The parent-teacher associations are the best means yet devised for reaching actual school patrons. Their value is incalculable so far as they go, but their influence does not ordinarily extend far beyond the parents of the pupils of the public schools. That is their allotted task.

More than this is necessary. The satisfaction which comes from the broader outlook that education gives should be impressed without ceasing, and not only the young but the mature of all ages should be stimulated to seek greater mental development.

With many persons the financial aspect of education must be emphasized. Taxpayers should be frequently reminded that wide-spread education increases the number of those who bear the burdens and consequently reduces the amounts which each individual must pay. Business men should not be permitted to become so absorbed in their desire for immediate gain as to forget that popular education is the best possible stimulus to business. Professional men should be equally interested.

Persons of education and culture as compared with the untutored buy more and better goods; they travel more; they have more to contribute to religious and philanthropic undertakings; they demand for themselves and their families more frequent attention from dentists and physicians, and they are better able to pay the bills; their enterprises require more of legal advice. Popular education, in short, means a higher degree of civilization and greater prosperity for all classes of people.

Money spent for the education of one's own children means much. Money spent for the education of the children of others is an investment which produces dividends equally as large, even though they may come indirectly. All these facts are self-evident upon consideration. It is the duty of every person concerned in education, public and private, to stimulate that consideration by every means in his power.

Periodical campaigns are an excellent aid in such efforts. Local campaigns are fruitful, but they depend upon circumstances which may not recur with sufficient frequency. National campaigns under the stimulus of official sanction and with the aid of patriotic, civic, and professional organizations have been conducted annually since 1920. The benefit that has come from them is beyond estimate, and every consideration demands that they be continued indefinitely.

Such a campaign is now in prospect. The President of the United States is expected to issue a strong proclamation and unquestionably governors and mayors throughout the country will follow his example and issue similar proclamations. Let none withhold his support in making the occasion a success without precedent.

Some Districts Still in the Tallow-Candle Era

NOW that the general economic welfare of the farmer is receiving unwonted consideration on the part of the people of the United States, including statesmen and others in high places, and the relation between increased intelligence and production on the part of the farm population is becoming better understood, it seems proper to consider the school systems in rural communities and the efficiency of educational opportunities they offer to farm children. Forty-seven per cent of all children in school are enrolled in open-country and small village schools, yet facilities offered the 47 per cent are by no means up to the standard accepted and practiced by the other 53 per cent. School terms in rural districts are on the average two months shorter than those provided in cities. During their school years children are under the charge of underpaid teachers, less than 10 per cent of whom reach the standard set for city teachers, namely, graduation from a standard teacher-preparing institution. In personal qualities and fitness, as well as in academic and professional attainment, the standard for cities is above that in rural communities.

Rural school buildings are often insanitary, inadequate, and unfit for their purpose. Thousands of country children leave school when they reach the age of 14 or 15 with no education beyond that usually obtained in the fifth or sixth grade. They do not participate proportionately in the general benefits of secondary and higher institutions because of the inefficiency of the lower schools. State teacher-preparing institutions send a negligible percentage of their graduates into small rural schools. There is convincing evidence that the farmer generally pays more for and receives less in education than his urban fellow citizen.

Perhaps nothing has so stimulated our thinking in regard to this situation as the building up in recent years of a few efficient schools in each State for rural children in the open country or in small villages. They have offered convincing proof that rural children are not inevitably doomed to poor elementary schools and inadequate high-school facilities. This has not been accomplished by accident. In most cases improved conditions have come about through some kind of reorganization of the administrative system which makes possible the collection in groups of larger numbers of children and the centralization for taxation of enough territory to insure conditions and revenues necessary for efficient schools. Education, if worth while, costs money. It costs more and more money as higher ideals prevail and as the costs of all the necessities of living increase. The country as a whole has generously provided for the increasing needs. Farm people as well as the inhabitants of the cities have passed the stage coach, pony express, and tallow candle era in most things, but some rural districts are yet in that remote condition, and in them the little red schoolhouse is still considered sufficient to provide an education fitting for life needs.

Now that we are awakening to the importance of the economic and social

status of our farm population, it seems a good time to remember that there can be no permanent solution of the problems presented unless the plan includes ample consideration of the educational facilities offered to farm children. We need the courage to face conditions squarely where they are unsatisfactory and the intelligence to apply the remedies which time and progressive communities have demonstrated to be effective. More money is needed in most States but equitable distribution and intelligent expenditure of revenue from old and new sources are of at least equal moment.

The Teacher Shortage is Still With Us

NO LESS than at any time in the past the need exists for teachers well grounded in subject matter and technique of instruction; for teachers inspired through an understanding of the child's nature to help him more fully to reveal himself.

The layman is beginning to understand that teaching is a profession as truly as law, medicine, or the ministry. Like these, it is founded upon a body of ethical and scientific principles which, with their applications, should be understood by its practitioners.

The number of trained teachers does not meet the demand. Three-fourths of all America's public-school teachers are not sufficiently trained; that is, they have completed less than two years of training beyond high-school graduation. The majority of the untrained teachers are in rural schools. More than 11,000,000 rural and village pupils are instructed by such teachers. More than 3,000,000 rural boys and girls in one-teacher schools are under teachers who have never completed their high-school education. Thousands of them have only an elementary school education.

The seriousness of the situation is intensified by the inexperience and immaturity of the teachers in the 175,000 one-teacher rural schools. Furthermore, the tenure of these rural teachers is short. About 50,000 more trained teachers are required. This estimate makes liberal allowance for beginning teachers entering the field from high school and normal training courses.

The need for trained teachers in rural schools has challenged the attention of State authorities. More than half a dozen States have adopted scholarship or bonus awards of considerable size to attract promising young people into teacher training institutions to prepare for rural teaching. Most of the States give some assistance, such as free tuition, to prospective teachers.

Normal training courses are maintained in the high schools of some of the States. This, however, does not seem fully to meet the need. Three of the twenty-six States that have tried the plan have discontinued it. In another State it will be discontinued after this year. In still another State such secondary courses are not receiving any encouragement, for the State normal schools have attempted to take over the task of supplying the demand for fully trained teachers.

Even though all of the State normal schools and teachers' colleges plan to supply the demand for well-prepared rural teachers, many problems arise in their organization for the work. Assuming the end of rural and of city education to be the same, should the curriculum of both groups be identical? Many institutions make little or no difference between them.

Should all the observation and practice-teaching of the prospective rural-school teacher be done in the local training school, which usually approximates city-school conditions? Most normal schools offer only this; some offer little or no practice. The cost of transportation and the task of administering rural observation and practice schools complicates the problem.

Are one-teacher rural schools disappearing so rapidly that normal schools may disregard this field and concentrate their efforts on preparing teachers for graded schools? Is the teacher of the sons and daughters of the farmer, who is taxed to support the State normal schools, receiving as much attention and as adequate training for the job as the city teacher?

With these and similar questions in mind, the Rural Division of the Bureau of Education has recently added a member to its staff to compile data and disseminate information on courses of study, observation, and practice teaching, and related subjects to those engaged in rural teacher preparation.

During the past 15 years the bureau has made many studies in the general field of teacher training. More than 40 bulletins, circulars, and leaflets have been published dealing with the problem. About one-third of these bulletins deal specifically with rural teacher training problems, and many of the others contain information applicable to that field.

The subject matter of the bulletins covers a wide range. A number of them deal with the training of teachers in special subjects, such as agriculture, mathematics, and nature study. Some discuss the need for training and the plan of observation and practice teaching followed in some of the teacher training institutions. Others discuss training of teachers in service. Studies of the training, experience, and salaries of teachers and of the State laws and regulations governing the issuance of certificates are reported. Some of the bulletins consider the various types of teacher training institutions, such as high school, county, and normal schools, as well as the problems of their standardization. Others consider teacher training in foreign countries. The surveys by the Bureau of Education of institutions of higher learning often deal with teacher training problems.

As the field of teacher training develops, the emphasis is shifted from one phase to another. New obstacles constantly arise. The problems of and the need for teacher training, however, remain as impelling and imperative as at any time in the past.

IT IS A MISTAKE to say that we have much ignorance in this country. There is little of what is generally called ignorance in the United States. In the Old World, under the despotism of Europe, the masses of ignorant men, mere inert masses, are moved upon and controlled by the intelligent and cultivated aristocracy. But in this Republic, where the Government rests upon the will of the people, every man has an active power for good or evil, and the great question is, will he think rightly or wrongly; shall the power in him be educated and directed aright toward industry, liberty, and patriotism, or, under the baneful influence of false theories and evil influences, shall it lead him continually downward and work out anarchy and ruin both to him and the Government?

The question is not whether our people shall be educated or not. If they are not educated in the school of virtue and integrity they will be educated in the school of vice and iniquity. We are, therefore, afloat on the sweeping current; if we make no effort we go down with it to the saddest of destinies. It is only by perpetual and persistent effort that we make headway and advancement in civilization.—*James A. Garfield, June 8, 1866.*

Malnutrition cases in the elementary schools of Bridgeport, Conn., show a decrease of almost 33 per cent between the years 1921–22 and 1923–24. This progress is attributed to health education training and instruction for malnourished children.

Austrians Are Testing New School Types

Trial Will Continue Until 1931 and Results Will Determine Whether New Types or Old Will Survive. Einheitsschule Postpones Decision of Child's Educational Future Until Reasonable Maturity is Reached

By ROBERT W. HEINGARTNER
American Consul at Vienna

SOON after the collapse of the Austrian Empire the Social Democratic Party took up the question of school reform in Austria and made this issue one of the most important planks in their platform. It is claimed by other parties that the Social Democrats made such a prominent feature of school reform in order to undermine the influence of the Catholic Church in educational matters and to win partisans among the teachers, who were promised freedom of opinion and the possibility of individual development under a Social Democratic administration. It is claimed that many of the reforms in teaching propagated by the Social Democratic State Secretary Gloeckel were employed previously by first-rate teachers of the old system, and that reform would have come gradually as conditions become more consolidated in the country.

Normal Children Complete Eight Classes

In Austria every child is obliged to attend the schools from his sixth to his fourteenth year. Up to now the public schools consist of the elementary school (comprising five classes) and of the grammar school (Buergerschule) comprising three classes. In some of the Viennese grammar schools there is a fourth class which can be attended by pupils preparing themselves for admission to teacher seminaries or other training schools. Thus a normally developed child can complete five classes of the elementary school, and either three or four classes of the grammar school, during the time fixed by law for the child's education.

Public schools have always been free of cost for tuition, but educational requisites, namely, books, copy books, rulers, pens and pencils, colors, thread and needles, etc., had to be furnished by the parents of the children except in needy cases. At present the Social Democratic Vienna municipality supplies all children without distinction with the necessary educational requisites. The yearly cost of these supplies is 4,500 million crowns, and it is considered superfluous by many people that the Vienna municipality, which is always in financial difficulties, should make this expenditure for children of well-to-do persons.

School Tours Require Heavy Expense

Another expenditure of 1,200 million crowns is made for the use of the tramways four times a year free of cost when making school class excursions, which take place as provided for by law.

Heretofore the parents had to decide after completion of the fourth or fifth class of the elementary school—that is, at the age of 10 or 11—whether or not the child should be prepared for a university education. In case a university education was contemplated the child was placed in one of the three institutions preparing for the university (duration seven to eight years), viz, Gymnasium (with Latin and Greek), Realgymnasium (with Latin and one modern language) or Realschule (with two modern languages and detailed instruction in mathematics). If university studies were not contemplated education was continued in a grammar school.

Purposes of "Einheitsschule" or Middle School

Soon after the collapse of the monarchy a new type of schools, the so-called "Einheitsschule" or middle school (duration four years), was created in the six federal educational institutions. The idea of this "Einheitsschule," which is in a way a fusion of the plan of instruction employed in the grammar school and the lower classes of the different types of the Gymnasium, is to enable parents to decide as to their children's future education when children are in a more developed age—after the completion of the "Einheitsschule," and not after the five years elementary school.

As the studies in the six federal "Einheitsschulen" created in 1918 were completed in June by the first pupils who followed these courses, classes of a new type of schools, the so-called "General Educational Upper Schools" (allgemein bildende Oberschulen, duration four years) was opened for them in the autumn of 1923. This new type of school, which is as follows, will be tried in four variations, according to the special aptitude and talents of the pupils:

Four Variations of New Type of Schools

1. The ancient-language upper school, which will deal principally with the study of the ancient languages and civilization as compared with the present civilization.

2. The modern-language upper school which will deal with the works of the western nations (French and English) and will, by the study of the characteristics of those nations, lead to a thorough understanding of Austrian nationality and culture.

3. The upper school for mathematics and natural science, which will serve to train individual thought on the basis of mathematical studies and experimental natural science.

4. The German upper school, which will explain the culture of the Austrian nation in its principal ramifications—in language, science and arts, religion and philosophy, state, society, and political economy, as well as in the natural and historical conditions which were decisive for its development. It is believed that by drawing from these sources of German culture the way will be prepared for a universal comprehension of the culture of the present age.

This fourth type is meant to replace the teacher seminaries, which last four years as a continuation of the grammar school. As the present education of teachers is considered inadequate, the four-year "Deutsche Oberschule" with one or two years university will probably be the future education of teachers.

Pupils who have completed the course in this "General Educational Upper School" will be entitled to admission to the universities.

In case the results of the "Einheitsschule" (middle school) and the different types of the "General Educational Upper School," which follow, should prove to be satisfactory, it is planned to eliminate the grammar school (Buergerschule) entirely, and to modernize the Gymnasium. Realgymnasium, and Realschule on the lines of the "General Educational Upper School."

All these school-reform experiments will be tried out up to the year 1930–31, and it will then be decided whether the new schools shall be generally established throughout the country or gradually withdrawn.

Official report to the Department of State.

State Legislatures Meet at Varying Intervals

Six State legislatures meet annually.—All of these States are on the Atlantic seaboard and all were of the original thirteen colonies: In New England, Massachusetts and Rhode Island. On the North Atlantic, two at the mouth of the Hudson, New York and New Jersey. On the South Atlantic, two at the mouth of the Savannah, South Carolina and Georgia.

Five State legislatures meet biennially and in even years.—All of these are southern States: Two at the mouth of the Potomac, Maryland and Virginia. One at the mouth of the Ohio, Kentucky. Two at the mouth of the Mississippi, Mississippi and Louisiana.

All other State legislatures meet in odd years, but regular sessions in Alabama are quadrennial in the year before leap year. Forty-two legislatures will be in regular session in 1925.—*William R. Hood.*

The Place of the Museum in University Instruction

Without Aid of Museum Specimens Many Courses Can Not be Given Successfully. Natural Methods of Exhibition Coincident with Revival of Use of Concrete Objects. University Museums Differ Essentially From General Museums in Being Distinctly Technical. Characteristic Methods of University of Illinois

By FRANK COLLINS BAKER, *Curator of Natural History, University of Illinois*

NOT MORE than a dozen of the 200 university and college museums in the United States are functioning in a satisfactory manner; the great majority are of little or no value as an aid to actual instruction. The students of science and art are, therefore, deprived in great measure of a very valuable and potent aid in more clearly understanding those subjects, besides missing the pleasure and satisfaction derived from visits to the museum halls, which all students enjoy. Without the aid of museum specimens, some courses can not be given with any degree of profit.

Synoptic exhibit of invertebrate

Years ago, the museum was considered a valuable aid in most colleges and universities, and the late Prof. Henry A. Ward, for some years connected with the University of Rochester, N. Y., supplied a large number of these institutions with reproductions of famous fossils and other natural history material. These college collections may be found in many institutions to-day, dusty and neglected, mute witnesses of a great and vanished past. The startling results of studies in evolution, heredity, and animal experimentation placed these tangible teaching equipments in obscurity, where they have remained for more than a score of years.

As life in general is a cycle, so is teaching, and there are abundant evidences that the use of museum material is again to function, and in a much larger measure than before. This revival appears to be coincident with the more modern and natural methods of exhibition adopted by the progressive museums of America.

There can be no question that a well-arranged museum can make a science course much more intelligible. Fragmentary periods in classroom and laboratory may be cemented into a rational whole by a review of a good exhibit. Such subjects as variation, evolution of types, metamorphosis of growth, and others can be taught successfully only by the aid of museum exhibits, either in laboratory or museums. Museum specimens are absolutely essential for the proper teaching of many subjects and these specimens should be rationally arranged to bring out some principle.

A university museum, however, appeals to a class different from the general city museum. Here all are trained to think and observe, and both the exhibits and the descriptive labels in large part must be of a more technical character. This does not mean, however, that less technical exhibits may not occasionally be used, solely for the purpose of educational enjoyment. The exhibits must, for the most part, fit into some course of study. This statement relates particularly to the exhibit halls. There is another side of university museum activity—that of research and the storage of material illustrating the natural resources of a state or region which is even more important than exhibition. But this is another story.

I wish to point out concretely some of the methods that are employed in the

A section of the museum of the University of Illinois

Delivered before the American Association of Museums, Washington, 1924.

museum of the University of Illinois to make the exhibits of value and to help in actual instruction.

We have a course called zoology I, a beginning course in animal classification and generalizations in zoological theory. methods of growth, reproduction, metamorphosis, etc. A more advanced course in taxonomic and distributional problems also includes reference to this exhibit. An exhibit of the pearl-button industry supplements this case.

How butterflies pass the winter

To supplement this course there is a synoptic exhibit filling 7 cases for the invertebrates. This includes both recent and extinct forms, is illustrated by more than 300 diagrams—many of them by that veteran teacher, Dr. J. S. Kingsley—200 models and restorations of extinct forms, and scores of descriptive labels. This exhibit is also used in an advanced course in invertebrate morphology. The cases are of a new type, giving the maximum of exhibition space within a reasonable range of vision. Every specimen may be clearly seen and every label distinctly read. Each case carries a caption label in 2-inch letters indicating the phylum represented, so that no student may have the least difficulty in finding the particular exhibit assigned for study.

A synoptic exhibit of vertebrates is also available, which now fills 9 cases, but will soon be rearranged along modern lines to fill 12 cases. This is used primarily in connection with our course in vertebrate zoology.

A course in field zoology includes the collection, preservation, and identification of common representatives of the local fauna. Chief among these are the river mussels, and to supplement this course there is a case of the river mussels of Illinois, showing their range in variation, both of age and sex. Labels and illustrations indicate the economic value,

A course in animal ecology, the relations of animals to their natural environments, makes use of a case of transparencies made from the most perfectly constructed animal groups in American museums. These are so beautifully executed that many students have asked the question, "How did they get the animals to stand still for this photograph?"

Evolution and heredity are subjects taught at Illinois, and a case has been prepared to illustrate the evolution of the horse, the most classic as well as the most complete example of the theory of evolution. This is arranged to show the stratigraphic sequence geologically, the evolution in time, as well as the principal stress in the course of evolution—the loss of toes, the increase of size, and the change in tooth structure. At the end of every semester, just before examinations, the curator gives a demonstration in evolution for the benefit of students in some of the courses outlined. This includes evolution, variation, migration, metamorphosis, geographic distribution, and human evolution. The demonstration includes material in 23 different cases on two floors of the building.

A course in ornithology makes exclusive use of an exhibit of local birds. This is one of the most thoroughly used exhibits in the museum, and in the spring particularly, when bird identification is active, there are usually from one to a dozen students doing assigned work several hours in the day.

Geology by its very nature must make use of specimens, and a museum is especially adapted to give substantial aid in courses in this subject. At Illinois two

Birds of Urbana and the vicinity

courses at present make some use of the synoptic exhibits in invertebrate zoology, the more recent forms being compared with the extinct forms also exhibited. A course in invertebrate paleontology and in stratigraphy are so used. The synoptic collection is an example of the fact that a well-arranged exhibit may serve several purposes. This collection is used by the zoologist to show the correlation between extinct and living forms. The exhibits of commercial geography, including products from corn, cotton, rubber, the button industry, beverages, and others, are used to some extent. Six new cases are in preparation to contain exhibits of historical geology or stratigraphy.

The department of sociology has made use of the exhibits in ethnology (social evolution), using as illustrative material the exhibits of American Indians and especially the restorations of primitive man made by Doctor McGregor. Recent additions have made this department of the museum of great benefit in this direction.

Entomology especially lends itself to museum technic and the preparation of useful exhibits in aid of teaching. For this purpose four groups have been constructed, known under the following captions: Insect pests of the corn plant; Enemies and friends of the apple tree; How butterflies pass the winter; The old log habitat. These, of course, are of especial benefit to economic entomology and are particularly useful in the course introduction of economic entomology.

A synoptic exhibit of insects is used by classes in systematic entomology. These exhibits are also of special interest to the men taking the short course in agriculture of two weeks.

The method of exhibition, labeling, and use of these cases is believed to be unique. Each case is 3 feet square, the exhibit is 3 feet above the floor, and the case is but 5½ feet high. It is observed from four sides, three species of injurious or beneficial insects being shown, in their life history, on each side. Each species is described by a label printed in 12-point type, indicating the damage done, the life history of the insect, its natural enemies, and the control advocated by the best authorities. A description of the exhibit and references to literature completes the label. The exhibit of corn insects is probably one of the best-used cases in any university museum. It is first studied rather closely by the class, the students being required to find all stages represented. Several days after this study a quiz is given, all labels being removed and the student required to describe the different stages and their significance. Several days before this quiz is given students are noticed about this case in unusual numbers, and they have even gone into the museum hall in the evening to prepare for this examination. Many exhibits of this type will probably be added to those in the museum.

Insect enemies of the corn plant

Exhibits in a university museum need not be confined to those of the natural sciences. History, both modern and ancient, American and exotic, may be greatly aided by museum exhibits. Some of these are to be found in the other museums on the campus of the University of Illinois—European culture, with Prof. Neil C. Brooks as curator, Classical art and archaeology, with Prof. Albert T. Olmstead as curator—all are used more or less as aids to instruction. Museums of art would no doubt be useful, but seem to be few in number in universities.

American history teaching might be greatly stimulated and aided by the establishment of museums of history, and if the great events of our country's short life could be portrayed in miniature, as is being done on a large scale in the Milwaukee museum, the effect on the undergraduate would be surprising. Every university should acquire material illustrating the culture of the States and colonies during the earlier years of the country's existence, so that the student may visualize times and conditions, which he can not do simply from reading textbooks. There is a wide field in this direction for a curator who has training in museum technic and a thorough knowledge of American history.

I have endeavored to indicate the place that the museum of the University of Illinois holds in the curriculum. Many of the museum exhibits are intimately associated with definite courses. It is proposed to expand and augment this policy until every phase of museum activity that can be made to aid the regular courses of instruction has been put in operation.

We are particularly fortunate at Illinois in having a staff of instruction that has seen the possibilities of the museum in strengthening the regular courses. Without this willingness to use the exhibits and the friendly cooperation in their preparation, the museum would be of little value. I suspect that in some universities and colleges the faculty will themselves have to be educated to realize the value of museum exhibits. With this end in view I submit this short account of the museum relationship at Illinois, hoping that the unusual success which has attended our efforts may stimulate those interested in similar work in other higher institutions.

New State Program in Physical Education for Missouri

Games the Best Foundation for Physical Training. Frequent Recesses are Beneficial. Five Acres Should be the Minimum for a City School Site. Proper Selection of Games

By HENRY S. CURTIS
Director of Hygiene and Physical Education for Missouri

TO PROVIDE for all children training of the highest physical value and of social and moral value as well, the Missouri State Department of Education is promoting a program in physical education built chiefly on athletics and games.

Play is the method which nature herself has devised for the initiation of the young and the activities of the old. The fundamental training which the girl gets for her life as housewife and mother is the training that she gets from playing with her doll. The play of the boy is one project after another; he builds a playhouse in the yard; he puts a water wheel in the brook. Our project method in education is but a meager attempt to do the same thing in the schoolroom. The initiation of the child into society comes almost altogether through his play. In play he learns to get on with other children; to make friends, and be a good comrade. He gets his ideas of honesty or dishonesty mostly from the games he plays. A dishonest coach can do more to make a whole student body go wrong than all the Sunday schools can do to make them go straight. The team game is the great school of loyalty. Loyalty to the team is essentially the same as good citizenship applied to the city, or patriotism applied to the country.

Games Cultivate Quick Mental Action

There are many people who should not drive an automobile—their reaction time is too slow. If a child runs in front of them, they run over him. But they never played football. If, instead of shivering on the sidelines they had gone into the game and got some training in quick thinking, they might now be able to step on the brakes at the right moment. In football or baseball all the decisions are made in small fractions of a second, and countless emergencies arise in every game. The energy of the motor areas is the energy which runs the brain in all of its activities.

The big end of physical training is in the first grade. The little child is motor minded. Nearly all of his interests are in motor activity, while many of the intellectual interests are not yet developed. Yet the school is suppressing rather than promoting the activity of children.

As a result of a long series of experiments carried on in Europe 30 years ago, a law was passed in Germany providing for a 15-minute recess in every hour. The State Department of Education of Missouri is asking for two 20-minute recesses in the morning, and two 20-minute recesses in the afternoon for the first three grades. In California the law forbids a school day longer than four hours in the first four grades. Out of these 4 hours one half-hour recess and two 15-minute recesses are taken, leaving 3 hours of school. Yet California stands near the top of every educational list. With a six-hour school day in Missouri, we can easily take two hours for physical training in the first three or four grades and still have as much work done as we are now doing. Small children have very limited powers of application and do not profit by long periods. Applying the standard arithmetic test to the fifth grade of 40 cities, it was found that exactly the same progress was made by those using the 15-minute period as by those using the 45 minute period.

Grounds a Part of School Equipment

The city elementary school should have a minimum of 5 acres of ground; the junior high school should have 8, and the senior high school 12 acres. This ground must be made level and a part of it should be surfaced. There should be trees around the edge, but no trees in play spaces. Under the Missouri physical education law the school ground becomes as much a part of the school equipment as the schoolroom. It must be in condition to use.

There should be a running track, a jumping pit, and three or four horizontal bars along the side of every school ground. This permits the standard athletic test to be given—that a boy shall run 60 yards in 9 seconds, jump 5 feet and 9 inches standing, chin a bar 4 times, and throw a baseball 130 feet, or pitch 3 strikes out of 6 deliveries. This test is uniform throughout the United States, and a standard medal is given for it.

The race has an interest in the health and physical development of girls that it does not have in the boys. Girls should avoid strains and bruises, but such exercises as walking and swimming, tennis, and volley ball are much more significant for them than for boys.

Beginning with the fourth grade, two indoor baseballs and four bats, two volley balls, and, where feasible, a soccer football should be furnished to each grade. Then when a class has a physical training period they can take their own equipment and go into the yard to play without loss of time.

In the elementary schools it is expected that physical training shall be conducted by the regular teachers under the supervision of a physical director. In the junior high schools and high schools physical training should be under regular physical directors. At all of the large schools there should be someone in charge after school until supper time. In congested sections the school grounds should be lighted for use at night.

Five Principles in Selecting Activities

In selecting activities for a program, the Missouri State department has been governed by five general principles:

1. It seeks to train the type of muscle and social development that life needs. On the physical side, walking is the primary form, and with most of us it is the only physical activity that we keep up after we get through school. It represents at least 90 per cent of all of the physical energy we develop. On the social side, the development of friendships and good comradeship comes almost altogether through play in childhood.

2. In selecting games, baseball and football must be rejected from the program of the elementary school, because there is not enough room and because girls do not play.

3. The activities put into the program must be such that all children in a class can take part. On this basis, basket ball must be rejected. Because of the violent strain on the heart, basket ball should not be played without a careful physical examination.

4. At least two hours of physical exercise each day is necessary for a vigorous boy or girl. If we can not put more than one-half hour into the program, we must give school activities that children will carry on after school, on Saturdays, and during the summer time. The only ones that meet these conditions are athletics and games.

5. The activities selected should be of a type that carry over into life, as tennis, cricket, and hockey do in England, where they are often played until men are 60 or 70 years of age.

The Missouri Department of Education is encouraging much more walking

than we have had. It hopes to be able to make a definite requirement. Every boy and girl should learn to swim before graduation from high school. In every possible way will the department encourage every boy and girl to play tennis. A vigorous type of folk dance has a specific place and should be encouraged.

Volley ball, playground baseball, and circle dodge ball will be on the program for every school. Volley ball is a game which we begin to play at 8 and continue to play until we are 80. It can be practiced in the backyard of nearly every house. It has great corrective value, as it tends to put the head back and deepen the upper chest.

Soccer ball is undoubtedly the most popular game in the world. It is played all over South America, Europe, Australia, New Zealand, India, South Africa, Japan, Canada, and the Philippines. It is compulsory in English preparatory schools from the time the boys are 8 years of age. It is required also in about half of the English high schools for girls. At the meeting of the State directors of physical education in New York in January it was voted unanimously that soccer is a much better game for the junior high school than the American game of football. The belief was also expressed that men would be better players in the American game in college if they had played soccer throughout the high-school period. The Missouri State department will encourage soccer both for girls and boys wherever possible. This is entirely in line with what has taken place all over the world since the war.

Higher Salaries Naturally Follow Better Preparation

Differences in salaries reported by one normal school last year show that its two-year graduates received from 30 to 40 per cent larger salaries than did those students who went out as undergraduates to teach.

In a recent unpublished study by the Bureau of Education a comparison is made of the preparation and salaries of nearly 2,000 teachers distributed among the States in over 300 villages of less than 500 population. The average monthly salaries of teachers with elementary-school training only is $83; with some high-school training, $94; with four years of high-school training, $95; with one year of normal school, $104; with two or more years of normal school, $113; college graduates, $156.—*W. M. Robinson.*

The Thirteenth Annual Safety Congress of the National Safety Council was held at Louisville, Ky., September 29 to October 3.

What to Observe When Visiting Schools

When you visit your schools American Education Week what are you going to observe and what information are you going to seek from the principal and teachers? According to school superintendents who have written to the United States Bureau of Education on these points, parents should observe: The general attitude of the children toward the school; the general physical condition and sanitation of the school buildings; the amount and use of play space; the size of classes; equipment of the schools, as library, gymnasium, shops, maps, etc.; and the exhibit of the children's work.

Parents should seek information on the standing of their own children in their school work; whether their children are working up to their full capacity; what the parent can do to help his children do better work; what bad school habits have been noted; what are the qualifications demanded of the teaching force; what salaries are paid to teachers; how school costs compare with costs in like communities; what proportion of the pupils of high-school age are in high school; what provision is made for children of kindergarten age; why pupils leave school; and what the parents may do to help the schools.—*W. S. Deffenbaugh.*

Instruction in Biology in Oregon Grade Schools

Sponsoring the teaching of biology, or the science of life, in the grades is regarded by the Oregon Social Hygiene Society as the most constructive and outstanding piece of work in connection with the schools. Not only has this science given the children a natural and wholesome attitude toward bodily functions but it has also taught them to observe accurately, to experiment carefully, and to draw sound conclusions from their own observations and experiments.

MY FLAG, born in the days of the Revolution, baptized in the days of civil strife, rededicated to the cause of human freedom in the great world conflict; in peace and war it has ever floated as the symbol of liberty and justice. May its stars never grow dim and its stripes never fade. And may the children in the schools over which it shall float be so taught to love justice, to hate evil, to do good, that they may forever protect the flag and the ideals for which it stands.— *Randall J. Condon.*

Get More Pupils into the Games

Physical Directors Favor Further Efforts Toward General Participation in High-School Athletics

OPPOSITION to Rugby football for elementary or junior high-school boys and approval of soccer-football as a better game for all high-school pupils are expressed in a resolution adopted at the second conference of State directors of physical education called by the United States Bureau of Education.

Discussion centered around management of athletics for boys and girls, especially in interschool competition, and the following resolutions were passed:

(*a*) We approve the participation in athletics by the majority of pupils.

(*b*) We would limit the length of the high-school interscholastic season in football or basket ball.

(*c*) We would eliminate interstate or intersectional games involving long trips.

(*d*) We would eliminate post-season interstate and intersectional athletic contests.

Relative to competitive athletics for girls the directors expressed themselves as opposing State, interstate, or intersectional basket-ball tournaments and as favoring intraschool activities rather than interschool contests. They recommended extension, under the supervision of women teachers and directors, of nonpersonal-contact athletic sports of a type suited to girls' physiological and social needs. They recommended that, surrounded by proper physical and social safeguards, a majority of the students should participate in noncombative contests conducted for the benefit of the participants.

Finding time on the school program for matters pertaining to health, and adequate training of the regular teacher for such work were cited as difficult problems on which some progress has been made.

That States vary widely in the nature and enforcement of their physical education laws and in the duties assigned to directors of physical education in States where this office exists, was brought out during the conference. Thirty-two States now have physical education laws. Only 12 of these States have appointed State directors, but another State which has no specific legislation on the subject has a director who is an official of the educational system.

In some States the physical director has charge of only the exercise side of physical education; in other States he supervises also the health instruction of the classroom and may have charge of the medical inspection of pupils.

Group of children who participated in a "play festival" at Highland Park, Va.

Virginia Governor Urges Attention to Children's Health

Thought to the health and well-being of the children was recently enjoined upon the people of Virginia in a formal proclamation by Gov. E. Lee Trinkle. He advised that full support be given to public health officers and sanitary advisors in all matters of nutrition, housing, nursing, ventilation, recreation, and other elements that make for individual well-being.

Further, he recommended that celebrations with games, music, and athletic events be planned to focus the attention of each community upon its children and emphasize the value of play and recreation in promoting good health.

His suggestions were widely followed throughout the Commonwealth, and the citizens' associations and community centers were active in promoting the celebrations which the governor recommended. One of them is illustrated by the picture on this page, which represents a group of children who participated in the play festival at Highland Park. A thousand children took part, and 5,000 persons were present to witness the event. The festival was planned by the Highland Park Community Center, of which A. A. Guy is chairman.

In an effort to reduce to the minimum interruptions of school time, William McAndrew, superintendent of the public schools of Chicago, has caused the meetings of the high-school teachers' council to be discontinued.

Effect of Size of Classes Upon Efficiency

Relation of size of class to efficiency is the subject of a project under study by the Bureau of Educational Research of Ohio State University. Four Ohio cities—Cleveland, Cincinnati, Akron, and Toledo—are participating in the project as it relates to the elementary grades. Pupils are grouped for a semester in a large class, followed by a semester in a small class, taught in each case by the same teacher, while another teacher has a group of children in a small class during the first semester and in a large class the second semester. As determined by testing, the classes have the same average and variability of intelligence. This is but one of the projects of the elaborate program which the bureau has under way.

Seventy-seven traveling teachers are employed in Cuba to give instruction in 187 centers in sparsely populated districts. They instruct 3,639 children.

I CONSIDER knowledge to be the soul of a republic, and as the weak and the wicked are generally in alliance, as much care should be taken to diminish the number of the former as of the latter. Education is the way to do this, and nothing should be left undone to afford all ranks of the people the means of obtaining a proper degree of it at a cheap and easy rate.—*John Jay.*

Classical Education Best Basis for Industrial Work

Classical studies are advocated by Sir Arthur Duckham, a prominent English industrialist, as the foundation of all development in industrial work. Sir Arthur was one of the principal speakers before a recent conference of headmasters of British public schools (of the Rugby, Eton, Harrow, Winchester kind), and he asserted that industry badly needs men capable of taking the lead. Industrialists like himself are always searching for men to control works, control men, and carry on efficiently, he said, but it was with the greatest difficulty that they obtain this class of man. The openings in industry to-day are greater and the prizes higher than ever, but there is a lack of really fine, sound men as leaders.

Many branches of industry are suffering from inefficiency, he continued. Public-school training is ideal as a beginning for the men who were going to keep the country prosperous. Industry is really an interesting occupation; he would rather be in industry than in a bank or financial house, or other black-coated kind of work that public-school boys were rather inclined to enter.

The first thing needed in industry, he added, is a fellow who would do his job; he should also be able to express himself. To that end he believed in a classical education as the foundation of all development in industrial work.

The world has still to realize its debt to the common schools of America.—*H. G. Wells.*

New Books in Education

BY JOHN D. WOLCOTT
Librarian Bureau of Education

ALMACK, JOHN C. Education for citizenship. Boston, New York [etc.], Houghton Mifflin company [1924] xvii, 287 p. 12°. (Riverside textbooks in education, ed. by E. P. Cubberley.)

This work is written from a practical point of view, with the purpose of instructing teachers in the principles and methods of effective training for citizenship. After discussing the meaning and problem of civic education, the author shows how the school may be put on a civic basis, in a section which gives particular attention to civic values in the school organization, in school government, and in social institutions. Directions are next given for using civic materials and methods from various sources, such as the social sciences, the regular school subjects, and moral training. Other aspects treated are how to utilize special occasions for civic training, and civic training through school service, social methods, and personal guidance. The final section deals with the integration of the school and the community, showing how these may cooperate in raising the standard of citizenship. The particular functions of the teacher in relation to civic improvement are also brought out.

AVERILL, LAWRENCE AUGUSTUS. Elements of educational psychology. Boston, New York [etc.], Houghton Mifflin company [1924] xii, 425 p. tables, diagrs. 12°. (Riverside textbooks in education, ed. by E. P. Cubberley.)

This textbook applies the general principles of psychology as a science to the classroom problems of elementary school teachers. Such topics as easily lend themselves are subjected to experimentation in the course. In a brief final summary the author points out how largely, after all, education is a process of producing desirable changes in children, and shows how teaching is an art based on the results of scientific research. The chapters in this concluding section deal with the transference of training, and building a well-adjusted personality.

BAGLEY, WILLIAM C., *and* KEITH, JOHN A. H. An introduction to teaching. New York, The Macmillan company, 1924. x, 400 p. 12°. (American teachers college series, ed. by J. A. H. Keith and W. C. Bagley.)

As an introduction to a series of books on specific topics designed expressly for students of collegiate grade in professional schools for teachers, the present volume aims, through a brief but comprehensive survey of the field, to orient the prospective teacher with regard to the outstanding problems of education, to give him a balanced perspective on disputed issues, to develop in an initial way the meanings of the more important technical terms which his later studies will involve, and to facilitate on his part an intelligent choice of a particular field of service. It gives the basic facts regarding teaching as an occupation, explains the essential nature of teaching and learning, considers the materials of universal education, and outlines the psychology of the educational process. Public education as a vast social enterprise is concisely described, and the personal and specific qualifications requisite for teachers are discussed.

BURNHAM, WILLIAM H. The normal mind; an introduction to mental hygiene and the hygiene of school instruction. New. York, D. Appleton and company. [1924] xx, 702 p. 12°.

The mental health of normal children is dealt with especially in this book. It maintains the thesis that the essential characteristic of the normal mind is an integration of the personality that makes adjustment possible, and it discusses conditions and methods that tend to preserve and develop integration, as well as conditions and practices that tend to disintegration. Instead of attempting a systematic and complete treatment of the whole subject, the author has confined himself to illustration of significant aspects of mental hygiene and the hygiene of instruction in a few important parts of the field.

FOWLKES, JOHN GUY. School bonds. Milwaukee, Wis., The Bruce publishing company [1924] 177 p. tables, diagrs., facsims. 12°.

The guiding principles for issuing school bonds are presented by the author of this book, for the benefit of school officials and of students and teachers of educational administration.

Methods of financing school building programs are first discussed, and the nature of school bonds is defined. Other topics taken up are the trends in school bonded debt assumed annually and ways of justifying a school bond issue, also the marketing, retiring, and recording of school bonds. The final chapter gives some functions of State departments of education in issuing school bonds.

FREELAND, GEORGE E. The improvement of teaching. New York, The Macmillan company, 1924. xv, 290 p. front., plates, 12°. (Modern teachers series, ed. by W. C. Bagley.)

This volume comprises a collection of case-studies in the art of teaching, from observation of the procedure of successful teachers, with an interpretation of the principles involved, so that they may be applied in the improvement of teaching elsewhere. The material appeals first to students preparing for teaching, next to teachers in service, and lastly to the general public, parents, and school boards, so that those who support public education may be posted on the distinguishing marks of good teaching.

HAYNES, MERRITT WAY. Teaching shop work; a handbook for instructors in vocational schools and for students in trade-teacher training classes. Boston, New York [etc.] Ginn and company [1924] x, 238 p. illus., forms, diagrs. 12°.

Here are given the results of the author's experience while conducting evening classes for trade teachers under the auspices of the New Jersey State department of public instruction. The material is published for the benefit of all workers in the field of vocational education, and particularly for director of teacher-training classes. By a process of analysis the subject of trade-teaching is resolved into the following units: Principles of vocational education observation of teaching, trade analysis, principles of teaching, practice-teaching, shop organization and management, psychology applied to student analysis.

LINCOLN, EDWARD A. Beginnings in educational measurement. Philadelphia, London, Chicago, J. B. Lippincott company [1924] 151 p. tables, diagrs. 12°. (Lippincott's educational guides, ed. by W. F. Russell.)

This elementary manual on tests and measurements has grown out of the needs of university extension classes for a concise textbook of this sort. After a general introduction, the author takes up the topics of subject-matter tests, the mathematics of measurement, the use and misuse of tests, and the measurement of intelligence and of character. Directions for the use of tests are given, and an appendix affords lesson plans and other suggestions.

MILLER, CLYDE R. *and* CHARLES, FRED. Publicity and the public school. Boston, New York [etc.] Houghton Mifflin company [1924] x, 179 p. 12°. (Riverside educational monographs, ed. by H. Suzzallo.)

Of the authors of this book, Mr. Miller is director of publications, Cleveland public schools, and Mr. Charles is a member of the editorial staff of the Cleveland Plain Dealer, who has had long experience in writing and editing educational news. The fact is emphasized that, in order to secure adequate support for public education, the people must be supplied with information regarding the public schools and their needs. This may best be accomplished through the newspaper, which is an important factor in popular education as well as the school. Effective school publicity is not a matter of occasional drives; it aims to promote complete all-year-round support and sympathy between the taxpayer and the school by the use of every legitimate means of information—the newspapers, the schoolhouse organ, school newspapers, parent-teacher clubs, reports and monographs—in accordance with principles which are outlined in this volume.

SMITH, WALTER ROBINSON. Constructive school discipline. New York, Cincinnati [etc.] American book company [1924] 275 p. 12°. (American education series. G. D. Strayer, general editor.)

Suggests ways and means of student control that will harmonize with social trends in other phases of life and provide a useful training for citizenship in a democratic society. The author asserts that the new socialized form of school discipline may be made a more vital element in moral education than could the earlier autocratic domination, which has now broken down in all phases of life.

WHEELER, JOSEPH L. The library and the community. Increased book service through library publicity based on community studies. Chicago, American library association, 1924. 417 p. illus., diagrs. 8°.

Library workers should devote a larger share of their attention to reaching the public which the library is designed to serve—less time in merely preparing books for use and more time in actually getting them read. The librarian of to-morrow will base his pride on the aid his library can give in making the use of books a means of positive educational and cultural advance. These ideals are accepted by the author of this book, which presents principles and methods for use by librarians in applying their service to those points where it is particularly needed in their respective communities. The volume deals with the community background of the library (including schools), public opinion, and the library, and especially the technique of library publicity.

Many Private Schools in Cities Are Deficient in Health Provisions

Excellent Equipment in Some Private Institutions. Others Would be Serious Menace but for Watchfulness of Parents. Public Schools are in General Far Superior in Provision for Health and Enjoy Better Supervision

By JAMES F. ROGERS
Chief Division of Physical Education and School Hygiene, Bureau of Education

THERE are private schools and private schools. Many of them are well housed and well conducted, but in this article we refer especially to many schools which spring up in cities where overcrowding in the public schools or the preponderance of foreign-born children or some other supposed fault has alienated the parents from public schools. In not a few of these private schools are to be found pupils, subnormal or otherwise exceptional, for whom no suitable provisions have been made in the public schools.

No Supervision by Special School Health Agencies

No matter what their origin or by whom patronized, a very considerable proportion of the private schools are far from ideal from a health-affording point of view. Frequently the sanitary conditions are much worse than in the public schools of the same community. School authorities, as a rule, are none too careful in matters of school health. However careless or ignorant the director of a private school may be, he is unfortunately outside the pale of inspection and unassisted by special school-health agencies.

Schools are often held in private houses and in rooms unsuitable in size for the number of pupils. Classes may be held in bedrooms which have been too recently vacated to be aired. Open gas stoves may serve as heaters. The temperature of the room is difficult to control and is often far from what it should be.

There may be few rooms, and the pupils being of a variety of ages the seats and desks (if the latter are provided) are unfitted in size for many of them. Pencils and other tools are often used in common and there are no sanitary drinking facilities.

Intelligent Home Care the Saving Element

Opportunity for play in the open air is frequently lacking, and the physical exercises that are carried out are done in overheated rooms. Medical inspection of either pupils or plant is almost unheard of. From the health standpoint, the school is saved to some extent by the fact that the pupils come from homes where they are well cared for and where they are usually kept at home if they show signs of infectious disease. Nevertheless the conditions in many schools are a constant and unnecessary menace.

It is unfortunate that in many communities parents patronize private schools, not so much because the public schools are poor as because it seems beneath their dignity and pocketbook to send their children to public schools. If they would contribute the tuition to the public school and lend of their time and interest, it might easily be far superior to the private school. Moreover, the parents might find upon investigation that, from a health point of view at least, the public school is already superior; but many of them never visit the school at all.

Thoughtful Planning Would Produce Good Results

If the private school must exist—and many of these schools fill a real need—it is unfortunate that all can not make an effort to approximate the excellence in sanitation and hygiene which is reached by the best of them. They are untrammeled in aim, and by a little thoughtful planning as to matters physical they could put things on a far healthier foundation than exists at present.

Having no supervising health authority, they might well have on their staff a physician who knows something of sanitation and the teaching of health, and with a slight expense for his counsel they could at least make the best of the conditions which exist. Certainly the school, which in this day of agitation for the desirability not only of freedom from sickness but the development of what health is possible for a pupil, should find that it pays to be, above all things, hygienic.

To train young women as household assistants the home economics department of the Denver (Colo.) public schools, cooperating with the Young Women's Christian Association, will offer a six or eight weeks course of intensive training for practical work in the home. Housekeepers of Denver promise the students positions immediately upon completion of the course.

To Equalize Opportunities for Home Reading

At a recent conference on home education which was called by the United States Commissioner of Education, librarians, extension directors of State universities, and leaders in parent-teacher associations discussed at length the facilities for giving people greater opportunities for reading.

As a result of this conference a committee of seven has been appointed by the United States Commissioner of Education to study the situation in the United States. This committee consists of Prof. Charles G. Maphis, University of Virginia, and Prof. Richard R. Price, University of Minnesota, representing the National University Extension Association; Mr. L. L. Dickinson and Mr. Judson T. Jennings, representing the American Library Association; Mrs. A. H. Reeve and Mrs. Drury W. Cooper, representing the National Congress of Parents and Teachers, and Dr. Jno. J. Tigert, representing the Bureau of Education, as chairman.

The agencies represented in this committee are already at work on some phase of this problem of home education, and it is expected that means will be developed whereby a nation-wide plan of cooperation may be outlined and put into operation, so that in every State there may be equal opportunities for all to enrich their lives when school days are over, through the use of books and periodicals. It is also hoped that public education may be more equally distributed throughout the States.—*Ellen C. Lombard.*

Rumanians Enthusiastic Over Agricultural Instruction

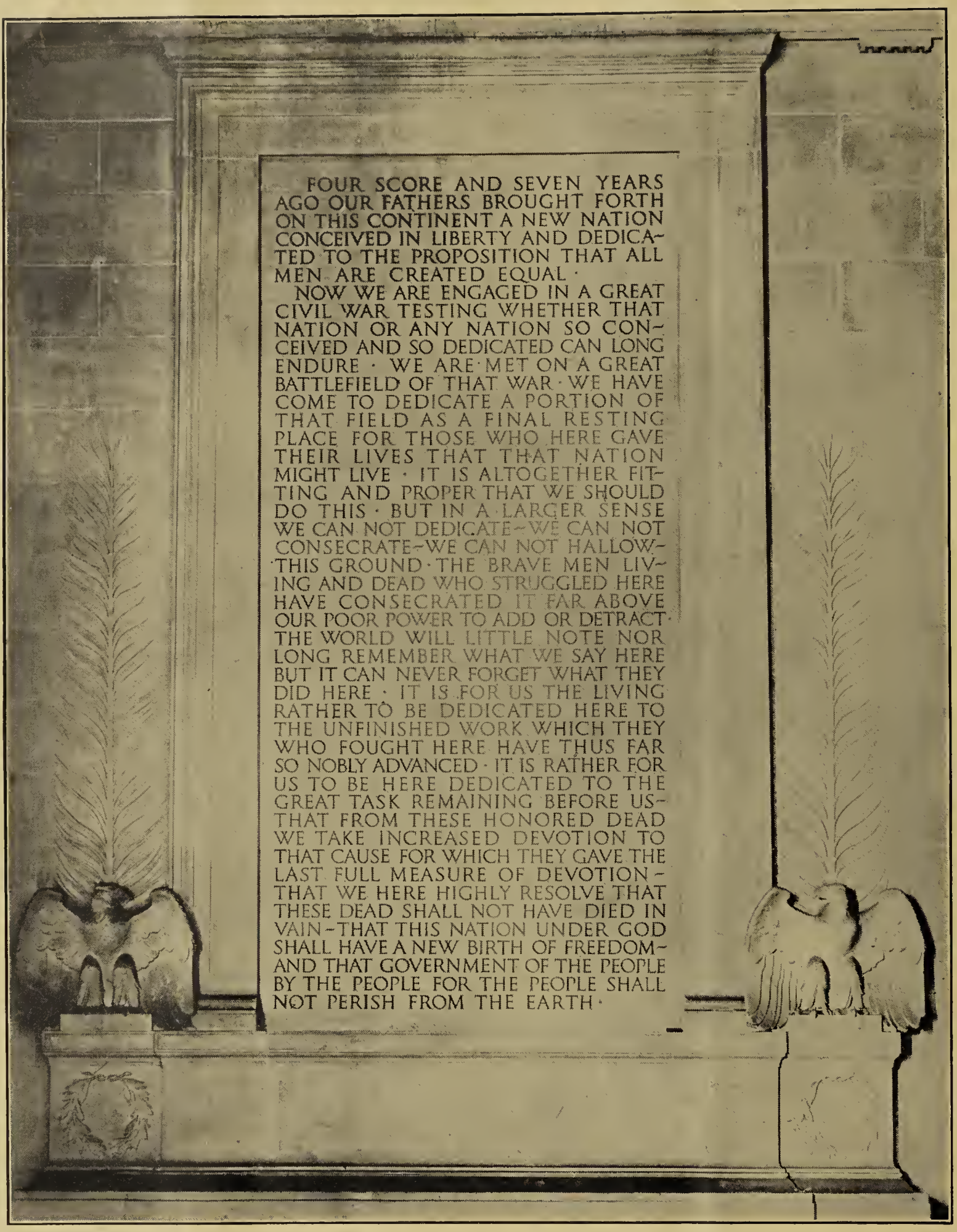
Rumania, with a population of a little more than 13,000,000, is supporting 59 schools of agriculture and 15 schools of household economics. For agricultural instruction alone, 31,600,000 lei, or $1,637,306, was expended in the year 1923, according to a recent report from Mr. Ely E. Palmer, American consul at Bucharest. In each of the four grades of agricultural schools students are given actual practice on school farms. The advanced schools confer the degree of "agronomical engineer" upon students who complete the four-year course. Graduates of these schools are qualified for teaching agriculture in the primary and secondary schools, and are also eligible for appointment as officials in the Ministry of Agriculture.

WASHINGTON : GOVERNMENT PRINTING OFFICE : 1924

THE most striking manifestations of progress in modern civilization are found in the extensions of educational facilities to the masses of the people; in the establishment of scientific, physical, mechanical, and all polytechnic schools, and in the discoveries made and results wrought by educated and enlightened industries. . . .

Modern progress is chiefly, if not entirely, found not in the advancement of what are called the learned professions but in the education and elevation of the masses; in the discoveries and appliances of the physical sciences; in the establishment of schools of science; and in the promotion, enlargement, and results of all departments of industries. . . .

Education is the one subject for which no people ever yet paid too much. Indeed, the more they pay, the richer they become. Nothing is so costly as ignorance, and nothing so cheap as knowledge. Even under old civilizations the States and people who provided the greatest educational dissemination and advantages were always the most wealthy, the most powerful, the most feared and respected by others, and the most secure in every right of person and property among themselves. And this truth will be tenfold more manifest in the future than it has been in the past. The very right arm of all future national power will rest in the education of the people.—*Benjamin Harvey Hill.*



LINCOLN'S GETTYSBURG SPEECH

(IN LINCOLN MEMORIAL, WASHINGTON)

APPROPRIATE FOR USE IN OBSERVING PATRIOTISM DAY

Observe American Education Week - November 17-23

SCHOOL LIFE

Volume X
Number 3

November
1924

AIR PLANE VIEW OF THE QUADRANGLE OF THE UNIVERSITY OF NEVADA
ONE OF THE MANY INSTITUTIONS FOR HIGHER EDUCATION WHOSE EXISTENCE IS DUE DIRECTLY TO DONATIONS OF PUBLIC LAND

Published Monthly [except July and August] by the Department of the Interior
Bureau of Education - - - - - - - Washington, D. C.

GOVERNMENT PRINTING OFFICE

CONTENTS

TO OBSERVE American Education Week appropriately requires active preparation. It is not always easy to devise effective methods or to find suitable material. Repeated requests have been made upon the Bureau of Education for suggestions as to what to do and where to obtain the necessary literature. In response to such requests the following documents have been issued. They may be purchased from the Superintendent of Documents, Government Printing Office, Washington, D. C., at the prices stated: (1) "Suggestions." Price, 5 cents; in lots of 100 or more, 2 cents each. (2) "Broadside," with material suitable for newspaper articles, addresses, etc. Price, 5 cents; in lots of 100 or more, 1 cent each. (3) "The Quest of Youth," a historical pageant. Price, 10 cents; in lots of 100 or more, 6 cents each. (4) "School and Teacher Day," an illustrated folder. Price, 5 cents; in quantity, 75 cents per hundred. Additional copies of this number of SCHOOL LIFE may be purchased at 5 cents each.

THE AMERICAN LEGION and the National Education Association are joint sponsors with the United States Bureau of Education in promoting American Education Week. Local and national officers of the American Legion should be consulted freely by school officers who are planning to observe the occasion.

The October and November numbers of the Journal of the National Education Association contain many appropriate articles, and in addition the Association has published a "research bulletin" entitled "Facts on the Public Schools for American Education Week." Information concerning these publications may be obtained from Dr. J. W. Crabtree, Secretary, 1201 Sixteenth Street, Washington, D. C.

SCHOOL LIFE

PUBLISHED MONTHLY *by the* DEPARTMENT OF THE INTERIOR, BUREAU OF EDUCATION
Secretary of the Interior, HUBERT WORK - - - - *Commissioner of Education,* JOHN JAMES TIGERT

VOL. X WASHINGTON, D. C., NOVEMBER, 1924 No. 3

Kindergartens As Integral Parts of the Public School System

Worth Has Been Proved by Long Experience. Entitled to be Placed on Same Footing as Primary Schools. Discrimination in Methods of Support is no Longer Justified. Rural Communities and Consolidated Districts Should Not be Deprived of Benefits Which Cities May Enjoy. Teachers Should be Trained for Work in Either Kindergarten or Primary Schools or Both

By NINA C. VANDEWALKER
Associate Specialist in Kindergarten Education, Bureau of Education

KINDERGARTEN LAWS of many of the States need revision. That changes of some kind should be necessary is not surprising, for in several of the States the laws were enacted nearly 30 years ago when the kindergarten was still an experiment. Forty States have kindergarten laws. Arkansas, Georgia, Maryland, and Mississippi have not yet enacted such laws; Massachusetts, Nebraska, New Hampshire, and Rhode Island do not need them because the age at which children in these States may enter public schools is as low as 5 years and the kindergarten may therefore be maintained as a part of the public school system. The kindergarten laws of 40 States are therefore the basis for the comments which follow.

Essential Features Common to all Laws

The needs and conditions in the several States differ widely, and it is but natural that there should be differences in the kindergarten laws. All have certain provisions in common. They must designate the authorities to whom the establishment of the kindergartens is to be intrusted, and specify the kind of districts or communities in which the establishment is permitted. They must state the sources from which the support of the kindergarten is to be derived; and designate the authority for issuing teaching certificates. It is in these provisions that the laws differ, and in consequence any law may be good at one point and poor in another.

In its bearing upon the quality of the work done in the kindergarten the change most needed in a large number of States is to provide more adequate support. In only 15 of the 40 States under consideration does the law provide for the equal support of the kindergarten and the primary grades. In them it is required that the support of the kindergarten shall come from the general school fund. The States in which the kindergarten is thus supported are Connecticut, Florida, Indiana, Iowa, Kansas, Kentucky, Maine, Michigan, Minnesota, New Jersey, New York, Ohio, South Carolina, Washington, and Wisconsin. In the other 25 States the law provides that the support must come from "the local district fund only." This fund is usually smaller than the general fund, for the latter ordinarily includes appropriations from the State and county. This would seem to imply less favorable conditions for the children in the kindergarten than for those in the grades. Whether or not it does depends upon the classification of funds. Where it has this effect it is evident that a revision of the law is in order. In any event the kindergarten should be considered as an integral part of the public school system and treated upon precisely the same basis as the primary schools.

Undue Restriction Upon Location of Kindergartens

In a number of States the kindergarten laws need revision which will allow the establishing of kindergartens in a larger number of communities. In 21 States any community may establish kindergartens. These States are Arizona, California, Colorado, Connecticut, Florida, Idaho, Illinois, Michigan, Montana, Missouri, New Jersey, New York, North Carolina, North Dakota, Ohio, South Carolina, Texas, Vermont, Virginia, Wisconsin and, Wyoming. In the other 19 States they may be established only in communities of a certain size or type. In Alabama, Delaware, Indiana, Iowa, Kentucky, Maine, Minnesota, Tennessee, and West Virginia they may be established only in special and independent districts, cities, and incorporated towns. In several others there are prescribed limitations of size and class. In New Mexico, for example, a town must have 200 or more children in average daily attendance in order to have a kindergarten; in Oklahoma, the community must have a population of at least 2,500; in Pennsylvania they are permitted in cities of the first, second, third, and fourth classes; and in Utah and Washington in those of the first and second classes only. In Oregon only communities that have 20,000 pupils of school age are allowed to have kindergartens, a condition that Portland alone is able to meet. The laws of this type need revision so that children of kindergarten age in all parts of the State may have equal opportunities.

Should Be Permitted in Consolidated Schools

The broadening of the scope of these laws deserves especial consideration at this time because the movement for the consolidation of rural schools is making it possible to bring the advantages of the kindergarten to children in the rural districts. The need of kindergartens for such children is not to the point here. What is to the point is that the kinder-

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garten laws of the different States should not prevent the establishing of kindergartens in consolidated schools when the time is ripe for such action.

New Laws Make Parents Responsible

The fact that many parents wish their children to have the advantages which the kindergarten affords, and therefore wish to see the kindergarten laws liberalized, is shown by the widespread efforts made in recent years to secure the enactment of laws of the mandatory-on-petition type. Such a law was first enacted in California in 1914. It represents a radical departure from previous ones in the fact that it makes the parents of children of kindergarten age in a given district, instead of the school authorities, responsible for the establishment of kindergartens. This is accomplished by means of a petition from these parents to the school authorities, which constitutes a mandate for the establishing of a kindergarten, with which these authorities must comply. The assumption underlying this law is apparently that the parents' interest in their children's education is greater than that of the school authorities, and that they should have a voice in determining whether or not children of kindergarten age are entitled to educational privileges.

The results of the enactment of this law in California were very gratifying. In the first two years after its enactment the number of kindergartens increased from 149 to 316. This increase has continued, and as a consequence California leads the States in the proportion of children of kindergarten age enrolled in kindergarten.

School Officers Often Oppose Mandatory Laws

The successful operation of this law in California led to efforts to secure the enactment of a similar law in other States in the years immediately following. These efforts were successful in Arizona, Illinois, Kansas, Maine, North Dakota, Texas, and Wisconsin. They were not successful in several others, in part because such a law did not meet the needs and conditions of these States and in part because of opposition to the law as such. This came from the school authorities themselves in some instances because they feel that such a law hampers their freedom in determining how a given school and community may be best served. The law in question has contributed to the progress of the kindergarten movement and will doubtless continue to do so. The current need, however, is for a revision of existing laws on the basis of the weaknesses here indicated.

The laws of several States relating to the certification of kindergarten teachers are also in need of improvement. Thus far, 34 of the 40 States that have kindergarten laws on their statute books have also enacted certification laws. Six of the forty have not yet done so. These are Alabama, Kentucky, Louisiana, Oklahoma, Tennessee, and Virginia. The kindergarten certificates, like those for other lines of work, differ in the several States. In nearly all the requirements are graduation from a four-year high school, and from a kindergarten training school approved by the State authorities, whose course is at least two years in length. The certificates in question are nearly all of the "special subject" type, corresponding to those issued to teachers of art, music, manual training, and other subjects. In consequence they are valid for teaching in kindergarten only.

Effective Method of Unification

In a few States—California, Illinois, Michigan, Ohio, and Wisconsin—a kindergarten-primary certificate is issued which is valid for either kindergarten or primary work, or both. These certificates are in line with present-day theory and practice. One of the means for the unification of the kindergarten and the grade work is a training course for both kindergarten and primary teachers that covers both phases of work. Teachers who have taken such courses are capable of teaching either kindergarten or primary children. The special-subject type of kindergarten certificate, however, allows her to teach in kindergarten only. It therefore tends to perpetuate the separation that teacher-training institutions are attempting to eliminate.

The changes here suggested are called for by changes in educational conditions. When the laws providing for the local support of kindergartens were enacted the kindergarten was still an experiment and could hardly be expected to be placed on the same level as the grades. It has now demonstrated its value, however, and has proved its right to a corresponding support.

Parents Understand what Beginnings Should Be

The desire for kindergartens in small communities as well as large ones is the result of a greater intelligence on the part of the parents as to what the beginnings of education should be. Many of these now recognize the kindergarten as furnishing the right beginnings and wish to see it made a part of all schools—urban and rural. The recognized need for certificates that cover both kindergarten and primary work is the result of the reorganization of the elementary school that places the kindergarten and primary grades in one group. The changes will therefore enable the kindergarten to work more effectively as a part of the school and of American education.

Teachers As the Pupils See Them

High School Juniors Express Their Opinions Frankly. Elements of Weakness and of Strength Are Carefully Enumerated

By WILLIAM M. ROBINSON,

Assistant Specialist in Rural Education, Bureau of Education

THE INFLUENCE of teachers is best judged by pupils themselves. High school juniors were asked by the North Central Association of Colleges and Secondary Schools to give three reasons for liking and three reasons for disliking school. Approximately 5 per cent of the 14,585 reasons given for liking school referred to the teacher. Thirteen per cent of the 4,685 who dislike school named the teacher. On the other hand, more than the two combined voted "the teachers" among the admired characteristics of their school.

More significant, however, were the qualities considered the "elements of strength" possessed by the best teachers. Of the 13,825 replies made, "capability" or "knowledge of one's subject," with 18 per cent of all the replies, led the list; "character (force, disposition, sympathy)" received 13 per cent of the total replies; "fairness, 12" per cent; "good nature, humor, kindness," 10 per cent.

The most commonly mentioned trait of the weakest teachers was "failure to explain and make clear," which included 18 per cent of the replies. Next in order of frequency were "lack of discipline," with 12 per cent; favoritism," with 10 per cent; "uninteresting and uninterested," "unfairness," and "quick temper," each with 8 per cent.

Teachers and those preparing to teach will do well to meditate on this report. School boards and superintendents in selecting new teachers may wisely consider more carefully the pupils' reactions to teachers.

Vocational School for Boys in Meat Trades

Meat examination, natural history and animal physiology, diseases and parasites of food animals, shop management, and legislation governing the industry are subjects included in the curriculum of a vocational school for boys and men employed in the meat trades of London. This school was opened September 15 by the London County Council in cooperation with organizations representing the meat trades, and will be known as Smithfield Institute. A minimum fee is charged for evening classes, and tuition is free for juniors up to 7 p. m.

Contributions of the General Land Office to Education

One Ninth the Normal Area of Every Township in New States Donated by Federal Government for Benefit of Common Schools. Appropriation of Lands for Agricultural Colleges in all States. Special Grants in Aid for Individual Institutions on Admission of States. Characteristic Methods in Distributing Lands to Settlers. Large Sums Received From Sales Paid into National Treasury

By WILLIAM SPRY
Commissioner General Land Office

THE GENERAL LAND OFFICE is the agency through which the Government handles all its transactions involving title to public lands. It is first, last, and all the time, strictly a business office. It is the senior bureau of the Interior Department; organized as one of the activities of the Treasury Department in 1812, and transferred to the Interior in 1849, when that department was created. It is charged, under the supervision of the Secretary of the Interior, with the survey, control, and disposition of the public lands, and the adjustment of private land claims. Hence, all recipients of title to the public domain must look to the General Land Office, acting under authority of some act of Congress, as the source of title; while the confirmation of private land claims is in like manner intrusted to the same bureau.

A typical scene on the public domain

Our public lands, aggregating a billion and a half acres, were acquired by the United States through treaties, cession by the States, and purchase, and the story of this acquisition of title, the creation of 48 States therefrom, and the distribution of farms and homes among our pioneer empire builders is all written in the records of the General Land Office.

As a preliminary to any disposition of our public lands, it was necessary that they should be identified upon the ground by such monuments and terms of fixity in place as to furnish descriptive certainty in deeds of conveyance or patents; in other words, our public lands had to be surveyed before they could be sold.

The system of rectangular surveys now in use is unique in the field of land measurement. To the average citizen it seems so simple in form, but so certain in results, that he takes it for granted as an elemental principle governing surveys. But the "Ordinance for ascertaining the mode of locating and disposing of lands in the western territory and for other purposes therein mentioned" was enacted by the continental Congress May 20, 1785, with its provision for 6-mile squares called townships, as against the prevailing metes and bounds method, only after long-continued contention and sharp debate, and the foundation for our present system of public land surveys thus established.

As a part of the regular annual output of the General Land Office, it issues a map of the United States, upon which is shown in graphic form the progress of these surveys, establishment of national parks and reservations, county seat locations, lines of railroads, as well as towns and cities that have attained substantial importance. The story of the acquisition of our public domain is not overlooked in the compilation of this map, for at a glance it may be seen from what source it is derived, whether through our colonial possessions, or by treaty or purchase.

A "homestead" under cultivation

This annual map is in fact an exhibit in concrete form of our national growth and development, as thus recorded from year to year, more convincing in its visual wealth of detail than any table of statistics

One of the chambers of Carlsbad Cave

In the survey of our public lands, and subsequent investigations incidental to the administration of the public land laws, it often occurs that marvelous discoveries are made of natural wonders, dreamlands of scenic beauty, or remains of ancient occupation. Brought to the notice of the department, they are withdrawn for national parks or monuments.

The report of the mineral inspector of the General Land Office, on Carlsbad Cave, New Mexico, which was made a national monument by proclamation October 25, 1923, was accompanied by a series of photographs, to illustrate in some slight degree the educative opportunities afforded by the records of the General Land Office.

Originally a Sales Agency for Public Lands

The primary conception of Congress in dealing with our public lands was the realization of the largest possible cash return for their sale to meet the immediate necessities of national enterprise. The General Land Office was thus organized in accordance with this conception; practically a real estate agency acting for the United States in the sale of its public domain. The early statutory provision for the conversion of public lands into cash funds was, in brief, the congressional definition of the powers and duties of the General Land Office.

Since that time policies widely differing, involving a broader conception of the proper foundation of our national institutions, and a better development of the entire country, gradually came to be recognized, and took form in the later statutes, that abandoned the cash sale proposition, and adopted a theory based on the enhancement of agricultural value, in which the entire nation would ultimately profit. The preemption law of 1841 was the first substantial recognition of the later theory in which a preference right to the purchase of 160 acres was acquired through settlement upon the land. The homestead act of May 20, 1862, was the logical successor of the preemption law in which the home was made the unit of development, and citizenship a prerequisite to the right of final entry, thus uniting ownership with settlement, and use of the land with taxation under the laws of the State. The various modifications of the homestead law that have been subsequently adopted to meet the changed conditions of the lands remaining subject to entry still preserve in the main the cardinal principles of the original act.

Preemption Law Recognized Settler's Rights

Prior to the passage of the preemption and homestead laws, and while the system of cash and credit sales prevailed, the Government parted with over 13,500,000 acres of land, distributed among eight different States, in which Ohio was the leading purchaser and Alabama the next in line. The preemption act of 1841 was repealed March 3, 1891, but from the date of its passage down to the date of its repeal, it was the principal means by which small tracts of land were acquired under settlement rights, and whatever may be said about the imperfections of this law, it was largely through its instrumentality that settlement rights as such came to be a recognized principle of public land law.

Observing the sun for meridian at a public land corner

Congress has from time to time made due provision under other laws like that of the timber and stone act, the desert land law and similar statutes, for the disposition of lands not suited in their natural condition to agriculture. Mineral lands, which are not subject to appropriation under the homestead or other agricultural land laws, have been made the subject of special study by Congress; and our mining laws for the exploration and development of mineral lands have contributed largely toward development of our immense mineral deposits. By the leasing act of February 25, 1920, the Government has made provision for leasing certain nonmetalliferous deposits, like coal, oil, oil shale, and phosphates, in which the Government is paid a royalty for the privilege of developing these deposits.

As a natural outgrowth of the theory of development of our national resources, Congress early began to make liberal donations of the public lands to the several new States as they were admitted to the Union for the support of common schools and internal improvements; also granted to a number of the States the swamp lands therein to aid in effecting their drainage and reclamation; and later made grants, sometimes to the States and sometimes directly to chartered companies, in aid of railroad construction, a policy which has operated to broaden and at the same time unify the rapid expansion of our national growth.

In the matter of grants in aid of common schools and for educational purposes Congress has dealt with a generous hand, in recognition of the free school as the keystone of our national permanence. On the admission of the earlier States to the Union they received one section of public land in each township for the support of common schools; States later admitted received two sections in each township, and States still later, four sections; or, one-ninth of the normal area of the township was donated to the State for this purpose. This policy of providing for the maintenance of common schools was supplemented by the agricultural college grant of 1862, known as the Morrill Act, "donating public lands to the several States and Territories which may provide colleges for the benefit of agricultural and mechanic arts" a quantity equal to 30,000 acres for each Senator and Representative in Congress to which such State was then entitled, with provision for scrip in the absence of public lands subject to selection under the grant. Under this legislation in aid of the common school, and for the maintenance of agricultural colleges, there has been granted to the several States 101,617,628 acres of public lands and scrip for an equivalent area of 7,830,000 acres.

"Chaining" from a public band corner

In keeping with the policy of the Morrill Act Congress later, on the admission of States to the Union, has made grants in aid of certain specific educational purposes, notably for normal schools, universities, schools of mines, and military institutes, in still further recognition of the true relation between diffusion of knowledge and the stability of Government.

Of all the laws, however, adopted by our Government in recognition of universal land hunger, none has taken such deep hold of public sentiment, and proved so efficacious in the permanent settlement of our country as the homestead law, and especially is this true of the original act which found millions of acres of fertile prairie lands ready for the plow. At the end of the fiscal year 1923 final entries had been made under the homestead law and its later amendments for 213,867,600 acres.

The opening to entry and the settlement of Oklahoma reads like a romance. The first lands to be opened in the Territory were some 2,000,000 acres which had formerly been embraced within an Indian reservation and were opened to settlement at noon on the 22d day of April, 1889. Persons entering prior thereto, afterwards known as "sooners," forfeited all future claim or acquisition of right to any such lands. The moment of lawful entry was announced by firing cannon at different points on the border and the race was then on, for race it was, by foot, horseback, and team, and the result was not always to the swiftest. In many cases rival racers appeared upon the same tract, priority of right only to be determined after litigation: "A horse race in which the judges saw neither the start nor the finish." At Guthrie, one of the new land offices opened in the Territory, the only inhabitants in the morning were the officials of the district land office; at night 7,000 persons were there, who proceeded to lay out and organize a town, which, by the way, now rates 12,000 population. The opening of the Cherokee outlet embracing some 6,500,000 acres, which occurred in 1893, was the last great horse race for public lands. The experience of the Land Department in these several openings had been so extremely unsatisfactory in the matter of resulting conflicts, and long drawn out litigation, that Congress sought some other method of opening public lands to disposition, and authorized, by the act of 1901, the President to prescribe the manner in which the land should be taken, under which authority a plan was finally adopted for the registration of all applicants for the right of entry at a specific time and place in the immediate vicinity

of the lands, with a drawing thereafter by which the right of entry would be determined. Under this scheme some 2,280,000 acres were opened to entry August 6, 1901, for which 164,416 applicants registered. The proportion of applicants to the amount of land opened can be understood when it is known that 13,000 entries of 160 acres each would have exhausted the entire amount of lands opened.

Settlement without Contention or Hardship

A special feature of this opening was a provision of law authorizing the setting apart of a tract of 320 acres for a county seat in each one of the three counties created under the act of opening. The story of this opening, the registration, the drawing, the sale of town lots, is contained in a report made under date of October 9, 1901, by Assistant Commissioner Richards, of the General Land Office, in which a very full description of conditions encountered and results obtained are set forth. He concludes: "There has been no complaint of discrimination or unfairness; there were but little of the hardships and suffering usually encountered in the settlement of a new country. Without strife or contention, but in a quiet, peaceful, and orderly manner, these lands have passed from the condition of an Indian reservation to that of a populous, thrifty, peaceable, agricultural community."

Later openings of public lands in large bodies followed the general plan adopted in 1901, greatly to the advantage of both claimant and the Land Department.

The opening of the Oklahoma lands is only an incident in the operation of our public land system, but it serves to emphasize the historic value of our records in the educational field, especially in a study of our national and State development.

Remaining Land Better Adapted to Grazing

Coming down to the present time, the vacant, unappropriated, unreserved, public lands of the United States at the end of the fiscal year, exclusive of Alaska, had been reduced to 185,000,000 acres, and these lands, so far as they are agricultural, are for the most part better adapted to grazing than ordinary cultivation.

During the same fiscal year, however, the General Land Office patented an area of 9,395,815 acres, which exceeds in area the three States, Connecticut, New Jersey, and Rhode Island, and in the same period collected from the sales of public lands and kindred sources and paid into the United States Treasury the sum of $10,700,447. It is apparent, therefore, that the disposition of our public lands remains, as heretofore, a matter of deep national interest which can not be overlooked in a study of the essentials in our national educational field.

Tests and Rewards for Health Habits and Sportsmanship

Bronze Badge Awarded to Successful Competitors Bears Numerals to Indicate Number of Tests Passed. Good General Deportment Essential to Eligibility. Health Habits and Sportsmanlike Conduct Are Considered

By HENRY J. SCHNELLE
Director Physical Education in Public Schools of New Haven, Conn.

A NUMBER of different tests of and rewards for excellence in pursuance of health practices and for skill in physical exercise have been invented recently by teachers of physical education.

The tests used in the schools of New Haven, Conn., and the unique badge adopted, as an incentive to effort are well worth the attention of other workers in the same field.

The badge is divided into seven panels. The upper panel is inscribed with the Greek character ϒ which symbolizes "a healthy mind in a healthy body." The other panels are inscribed with the

following figures, a jumper, a climber, a runner, a swimmer, a skater, and a thrower. The center of the badge holds a removable numeral, which may be changed as the tests are passed. The badges and numerals are in bronze.

Eligibility to take the tests consists in obtaining a mark of at least "G" in effort and deportment.

To win the badge any one of several tests must be passed. As subsequent tests are passed, the numeral in the center of the badge is changed to coincide with the number of tests successfully completed. It indicates, therefore, the number of tests passed. The star is inserted when all of the tests have been passed.

To pass the health-habit test all the provisions of the test must be met—habitual cleanliness, good teeth, good vision, habitual good posture, and not more than 10 per cent below weight for height.

The athletic tests are based on fundamental motor activities: Running, jumping, throwing, and climbing, and to these skating and swimming have been added.

Health-habit tests.—The requirements of this test are: (*a*) Well-cared-for teeth; normal vision, or vision that has been corrected by an oculist; and not more than 10 per cent underweight for height. These are tested at a specified time. (*b*) Habitual cleanliness, habitual good standing, sitting, and walking posture, to be considered throughout the entire school year.

Test in sportsmanship.—The requirements of this test are: Sportsmanlike conduct at home, in school, and on the playground. This includes the social traits usually considered desirable; that is, courtesy, respect for elders, clean speech, honesty, right attitude toward victory and defeat in games, etc. These requirements are to be considered throughout the entire school year.

Athletic tests.—Run 60 yards in 9 seconds, jump 6 feet 3 inches in a standing broad jump or 12 feet 4 inches in a running broad jump; "chin" five times; throw a baseball 182 feet or, standing 45 feet from a rectangular target that is 12 by 36 inches, hit the target three times out of seven throws; skate forward, backward, and lap circles (ice or roller skates); swim 50 yards any stroke in good form.

IN ITS BROAD and comprehensive sense, education embraces the physical, moral, and intellectual instruction of a child from infancy to manhood. Any system is imperfect which does not combine them all; and that is best which, while it thoroughly develops them, abases the coarse animal emotions of human nature and exalts the higher faculties and feelings. An essential part of the education of youth is to teach them to serve themselves and to impress upon them the fact that nothing good can be acquired in this world without labor, and that the very necessaries and comforts of life must be procured by earnest and regular exertion.—*Robert Edward Lee.*

Without Eyes They Perceive; Without Voices They Learn to Speak

The Blind and the Dumb, for Centuries Considered Without Hope, Now Take Their Places With Normal Persons in Industrial Life. Self-Reliance, Strong Bodies, and Versatile Minds the Objectives in Instructing Them. Efficient Methods of Teaching Have Developed in Past Century

By JAMES C. BOYKIN
Chief Editorial Division, Bureau of Education

WITH all the sympathetic consideration that enlightened humanity suggests, the lot of those who are deprived of either of the special senses is hard enough, but they are infinitely better off now than at any time in the past. Some of the primitive peoples destroyed them without compunction as incumbrances. In other tribes they were held in a kind of superstitious awe but as men apart from other men.

When civilization began to advance, the deaf and the blind were allowed to live, but they were often treated with cruelty. God's chosen people during the Mosaic period were certainly no more brutal than the peoples about them, and it is indicative of the customs of the time that the prohibitions of Leviticus included this:

"And the Lord spake unto Moses, saying, speak unto all the congregation of the children of Israel, and say unto them * * *

"Thou shalt not curse the deaf, nor put a stumbling block before the blind but shalt fear thy God."

Under the Roman law persons born deaf were deprived of civil rights and were required to have guardians. The common feeling toward them was expressed in these lines of Lucretius, which have been often quoted:

"To instruct the deaf no art could ever reach,
No care improve them, and no wisdom teach."

Mendicancy Considered Inevitable for Blind Men

Blind Bartimæus as he sat by the highwayside, begging, typified that fate and the usual occupation of the blind at the time of Christ. Then, and for centuries afterward, blind men jostled each other and fought for favorable places for soliciting alms. The spread of Christianity increased the sentiments of charity which men felt for the afflicted, and made their begging more profitable, but few before the closing years of the eighteenth century thought of blind men in any other rôle than as mendicants and public charges.

Attention was given much earlier to the possibility of educating the deaf. The Venerable Bede, in the latter part of the seventh century, described a miracle wrought by his former teacher, John of Beverly, Bishop of York, which consisted of teaching a deaf person to speak. Girolamo Cardano, an Italian physician of the sixteenth century, suggested that the deaf might be capable of speech, and he invented a manual alphabet for them. About the same time a Spanish Benedictine monk, Pedro Ponce de Leon, for the first time in history successfully taught a class of deaf children, using oral methods.

In 1620, another Spaniard, Juan Pablo Bonet, who had had some experience in teaching deaf pupils, wrote a book on the subject, and invented a manual alphabet which appears to have been the foundation of that which is now used. A few years afterward Dr. John Bulwer, an Englishman, under the inspiration of the measure of success reached by the Spanish schools, wrote two books, one on the language of the hand and the other on the possibility of teaching articulation and lip reading to the deaf.

Attempts in Nearly Every European Country

During the century following these events, desultory attempts were made at teaching deaf children in nearly all the countries of Europe, and a number of books were written upon its theory and practice.

Finally Samuel Heinicke attained real success in oral instruction at Dresden and at Hamburg, beginning in 1754. In 1778 he became the head of a school at Leipzig under the auspices of the Government of Saxony which is described as the first public school for the deaf.

The first fully developed school for the deaf in France was that established in 1755 in Paris by Charles Michel, Abbé de l'Épée. The abbé and his school speedily became famous, and he was so overwhelmed with pupils that he reluctantly abandoned the oral methods with which he began, and adopted a manual method which required less of individual instruction. The school was adopted by the French Government in 1791, and after the death of Abbé de l'Épée, Abbé Sicard became its head.

Efforts parallel with those of Heinicke and the Abbé de l'Épée were begun by Thomas Braidwood in Edinburg in 1760 He used an oral method, presumably his own, and by strict secrecy in his instruction he was enabled to maintain a monopoly in the business, for such he made it, during more than a half century. Members of his family continued the work after his death, and they opened schools in other parts of Great Britain.

Knowledge of these things naturally spread abroad and schools for the deaf were established in most of the countries of Europe during the last decades of the eighteenth century.

In the meantime, many of those who sought to benefit the deaf also thought of aiding the blind, but practical means were not readily apparent. It is to be presumed that individuals in favorable circumstances found means of education on their own account. Genius recognizes no obstacles; Homer and Milton prove that. Other men of native ability, especially those whose parents were well-to-do, undoubtedly made respectable places in society for themselves notwithstanding their afflictions. But mendicancy was so fixed in the public mind as the one resort of the blind that it is recorded that certain asylums established under royal patronage were supported in part by the begging of the inmates.

Fatalism a Restraint to Scientific Prevention

Universally, blindness was then considered a visitation of Providence. Indeed, the Holy Word was the foundation of the belief, for it is written, "And the Lord said unto Moses, Who hath made man's mouth? or who maketh the dumb, or deaf, or the seeing, or the blind? have not I the Lord?" We now know that ignorant midwives, not inscrutable Providence, were responsible for much of the blindness that afflicts mankind; nevertheless, the superstitious fatalism of a dark age acted as a restraint to effort at scientific prevention.

It remained for a Frenchman, Valentin Hauy, to prove that education of the blind by the use of embossed print is as easily practicable as that of seeing per-

sons, and to establish at Paris a school for the blind which was the first in the world. Hauy's sympathies were touched by a humiliating exhibition of blind persons, and he set about to find means of elevating them above their degradation. By promising an intelligent young beggar, Francois Lesueur, as much money as he could gain by begging, he induced him to submit to instruction. The effort was successful, and in 1784 Hauy established his pioneer school. It attracted immediate attention throughout Europe. Philanthropic individuals and societies in a dozen countries established similar schools within a few years, although the whole of Europe was aflame with the Napoleonic wars.

Americans Follow Lead of Europeans

So much for the European beginnings of the education of the deaf and the blind. For America to follow was inevitable.

Several American children were sent to the Edinburgh school conducted by the Braidwoods, and the father of one of them, Francis Green, was particularly active in stimulating interest in this country in the education of the deaf. Several deaf children were inmates of the New York City Almshouse and the efforts of Rev. John Stanford to teach them, beginning about 1807, is said to have led to the establishment of the New York institution a few years afterward.

John Braidwood, a member of the Scotch family of instructors of the deaf, came to this country in 1812, through the instrumentality of the persons whose relative he had taught in Scotland, and conducted private schools for short periods in Virginia and New York, but he died a few years later without making any real contribution to American history.

Manual Method in America's First School

Thomas Hopkins Gallaudet was the actual pioneer in the instruction of the deaf in America. Friends of Alice Cogswell, a young deaf girl who lived in Hartford, Conn., in seeking means to benefit her, commissioned young Gallaudet, then a student of theology in Hartford, to go to Europe to investigate the methods of the schools there. Gallaudet was inclined to the oral method and first went to England, but encountered the spirit of concealment and monopoly in the Braidwoods, and was obliged to turn to France. There he was met with great cordiality by Abbé Sicard, and returned to America filled with enthusiasm for the manual method, and accompanied by Laurent Clerc, one of Sicard's best teachers.

Active steps were taken at once to establish a school. A society was organized and a charter was procured from the Legislature of Connecticut in 1816, and on April 15, 1817, the school was opened under the name of the American Asylum for the deaf, but the word "Asylum" was afterward replaced by "School." It was early recognized that the school was more than a local institution. Several States made appropriations to aid it, and the United States Congress gave it 23,000 acres of land which ultimately yielded $300,000.

Rapid Establishment of Schools after Beginning

Even before the Hartford school was actually in operation similar institutions were projected in New York and Philadelphia. Both were established in due course, and in 1823 another was established in Kentucky. The progress made since that time is too well known to require recital.

As Europe was slower in recognizing the needs of the blind than those of the deaf, so also was the United States. The first American school for the blind came 15 years after that for the deaf. Discussions concerning the need of such an institution occurred from time to time, but it was not until a meeting of philanthropic citizens was held in Boston on February 10, 1829, that anything definite was done. The organization of a school was determined then and there. The Legislature of Massachusetts granted a charter to the "New England Asylum for the Blind" soon afterwards, and Dr. Samuel G. Howe was chosen to be the head of it.

Doctor Howe visited several European schools to prepare himself the better for his task, and brought back with him two experienced teachers, one from Edinburgh and the other from Paris. The school began operations in August, 1832, with six pupils. Its name was changed to the "Perkins Institution and Massachusetts School for the Blind" upon the receipt of a substantial gift from the Boston gentleman whose name was incorporated in the title.

Great Cities Again Are Pioneers

New York and Philadelphia followed close upon the heels of New England in the establishment of schools for the blind as in those for the deaf. The fourth school to be established was that of Ohio, which was opened in 1837. Virginia established a combined school for the deaf and the blind, the first instance of the combination, in 1839.

The part of private philanthropy in the establishment of institutions for defectives has been to show the way. The States have followed the lead, for education is recognized as a function of the State. The Perkins Institution and seven other schools for the blind are under private control but 48 institutions are maintained directly by the several States.

Of the schools for the deaf, 67 are State institutions and 19, most of them small, are private enterprises. Only 15 institutions, in 13 States, admit both the deaf and the blind.

In addition to the residential institutions, day classes for the deaf and for the blind are maintained in many of the large cities as parts of their public-school systems. The Bureau of Education reports that 74 cities maintain classes for deaf children and that 15 cities maintain classes for blind children. Some of the residential schools started as day classes, but the deaf classes of the sort now recognized as day schools began with the Horace Mann School for the Deaf in 1869. The first day classes for the blind were opened in Chicago in 1900.

Advantages of Institutions and of Day Schools

Many of the directors of the residential institutions oppose the day classes because they feel that better care can be given in institutions, in which better equipment and grading are generally provided. They consider, too, that the children are treated more as normal creatures in the institutions than in many of the homes, and that better supervision of studies and physical activities can be maintained in the institutions.

There is much in their arguments. Nevertheless the feeling prevails that proper home life is of inestimable value in the nurture of children, and that it is well for them to remain if possible in the normal environment in which their after life must be spent. Furthermore, the tendency is for the cities to provide the means of education for all classes of their population, even including college training and instruction for adults. That tendency is not only wholesome and proper but it is economical; the cost to the public for educating a child in a residential institution is about twice as great as that of educating him at home. The day classes clearly have their place, and their numbers may be expected to increase.

Two Classes of Schools Are Complementary

Their growth, however, will never deprive the residential institutions of the necessity of being. Only the large cities have enough deaf or blind children to justify the formation of special classes, and even in those cities some children will have to be sent to the institutions for special instruction which they could scarcely obtain in the city classes. The two classes of schools are complementary, and the officials of one class may well consider the other class with complacency.

Much has been said of the differences in systems and methods, and there is no doubt that those differences have in the

past resulted in inconvenience at the very least. It is a matter of congratulation that the several schools of thought in such matters have come to a practical understanding. It is recognized that deaf children who can do so with reasonable effort and success ought to learn to speak and to read the lips of others in speaking, and that if enough of hearing is left to be worth while it ought to be utilized. But most of those concerned with the teaching of the deaf realize that the manual method is the best that can be given to many of the congenitally deaf. It is recognized all over the world that "it is in America that by far the best results in education [of the deaf] are to be seen," as the Encyclopaedia Britannica expresses it, and the reason for that preeminence lies in the sturdy common sense of American schoolmen.

The definite adoption of the Braille system as the uniform type for the blind is one of the greatest forward steps in the education of the American blind which has ever been taken. Proper standardization is as useful in instruction as it is in bridge building, and Americans are leaders in it.

The prime purpose in all instruction is mental development. All other considerations must be subordinated to that. The methods in the special schools should be such that the study of the method per se shall be replaced as early as possible by the study of the substance. The method is useful only as a vehicle by which the great end of the school may be reached.

Similarly, the industries taught in the schools must be chosen and instruction in them must be directed toward the end of general development, and not with the expectation that only the particular industries taught shall be within the power of the graduate. Deaf-mutes and blind men are in nearly every occupation that is open to those who see and hear. Remembering that, self-reliance, strong bodies, and well-trained and versatile minds must be the principal objectives in their instruction.

Volcano Observatory Now Controlled by Interior Department

Control of the Hawaiian Volcano Observatory has been transferred from the Weather Bureau to the Geological Survey, Department of the Interior. Regular scientific studies were begun at the crater of Kilauea in 1911, and systematic records of volcano and earthquake activity have been maintained by the director, Dr. A. T. Jaggar, since the erection of the observatory in 1912.

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Pennsylvania's Department of Public Instruction

Fourteen Professional Examining Boards Attached to State Department. New Bureaus Provided in Reorganization

THE Administrative Code which was passed at the last session of the Pennsylvania Legislature imposes upon the department of public instruction many new responsibilities and additional opportunities for constructive service. All of the professional examining boards, 14 in number, the State library and museum, the school employee's retirement board, the historical commission, and the board of censors are now organically attached to the department of public instruction.

Four additional State institutions, State Oral School, Soldiers' Orphan School, Home for Training in Speech, and the Thaddeus Stevens Industrial School, have been definitely placed under the supervision of the department of public instruction. The budgets of all educational agencies and institutions receiving State aid now clear through the department of public instruction.

The department has been recognized by providing for a bureau of field service, a professional service office, a fiscal administrative office, a central filing system, and a statistical section. The function of the bureau of field service will be: (1) To keep in close and constant touch with the educational needs and resources of the school districts of the State. (2) To direct and apply in the field the service of the department of public instruction so as to meet the schools needs of the district in the most effective manner possible.

The professional service will act as a general clearing and coordinating agency for the superintendent in administrative matters in the educational field.

The functions of fiscal administration office will be general. Coordination of the department activities in the field of fiscal and business administration.

The statistical section, which is in the fiscal administrative office, will collect and assemble all statistics of the department.

With the avowed object of encouraging education, efficiency, and patriotism the American Educational Association was organized in 1919. It is carrying on its educational work "by means of a series of messages written in the language of the masses and designed to direct thought and attention upon the simple fundamentals to human progress in its relation to society, government, and industry."

Aid in Solving Problems of Health and Welfare

"Welfare week-ends" is the name given to a series of meetings conducted by the extension division of the University of Oregon in cooperation with the Oregon State Board of Health, the Oregon Child Welfare Commission, the Tuberculosis Association of Oregon, the Oregon Social Hygiene Society, and similar organizations. These meetings were held to demonstrate the service available to communities in helping to solve problems of health and welfare.

Public-health nursing, child labor, accident prevention, physical and vocational rehabilitation of injured workers, infant and prenatal care, service to sick and crippled children, and sex education were included in the topics covering the two-day session of illustrated lectures, exhibits, and clinics.

Were You Taught to Care for Your Body?

It may be that you can run an automobile and know something about keeping it in good condition. Do you know as much about your own body, how it should be fueled and cared for to get the most work and fun out of it? When you went to school were you taught this most important business of living? The public schools are taking up this work in real earnest. Do you know what your own schools are doing along these lines? Friday, November 21, is Health and Physical Education Day in these schools. It will pay you to visit them on this day. Perhaps you can learn something for your own good health by such a visit. It will also encourage the teachers and pupils to do better work.—*James F. Rogers.*

Actual Working Museum for Country Children

A children's museum in a rural community on Long Island has been established in what was once a poultry house. Its pointed roof and crossbeams provide a very satisfactory place for holding owls, hawks, and other high-perching birds. A country wood stove gives warmth and cheer. Long tables with glass cases fill the middle section and a zinc-covered table long enough to seat 12 or 14 boys serves for conferences and for the work of mounting, which is done by Boy Scouts. The success of the undertaking is attributed to the homeliness of the building and surroundings. On Saturdays a hot dinner is served to the boys in their own museum.

· SCHOOL LIFE ·

Issued Monthly, except July and August
By THE DEPARTMENT OF THE INTERIOR, BUREAU OF EDUCATION
Editor - - - - - - James C. Boykin
Assistant Editor - - Edith F. Holmes

Terms: Subscription, 50 cents per year, in advance. Foreign (not including Canada, Mexico, Cuba), 75 cents. *Remittance* should be made to the Superintendent of Documents, Government Printing Office, Washington, D. C., and should be by cash or money order.

NOVEMBER, 1924

Observe American Education Week!

HEATED political fights should more than all else intensify the enthusiasm of the voters for the cause of education. The presidential campaign now in progress has been conducted by the three principal candidates upon an unusually high plane. The appeals, impassioned though they have often been, have been directed almost wholly to the intelligence of the voters, rather than to their prejudices. Constitutional questions and matters of broad public policy have been conspicuously emphasized. It has been conspicuously an educational campaign, and not only the voters but the youth of the land have learned much from it.

Political managers do not depend merely upon the excellence of their platforms nor upon the personality of their candidates to procure popular support. They leave undone nothing that will arouse in their adherents a feeling of militant loyalty to their candidates, and to bring into their fold the waverers from other camps.

Similarly, educational leaders must know that they can not rest complacently in the knowledge that the people of the country feel that education is a good thing. They must vigorously and continually appeal for support, and they must throw into their appeals all the enthusiasm that is within them.

American education week follows close upon the election; it should be benefited by the warmth that has been aroused by the earnest discussions of the campaign and by the ardent appeals to patriotism which have been constantly made. Only by those who have had reasonable opportunity for education can such arguments be assimilated.

When all the political speeches have been made and the determination of the people has been recorded, therefore, it behooves the educational leaders to take the places of the political leaders if they ean, and continue the agitation, not for political ends but for directing the thought of the country to the means by which its citizens best acquire that intelligence which they must have in order to exercise the right of suffrage properly and to perform the duties of life satisfactorily.

American education week comes at an opportune time. Let us make the most of it.

Land Laws Determined Nation's Policy in Education

EDUCATION in the United States is the concern of the several States. All Americans are fond of saying that, and many of them are not only very emphatic but very sensitive about it. Even the suggestion that the Federal Government might have a part in the conduct of public schools is enough to arouse resentment in any assemblage.

Few object to this feeling, and fewer still would advocate any change from the present status. Nevertheless the Nation has an interest in the education of its people which is no less vital than the interests of the States, and national control of the schools would have come by merely taking the other turn of the road at a point whose importance was not realized at the time.

Much is made of the fact that education was not mentioned in the Constitution. There was good reason for the omission. When that instrument was written education had not become a serious governmental function, either of the State or of the Nation. In the few States in which public schools existed they were essentially local affairs and the most that any State had done was formally to require communities to establish schools and to render limited aid. Naturally none of the delegates to the Constitutional Convention thought of suggesting a provision to cover a matter which had never been a prominent issue.

The question was settled in an entirely different manner. The policy of reserving public lands for school purposes was inaugurated in the ordinance of May 20, 1785, passed by the Congress of the Confederation "for ascertaining the mode of disposing of lands in the Western Territory."

It was freely asserted then by many of the leading statesmen of the Nation that there was no reason why the United States should not organize, control, and manage the schools so endowed. Section No. 16 of each township surveyed was duly reserved for schools in accordance with the ordinance, but no determination was made as to what authority should administer those schools. For 17 years, including the period of the preparation and the adoption of the Constitution, the matter remained open, principally because no occasion arose to discuss it. In all that time no transfer of title or control of the reserved school lands was made.

It was not until January 26, 1802, that a committee was appointed in the House of Representatives "to inquire into the situation of the several tracts and parcels of land which have been granted, appropriated, or reserved for the support of public schools and seminaries of learning * * * and to take into their consideration what measures are necessary and ought to be adopted to carry fully into effect the design of every such grant, appropriation, or reservation."

In the meantime the famous ordinanee of 1787 had been enacted, and Manasseh Cutler and his associates had become active. When the formation of a State government for Ohio was authorized by the act of April 30, 1802, the lands of section 16 were "granted to the inhabitants of each township for the use of schools." This was similar to the practice which had long prevailed in New England, and it was adopted apparently because New England men were prominent in the affairs of Ohio and the legislation was framed in the manner to which they were accustomed. The relative interests of State and Nation did not enter into consideration.

Many variations upon this law have been made in later grants, but in none of them has the Congress sought to retain in the National Government any control whatever of the common schools established through donations of public lands. The die had been cast, the precedent established, and none has sought to change its essential principle. The common schools have grown in the affections of the people and the wisdom of local control is proved beyond preadventure.

Contributions have been made by the Congress in aid of all classes of instruction, amounting in value to enormous sums. Combining the information in a leaflet recently issued by the General Land Office, which shows the donations of land to the several purposes, with that in Dr. F. H. Swift's pamphlet Federal Aid to Public Schools, which shows the part which reached the schools from "internal improvements," "swamp lands," etc., it appears that the National Government has donated lands to educational purposes covering not less than 300,000 square miles—approximately the present area of the original 13 States.

If it had been economically conserved and skilfully managed, it is not a wild conjecture to say that this land would have been in itself well-nigh sufficient to maintain the whole educational systems of the States which participated in the distribution. The waste and mismanagement in handling school and university lands is an oft-told tale. Notwithstanding the blunders that were made in plenty, the establishment of common schools in many of the public-land States must have

been postponed for years except for the aid they received from land sales. And many of the State universities and other "seminaries of learning" came into being directly as the result of congressional action; they were sustained in their early years principally by receipts from their lands; and even now they derive an important part of their income from the same source.

It goes without the saying that the agricultural and mechanical colleges endowed by the Morrill Act of 1862 and aided by the funds which Congress subsequently appropriated owe their being to the action of the Federal Government to such an extent that they may properly be called national institutions.

This was suggested by Commissioner Spry's article on the work of the General Land Office. To go further and attempt to discuss the direct appropriations of money made by the Congress for education would be to enter a wide field. The whole sum has been large. It has been applied in many ways, indirect as well as direct, and the benefit that has come from it is greater than figures can tell.

Through it all the desire which has grown up in the States to control the schools in their own boundaries has been scrupulously recognized, even though it might have been possible in many of the acts to attach conditions that would have made the Federal Government practically paramount in the end.

The American people are a unit in upholding local control of education, and so it will continue. The framers of the Constitution never had an opportunity to know the mighty forces which lie in organized public education, and their failure to mention the subject thus throwing the entire responsibility upon the States was wise, even though they were unconscious of their wisdom.

Low Birth Rate Causes Decreased Attendance

A decrease of 2,095 in attendance of the Denmark schools for the year 1922 is reported by Marion Letcher, American consul general, from figures just made available for the years 1921–22. The decrease is attributed to the low birth rate in 1915 due to war conditions.

Most of the Denmark schools are in session 246 days during the year, with a weekly attendance of 34 to 36 hours. Attendance records of the commune schools show that in 1922 pupils were absent on an average 12.9 days of the school year, 9.1 of these days of absence being due to sickness. The commune schools are attended by 87.6 per cent of the children.

Oklahoma Supreme Court Holds Education a State Function

Districts' Contributions Held to Fixed Limits. Imperative Duty of State to Do the Rest in Maintaining Efficient Free Public School System in Every School District

By JAMES F. ABEL
Assistant Specialist in Rural Education, Bureau of Education

A JUDICIAL decision of remarkable significance was rendered by the Supreme Court of Oklahoma on September 9 in upholding the validity of an act appropriating $650,000 to aid in paying teachers' salaries in districts that had levied the constitutional limit of local school tax and still could not maintain school for an eight-month term.

The court held that the burden of education rests on the State; that such an appropriation is not so much State aid to districts as it is part of the fulfillment of the obligation to maintain a system of public schools placed upon the State by its constitution; that district tax levies are in the nature of aid to the State; and that the limit of district tax having been reached, the State must "carry on" to the point where 'a system with some degree of uniformity and equality of opportunity is maintained.

The constitution of Oklahoma limits the local district tax for school purposes to 15 mills. The assessed valuation in many districts of the State is so low that the proceeds of the 15-mill tax, together with the apportionment from State sources, is not sufficient to pay for a school term of 8 or 9 months. An amendment to increase this to 25 mills was voted upon in 1922 and defeated. The legislature of 1923 appropriated $650,000 to aid weak districts to complete the 1922–23 term. A similar appropriation of $950,000 for 1923–24 was vetoed by the governor. In the spring of 1924 it became manifest that very many small schools would be forced to close prematurely if State aid were not forthcoming. Teachers were advised to continue their work in such schools in the belief that something would be done to enable them to be paid. The legislature in special session last spring passed a bill appropriating $650,000 to aid in paying teachers' salaries in the weak districts so that they might have the eight-months term. The money was not available until 90 days after the passage of the act. Many of the schools remained open, the term was completed, and the teachers did the work with the expectation that their salaries would be paid for the additional time from the $650,000 appropriation. Five thousand two hundred teachers and one hundred and seventy-six thousand eight hundred children were affected. Terms were lengthened in 1,065 schools.

The validity of the act, House bill No. 19, was tested in the district court of Oklahoma County. It was sustained there and the action dismissed. Later the case was taken on appeal to the supreme court.

The main grounds of attack were that the act was unconstitutional because the State was assuming the debt of a political subdivision and because the act was special in its nature. Further objection was raised that the fund from which the appropriation was to be paid was not named.

The supreme court decided that the act was general since it extended aid equally to like classes similarly situated; that failure to recite the particular fund from which the moneys are to be paid did not invalidate the act; and that the State was not assuming an indebtedness of the district, because no district could legally contract a debt for teaching service beyond the amount of its funds.

The court took its most decisive stand on this last point and placed the responsibility of education directly on the State, not on the district.

That no child in the city will be more than half a mile from a playground is the goal set by the park and playground officials of Milwaukee. Three kinds of play spaces are planned: (1) Those equipped with apparatus for small children; (2) playgrounds with small baseball diamonds and space for basket ball; and (3) athletic fields with regular baseball diamonds, football fields, and tennis courts.

Collection of funds in the schools of New York City will be limited to purposes connected with such school activities as contribute directly to the educational advancement of pupils; those having to do directly with the physical welfare of pupils; and those having to do with the decoration of auditoriums, classrooms and corridors, if the recommendations of William J. O'Shea, city superintendent, are carried out.

How Music was Introduced in the Rural Schools of a Pennsylvania County

Special Instructor Employed for Teachers' Institute. Proficiency in Music Required for Admission to High Schools. Assistance from City Supervisors and from State Department of Education. School Songs Heard Everywhere

By J. M. YETTER
Superintendent of Public Schools, Monroe County, Pa.

MUSIC is more than a pleasant pastime. It encourages the soldier, the worshiper, the worker. It clings to memory. A tune heard by a white child captured by the Indians was recalled when all other memories and traces of his former life had been entirely lost. Teachers have succeeded in fixing facts of various subjects in the memories of their pupils by setting these facts to music when other methods failed.

Town and city pupils have long enjoyed musical training; rural pupils have not. This has been a social handicap to the rural pupils who can not do their part when music is rendered. Years ago "singing schools" were conducted by music masters in rural districts, but these were institutions of the distant past. Something surely should and could be done for the country schools. An experiment was made in a one-room high school in a rural community in Monroe County, which was a success, and encouraged further effort.

Necessary First to Train Teachers

The first step was to train the teachers of the rural districts so that they could teach music. There was but one means at the disposal of the county superintendent and that was his teachers' institute. A special instructor was employed to give as much instruction as possible after the main session of the institute. A short but decided talk on the necessity of this work was given the teachers by the county superintendent. It was announced that an examination in music would be included in the requirements for admission into high school. Many doubted if the project could be carried through. The institute was held before the schools opened instead of in the middle of the term. Some teachers were much pleased with the plan and the project, and work was begun by them immediately.

A second step consisted of a number of demonstrations by the supervisors of music from the two town schools of the county. Stroudsburg especially assisted in the work, and the school board gave its full consent to the effort. The supervisor asked about the transportation. Pupils whose parents had automobiles were consulted and the parents gladly furnished transportation gratis to the supervisor. The plan succeeded perfectly. Demonstrations were given in various parts of the county. In one of these demonstrations the teacher had her pupils show what they could do. The pupils trained under a supervisor in a town school for several years showed a marked improvement over those trained for so short a time, but it was all encouraging as far as it went. When the parents and pupils were asked if they would like to have work of this kind in their schools, the reply was emphatically in the affirmative. The demonstrations and the institute instruction so far had cost the directors and taxpayers nothing.

Teachers Take Up Music Enthusiastically

There were some teachers who seemed to think that it would be safe to let the subject go by default, but many others tried to do their duty, and those who did not were very soon in a hopeless minority. Children love to sing and parents wish them to learn to sing. The subject is not a task or a drudgery; it is a pleasure.

A third step consisted of demonstrations by teachers of rural schools with their pupils. Two teachers, with their own money, hired a teacher to assist them in their work in music, feeling that they were unable to do the work satisfactorily otherwise. This instructor gave a demonstration with the pupils of these two schools. It was given to a crowded house of patrons. The next year a supervisor was elected for the entire township.

After the second teachers' institute, in which music instruction was given to rural teachers, the State department of education at Harrisburg was asked to do "follow-up work" in the county. Two weeks assistance by a specialist was granted by the director in charge, with the consent of the State superintendent of public instruction. An assistant director from the State department, the county superintendent, and sometimes a supervisor from the town schools formed a party which traveled through all kinds of roads and all kinds of weather, from school to school. Thus teachers were shown how to proceed. The pupils, teachers, and all concerned enjoyed the work, and it went on very smoothly. When teachers found difficulties and needed assistance to overcome them, it was forthcoming. The value of this follow-up work can hardly be overestimated. The people of every occupation watched the progress with interest. The rote songs learned in school were heard at home, on the road, during housework, during barn and stable work, and wherever boys and girls met.

School Music Utilized in Entertainments

Public gatherings are incomplete without music of some kind, and billboards everywhere testify to the results of the work in school. The supervisor of music was reelected for another year.

Two events which resulted from the "follow-up work" are worth telling. We visited a school whose patrons thought that music was a waste of time. The teacher continued just the same. Soon the pupils and the whole community were interested. The visitor from the State department suggested that the pupils write her at Christmas and tell her how many rote songs they had learned. At the time appointed she received, probably to her surprise, 30 letters, and these pupils told her that they had learned from 16 to 25 songs, and they named the songs. One of these letters was published in School Life some time later in an article by Doctor Dann, the director of music for the State.

In another school visited all three visitors agreed that the teacher was perfectly helpless. About three months later the superintendent visited the school and found marked improvement. The teacher does not sing, but the tones of the pupils were as good as any in the county, not excepting the boroughs. The teacher had accomplished the results by using a phonograph. She proved that the phonograph compels the pupils to sing with the correct time and the correct pitch. The tones must be soft in order to hear the instrument. The records are made by an expert and pupils imitate the best that can be procured. This instrument should be in every schoolroom.

Ungraded Schools Have Some Advantages

Ungraded rural schools are benefited by the fact that while the advanced pupils are having their lesson in music the lower grades are learning by listening; so that two classes in an ungraded school seem sufficient to afford all pupils the training afforded by graded schools.

A letter from the State director, Doctor Dann, approving and praising the work

was of great help. Teachers and others thought that if a man of such experience approves a plan it must be of value. The law which made music a regular subject in the curriculum of elementary schools in the State is valuable. Many said: "Few of us teachers can teach music," or "I do not know anything about it myself"; still, it is a law and all good people obey the law, even if they find difficulty in doing so.

Sunday school and church services have been improved by the teaching of music in the public schools. This has been attested in many cases. The ministers are invited to the demonstrations, and in every case they publicly say that their Sunday services have been improved by music in the public schools.

This is a county with some reputation for Sunday-school work, and with this encouragement anyone can imagine the result. In some villages where all of the pupils attend the same Sunday school hymns are practiced and learned in day school for the following Sunday. This is an incentive to attend Sunday school as well as to study music.

Advertising helps matters in school as well as in any other business or profession. The teachers' goods are the results of his work, and there is no subject that shows up so well in an attempt to advertise as music. I am not sure whether pupil or teacher has reaped richer harvests as the result of the trial of the subject. Both have reaped very rich rewards, and there are very few who do not realize this truth.

The attitude of the pupils of a school where music is a part of the program is noticeably better than where it is not. The judge of a court recently remarked, "Did you ever notice that you can not have a grouch and sing?" To this might be added, "Singing is sure to remove a grouch in most pupils as well as most teachers."

Not to neglect other subjects is a caution well worth remembering. A pleasurable subject is very apt to take more of the attention of the pupils than really belongs to it, and that phase of the matter requires the directing influence of the teacher and superintendent.

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"Health day" will be observed annually hereafter in every elementary school of the city of New York on the first Thursday in November. All academic work will be suspended until all pupils have been tested and observed by their teachers for acuity of vision and for evidences of defective hearing, defective teeth, nasal breathing, malnutrition, and other physical defects. Parents will receive reports of the tests and will be urged to have defects removed.

Status of Science Education in China

Only Teachers Trained Under Foreigners Show Skill in Demonstrating and Experimenting. Schools Poorly Equipped

By GEORGE R. TWISS

IN NATIVE ABILITY and in interest in their students the Chinese teachers compare favorably with teachers of other countries, but they are deficient in a knowledge of the fundamental principles of teaching sciences. The few who do have skill in demonstrating, experimenting, and scientific thinking are those who have taken courses of training in the laboratories of high-grade colleges and universities in Europe and America or under highly trained foreign teachers in China.

With very few exceptions the science teaching in the middle schools consists almost exclusively of formal and bookish lectures. In most cases lectures are illustrated with blackboard diagrams. Experiments and demonstrations are used, but as they are not skillfully performed and not seen in detail by all the students they are not convincing evidence for reaching logical conclusions. Occasionally one finds a really brilliant lecturer who draws with amazing skill and rapidity while he talks. Still less frequently one finds a lecturer who makes full and efficient use of the apparatus, charts, and specimens. In only three of the middle schools is all the science work on a good laboratory basis.

Questions not Framed to Stimulate Thought

Recitations are infrequent. Classroom discussions, blackboard demonstrations by students, reports from reference readings, and topical recitations are very rarely required. Most questions are answered by from one to five words. Occasionally one hears a thought question, but it is generally directed indefinitely to the whole class. The different answers come in a confusing volley from various parts of the room. No attempt is made to prove ideas, to start an orderly discussion, or to bring laggards into action, as should be done. There are, however, a few outstanding exceptions in which the entire procedure is excellent, where students respond with enthusiasm, showing thorough preparation and self-activity.

With respect to reference books and laboratory equipment, schools range from almost nothing at all to equipment first class in quality and generous in amount. An example of the latter is Peking Union Medical College. A few institutions may be cited as having buildings and equipment approaching reasonably near to the highest standards. The National Southeastern University at Nanking, besides having an especially well-trained and well-balanced faculty, is provided with very good and fairly complete apparatus in all departments; but its rooms for scientific work are overcrowded and in many ways inadequate. In spite of these handicaps much excellent work is done. New equipment is acquired as rapidly as possible.

Missionary middle schools might exert on the Government schools an influence of great value if they could show themselves as models of science teaching practice and prove the superiority of such practices by the results in the training of their students. Mission boards have sent out some strong teachers of science to their colleges. They ought to do the same for their middle schools.

In carrying out more energetic and effective measures for the training of teachers lies the only immediately practical means of improvement. The stronger Government and missionary colleges by cooperating and coordinating their efforts might soon turn out four or five times the number of science teachers that they are now turning out, and train them to more than twice the efficiency of the current product. This would result in a steady and rapid amelioration of all the other conditions.

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Health More Important Than All the R's

Are you one of those who have found fault because the school doctor has found your child imperfect or because the teacher has tried to improve his feeding habits? If so, you should know, as the teacher knows, that your child's health is of more importance to him and to you than the three, or a dozen, "R's." If you have not understood what the schools are driving at, why do you not visit them on Health and Physical Education Day, Friday, November 21, and find out what is going on. Your visit would help the teacher, help the pupils, and help you to a better understanding of the twenticth century ideal for a better mind in a better body.—*James F. Rogers.*

♔

Continuation schools for dressmakers' apprentices are maintained by the ministry of education of Czechoslovakia. Students may choose one of three courses, each of which requires eight hours a week. All of these courses include drawing and other technical subjects related to the dressmaking trade. Other subjects taught in these courses are hygiene, arithmetic, bookkeeping, and civics.

Habits Imbued in Athletics Persist in all Relations of Life

Educator Who Helps in Unfolding the Fine Flower of Ethics Has Done More than Can be Accomplished in any Other Field. An Excellent Program of Sportsmanship Proposed by Prof. S. C. Staley

By JAMES F. ROGERS
Chief Division of School Hygiene and Physical Education, Bureau of Education

SPORTSMANSHIP is only "playing fair" expressed in one word. It has been the unwritten rule of play since play began. It is the moral code compressed and expressed in 13 letters, and it applies to all social activities and not merely to athletics. For this reason its observance and practice in athletics leads to its observance and practice in other relationships of life and to the running of life's race with all earnestness and desire to win, but with an attitude of respect for others, generous recognition of their achievements when they surpass our own, and sympathy and kindliness toward them when we, because of superior heredity or better opportunities for development of our powers, have won the game.

Sportsmanship is not a primitive trait. We are born selfish, for it was essential to existence that we be primarily self-seeking with no thought for others. Some kind of "success" is sought by all of us, and many a boy finds school bearable because he excels in athletics, though he fails in everything else. In the playing of games the primary object is, and always will be, to win. Defeat is depressing, and the inclination to "do the things we ought not to have done" to handicap our opponents, to dispute the umpire, and to sulk after an unsuccessful finish, is not easy to overcome. It is hardly fair play or gentlemanly conduct on the part of coaches and spectators to badger the unfavored side; such practices are intended to depress the spirit of the opposing team and efforts, yet it is done constantly without thought that it is not quite sportsmanlike.

Principals Have Increased Opportunities

Sportsmanship, in its larger sense, is a measure of civilization and some doubt has recently been cast on our degree of progress in civilization. At a comparatively early age there are promises of civilization—signs of sportsmanship—for the average child despises the cheat and admires those of his age who excel by fair means in various activities, physical and mental. If the educator can help in the unfolding of this fine flower and essence of ethics, the spirit of fair play, he has done more than he can accomplish in any other field. The recent expansion of athletic activities in schools gives to principals, as well as to those who more directly supervise sports, increased opportunity for fostering this spirit and for suppressing its opposite, for making us a more civilized nation.

Prof. Seward C. Staley, of the University of Illinois, has published, in the University Bulletin of August 4, 1924, a fine Program of Sportsmanship Education from which we quote the following:

Organization of program.—Accepting the fact that good sportsmanship is a product of educational procedures the question arises, how shall the program be organized?

Program fostered by department of physical education.—Following the principle that any subject matter is best taught in connection with the department most closely associated with it, good sportsmanship is best handled in the department most intimately involved, namely physical education (or athletics). This department should be given direct responsibility for the conduct of the student body in its athletic relationships, both varsity and intramural.

Competent Adult Leadership of Prime Importance

Physical directors and coaches who are good sportsmen essential.—In the face of this responsibility the first consideration in our program of sportsmanship education is the employment of directors and coaches who are thoroughly sympathetic with the idea. Adult leadership of this sort is perhaps the largest single item in our program. Adults through precept and example dictate all social customs. The physical director and athletic coach are commonly the most prominent figures in school life. They are the local heroes, the local champions. They are on more intimate terms with the student body than any other members of the teaching staff and their influence is impressive, wide, and lasting. With coaches and physical directors who are good sportsmen the institution of good sportmanship is relatively simple; with coaches and directors who are not, it is impossible.

Year-round program.—The department of physical education should conduct a year-round campaign of sportsmanship education. Emphasis is placed on the fact that it should be in continuous operation throughout the school year. A short intensive campaign of one or two weeks followed by total neglect will not produce

A football game at East Stroudsburg State Normal School

the desired results. On the other hand, care should be taken that it is not overdone; sportsmanship pushed too vigorously becomes a bugbear. The most satisfactory procedure, perhaps, is to conduct one or two intense campaigns of short duration and then for the adult leaders, the "sportsmanship committee," to be actively vigilant throughout the year for breaches of the code. Cases of repeated willful violation should be disciplined as the adult leaders and "sportsmanship committee" best decide.

Faculty must be educated.—The first step in the project of sportmanship education is the education of the other members of the faculty. This may be done through discussion at teachers' meetings, through the circulation of printed matter, and through personal interviews. The teachers should be thoroughly acquainted with the size of the project, its far-reaching significance, and the part which they must play in its conduct. In this connection they should be warned against carrying grudges against rival schools, violating the rules as spectators, etc. Proper action on their part is of utmost value. Their examples should not belie their precepts. Every effort should be made to win them over to active cooperation in the conduct of the campaign.

Sportmanship committee.—The next step is the organization of a "sportsmanship committee." This committee should be set up as one of the most important organizations in school. Membership on this committee should carry particular honor and only leaders should be considered eligible. Team captains, class presidents, and similar officeholders should be the only ones considered. This should be a permanent committee chosen at the annual elections.

Finals in a junior tennis tournament

Code of sportsmanship.—The next step is the composition and adoption of a code of sportsmanship. The entire student body should be drawn into this. This last is rather a new idea. Codes of sportsmanship have been used for years but in the past they have been drawn up by the adult leaders and literally forced upon the students. There is no question but that this procedure has been effective but it would be more effective still if the code were a product of the students' own making. A ready-made code has not grown out of the pupils' experience and in many instances, therefore, it is difficult to relate to their activities The code should he formulated by the unit using it. Under these conditions it is much more meaningful, and not subject to misinterpretation. As it is a product of their own invention, every student involved takes an active interest in carrying out its precepts. In the grade school and in the junior high school the teachers should take an active part in shaping up this code, but in the senior high school the students can handle the matter satisfactorily without outside help. In any case, where adults are participating, they should confine themselves to suggestions and stimulation and should not become more directly involved than is absolutely necessary in determining the content of the code.

In establishing a code for the first time the most satisfactory procedure is to ask each student to draw up one and present it to the "sportsmanship committee." The committee should present these or a selected few of them to the assembled student body for general consideration and discussion, and should use these as a basis for a final code which should be drawn up and adopted.

The code should be printed on large cardboards by the art department and posted in the gymnasium, locker rooms, hallway, and assembly room. It should also be printed on small cards by the printing department and distributed to the pupils.

In shaping up the code care should be taken that general terms such as loyalty, courtesy, honor, truthfulness, and so on are not used. Good sportsmanship is social conduct in athletic contests and is made up of specific acts. In criticizing or lauding an individual we use general terms of this sort but our opinions are based on specific acts on the part of the individual or group discussed. In the face of this fact the code becomes much more meaningful if it clings to specific acts rather than to generalities.

Approval of Code Frequently Renewed

Open forum on sportsmanship.—The code of sportsmanship should be presented to the student body annually for adoption; in this way attention is periodically called to its existence in a prominent way. Otherwise, with the constant change in our school personnel, the code might disappear. On these occasions the old code may be adopted without change, or changes may be made, or an entirely new code may be introduced. This occasion should be in the nature of an open forum on the discussion of sportsmanship. It could be held at a regular assembly. The proper attitude and conduct of captains, players, coaches, and spectators toward opponents and officials should be discussed thoroughly. The captains, players, coaches, and other leaders in school life should be drawn into this discussion. An outside speaker would give this meeting added interest and importance.

Sportsmanship contest.—The "committee on sportsmanship" should hold an annual "sportsmanship contest" in which each student in the group should be asked to take part. In different years this could be a poster contest, a short-story contest, an essay contest, a poetry contest, a song contest, a slogan contest, or anything similar that the committee could devise. The exhibits or compositions should be turned in to the committee, who would select the best and give suitable recognition to their designers or composers. Or the committee could select the best and have them presented at an assembly of the whole group, who could determine the winners by popular vote. The music department, art department, English department, and others could cooperate in this project.

"Best sportsman" elected.—Another project that could be sponsored by the "sportsmanship committee" is the annual selection of the best sportsman in school. This selection is in some cases made by the "sportsmanship committee" in conjunction with the physical directors and coaches, but it is more satisfactory to decide the matter by popular election. A loving cup, shield, or a similar trophy should be awarded the winners. The athletic association should provide the funds for the purchase of the trophy. An appropriate way to handle this project is at an assembly. The chairman of the committee should preside. The cup should be on display. After the basis of the award has been explained the voting can be done by ballot. As soon as the ballots have been counted, the cup should be formally presented to the winner.

Spectators' Attitude Must Be Wholesome

Education of the general public.—Spectators exercise a tremendous influence in determining the manners of contestants in athletic contests. The spectators' attitude is quickly sensed by the players and is readily translated into action. If the spectators' attitude is wholesome, the players' reactions will tend to be wholesome; if the spectators' attitude is unwholesome, the players' actions will tend to be unwholesome. The attitude and actions of the students as spectators can be influenced by the school program of sportsmanship education, but additional procedures must be carried on to reach the large group of outsiders commonly known as the general public. The education of this group represents a real project to be faced and dealt with by the sportsmanship committee.

By promoting this project there are two procedures which should be invoked: 1. The local newspapers and school papers should be enlisted. 2. Programs and schedules should contain some reference to sportsmanship. This could consist of the school's code of sportsmanship, another school's code, or a quotation from some prominent writer, speaker, or perhaps, best of all, a quotation from some local figure, such as the coach, principal, chairman of the board of education, mayor, etc. A number of schools follow this practice now, but for the most part the same statement is used throughout the school year. It would be better to introduce a new statement occasionally.

Summary

1. Play is of vital importance in moral and charaeter training.
2. Good sportsmanship is the product of a program of education.
3. The department of physical education should carry on the program.
4. Physical directors and coaches who are good sportsmen are essential to its conduct.
5. The program consists of:
   - (*a*) The education of the other members of the faculty.
   - (*b*) The annual election of a "sportsmanship committee."
   - (*c*) The annual discussion and adoption of a "code of sportsmanship."
   - (*d*) The conduct of an annual "sportsmanship contest."
   - (*e*) The annual recognition of the "best sportsman."
   - (*f*) The education of the general public.
   - (*g*) Constant vigilance on the part of the adult leaders and the "sportsmanship committee."

American Educational Material Desired for Italian Exposition

A National Educational Exposition will be held in Florence, Italy, during the spring of 1925, under the auspices of the Ministries of Public Instruction and of National Economy, according to a communication from the chargé d'affaires ad interim of Italy.

Notwithstanding the fact that the exposition will be of a national character it is the earnest desire of the two ministries concerned to procure the largest possible participation of American firms interested in the production of educational material. Correspondence and exhibit material should be addressed to the "Comitato Generale della Mostra—Palazzo Mediceo Ricciardi, via Cavour N. 1, Firenze, Italy."

Eleven thousand of Cleveland's school children were engaged in garden club work during the summer of 1924.

Upbuild Homes, Improve Schools, and Standardize Colleges

Seventeen Women Form Association in 1882 Which Now Numbers 20,000 Members. Branches in Every State and in Five Foreign Countries. Activities Cover Many Fields. Headquarters Maintained in Washington

By LOIS HAYDEN MEEK
Educational Secretary American Association of University Women

MORE than 20,000 women who were graduated from universities and are now home makers, mothers, teachers, and professional women have united to form the American Association of University Women. Its 289 branches are in every State of the Union and in 5 foreign countries as well. Activities worthy of the high quality of its membership have developed in the 42 years of its existence.

At its founding 17 women, representing 8 institutions, Vassar, University of Michigan, Cornell, University of Wisconsin, Boston University, Smith, Wellesley, and Oberlin, participated. It was then called the Association of Collegiate Alumnæ, but in 1921 the name was changed to the American Association of University Women, and it became affiliated with the International Federation of University Women. Early in its history—that is, in 1889—the Western Association of Collegiate Alumnæ was consolidated with it, and in 1921 the Southern Association of College Women came within its fold.

The early members wrote essays, made investigations concerning the physical education of women, and by formal action urged the inclusion of women on educational boards and in college faculties. A bureau of information on all phases of higher education of women was maintained almost from the beginning, and in 1890 a bureau for the placement of women was established.

Improvement of Women's Colleges Earnestly Sought

Standardization of women's colleges and coeducational colleges has long been one of the activities of the association, and at present 146 colleges and universities are on its approved list and approximately 100 others are under consideration. For approval, an institution must not only meet certain academic requirements but it must also provide adequately for physical education, medical supervision, housing and social life of women students, and must make reasonable recognition to women on the faculty.

More and more it is realized that educative influences are not confined to the four walls of school buildings, nor to the playground or the community, but that they extend into the homes, including not only its physical and economic make-up but also the human beings who live there. Just as the value of the classroom depends in a large measure upon the training and personality of the teacher, so the worth of the home depends upon the training and personality of the mother.

The public school comes in contact with children only after they are at least 5 years old. They have then had five active years of life—five years in which to build up physical, mental, emotional, and social habits. The child who enters the kindergarten or the first grade comes, therefore, with literally hundreds of habitual responses pretty well established. It is the teacher's business to foster some of them, to eliminate some as quickly as possible, and to develop new ones as the need arises. But teachers and schools, however well meaning, however intelligently acting, are greatly handicapped. Five hours a day is the maximum for the children to be with them. From 19 to 21 hours of a child's day are not spent with the school. Parents, not teachers, have the cornerstone position in education. They are the ones who directly control the conditions that make for good or poor habit-building. Any educational program which does not take home environment into account is ineffective and inadequate.

To Make University Women Better Mothers

Because of a realization of such facts as these the American Association of University Women has accepted and is promoting the training of mothers.

Two years ago Dr. Frances Fenton Bernard, now dean of Smith College, who was then educational secretary, realizing the great importance of elementary education, encouraged the members of

This building crowded with historic associations is now the home of the American Association of University Women

the association to undertake a carefully planned and systematic study of elementary education. Special emphasis was placed upon the curriculum, which has been undergoing intense criticism. This movement was launched in order that these university women might become intelligent participators in the community life that affects the public school. This study is to be continued with equal earnestness during the next two years.

But that which seems of even greater significance is the work done with preschool education, for here it is that university women may make a direct contribution. Study groups are formed all over the United States whose aim it is to know the needs, desires, and capacities of children from 2 to 6 years of age. What are the best habits for these children to form; how can their poor habits be corrected; what is the best kind of environment for little children; what should adults do to bring about the best results with them? These are some of the questions that concern the American Association of University Women, and they are trying to answer them by means of study carefully planned and directed by the educational secretary.

Objective Observation of Children Emphasized

The educational office sends out definite plans for the procedure of the groups, including outlines and bibliographies for study. To branches where library facilities are inadequate, sets of books are sent. Since much of the literature is available only in pamphlet form, sets of reprints and pamphlets are assembled in the educational office and distributed as a basis for study. Another phase of the work will be the objective observation of children by a few study groups under the direct supervision of the educational secretary.

The aim is the immediate improvement of child care and child education in the home. It is by no means a child-welfare program, but a program which plans to improve the habits of every child in the homes of the A. A. U. W. women. Nursery schools have already begun to be formed, not for social welfare, but in order to furnish better facilities for the objective study of young children and to exemplify the best methods of educating them.

Besides these very valuable services the A. A. U. W. has seven other phases of work, as follows:

1. Provides, through local branches, a large number of scholarships for undergraduate women in colleges and universities.

2. Administers and awards eleven scholarships for graduate work in the United States and in foreign countries.

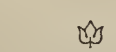
3. Publishes a magazine for information and discussion concerning subjects of interest and importance to university women.

4. Stimulates university women to continue intellectual growth after graduation, and to contribute in every possible way to the welfare of their communities according to local needs.

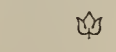
5. Encourages international relationships among university women, especially among the university women of the seventeen countries forming the International Federation of University Women, by exchange of professors and fellows, by a biennial international convention, and by the exchange of information and courtesy.

6. Supports a national and international club in Washington, D. C., as a center of work and fellowship among university women of the United States and foreign countries.

7. Maintains a national headquarters in Washington, D. C., for the business of the association, for cooperation with other national organizations, and for a center of information of many kinds and of service in many forms to university women. The total membership is now 20,531 women.



By matching a conditional offer of $500,000 from the General Education Board, Fisk University has established the first million-dollar endowment for college education of the negro in the history of America. The income of this fund is to be applied exclusively to teachers' salaries.



The Nevada State Board of Education urges "that clear, earnest, and intelligent instruction" as to the effects of drugs be made a definite part of the instruction in the public schools and State university.

THE PARAMOUNT END of liberal study is the development of the student's mind, and knowledge is principally useful as a means of determining the faculties to that exercise through which this development is accomplished. Self-activity is the indispensable condition of improvement; and education is only education—that is, accomplishes its purposes, only by affording objects and supplying incitements to this spontaneous exertion. Strictly speaking, every man must educate himself.—*Sir William Hamilton.*

Loan Plan for Aiding Christian Students

Needy Persons Preparing for the Ministry or for Missionary Work May Receive Assistance in Pursuing Their Studies

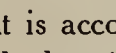
TO ASSIST worthy and needy Christian students in their educational career the North American Student Friend Association has been organized at Kansas City, Kans. A plan has been instituted whereby money will be loaned to selected students with the expectation that the money will be returned after finishing school. In selecting beneficiaries of the fund preference is given students preparing for the ministry or missionary work but it is expected that the funds will warrant assistance to a very large body of Christian students.

To determine approximately the number of young people who are interested in Christian education but find it difficult or impossible to attend college without interruption a survey is made of a large and representative number of schools. The need of the student is determined and met according to the rules and ability of the association. No discrimination is made on account of sex, race, nationality, or creed.

To all borrowers the money is loaned without interest through school life but after graduation a rate of 5 per cent is charged. Extent of the loan depends upon the conditions surrounding the individual case but in any event the student is urged to repay the loan as soon as possible after he has completed his course. For those who become missionaries the entire debt is canceled after three years' service.

A simple and convenient agreement is made between the association and the student before the money is loaned. A small clerical fee is exacted from the student and 1 per cent of the loan is retained for the registrar's fee when aid is granted.

To procure the necessary funds for the conduct of the organization a membership enlistment has been instituted. Shares vary in size from the associate membership at $100 each to the honorary life membership at $10,000 per share. Another means of collecting funds is through complimentary credentials, issued to churches and auxiliary societies or other Christian institutions.



Since Bible study for credit in Virginia high schools was authorized by the State board of education eight years ago, the enrollment in the course has increased from 27 in the first year to 933 in 1924.

Celebrities in Science Join in Centenary of Franklin Institute

Learned Men from 116 Colleges and Universities Pay Tribute to Benjamin Franklin the Scientist and to Franklin Institute, a Leader in Scientific Work. Bartol Research Foundation an Important Contribution

By JAMES F. ABEL
Assistant Specialist in Rural Education, Bureau of Education

THE latest and best thought of some of the most distinguished of the world's scientists was presented at the notable three-day celebration of the centenary of the founding of Franklin Institute held at Philadelphia in September.

Probably no larger or finer group of the leaders of research in chemistry, physics, and the mechanic arts has ever been brought together in America. Five continents were represented. Men and women came from 36 foreign and 83 American colleges and universities. Learned and professional societies, 47 in foreign countries and 58 in the United States, took part through their delegates. More than a hundred great industrial organizations sent members of their staffs to listen to the discussions or fill places on the program.

The series of lectures given by men famous for some particularly fine work in research or construction amounted to a summary of the highest achievement and most advanced thinking in several fields of scientific endeavor. There were four sections in session at the same time.

"Too many good things at once," the visitors said; "one does not know which to choose."

Number of Atoms Exceeds Human Conception

The range of subjects was wide. The atoms received especial attention. Sir Ernest Rutherford said that if the attempt were made to count the atoms in one cubic centimeter of air, it would keep the entire population of the earth, about one billion persons, counting at the rate of three a second for 10,000 years. He told how he had found out something of their structure by bombarding them with Alpha particles from radium, and had succeeded in disintegrating them in 13 of the lighter elements.

Sir William Bragg told how he had learned about them through a study of crystals by means of the X ray. Professors Charles Fabry, of the University of Paris, and Pieter Zeeman, of the University of Amsterdam, foremost authorities on spectroscopy, crossed the ocean to show the uses of the spectroscope and how through it we have learned what some of the stars are made of and may yet determine the ultimate composition of matter.

Dr. Fritz Haber, whose process for the xation of atmospheric nitrogen supplied Germany with nitrates during the war, was present to tell of the three rapid changes that have come in the fields of chemistry and physics during his lifetime: First, the idea of the grouping of atoms in the molecule; then the breaking up of molecules by the electric current; and, third, the analysis of the atom as consisting of separate electrical particles.

Professor Coker brought from University College, London, his specially prepared apparatus for showing screen pictures of how the atoms realign themselves when a substance is under pressure. He is able to determine the correctness of the estimates made of the stresses and strains on materials in great structures, such as bridges and buildings, by his pictures of how the atoms behave under strain. Doctor Stieglitz, of Chicago, told the assembled scientists how color is determined by the amount of activity among the electrons within the atom.

The weather was a frequent topic for discussion—the kind that Franklin set an example for when he studied the direction and velocity of the storms of North America, learned and charted the Gulf Stream, and suggested the cause of the aurora borealis. He and, later, Franklin Institute laid the foundations for the science of meteorology and set in motion the work in weather observation that finally led up to the establishment of the Weather Bureau.

Ocean Currents and Winds Under Discussion

Doctor Humphreys showed why the winds blow opposite to the ocean currents and at greater velocity than the currents flow, and how the devious and strange ways of the wind may be worked out by mathematics. · F. W. Peek, jr., told about lightning, real lightning of some 100,000,000 voltage and artificial lightning of 2,000,000 volts. He makes the artificial kind in his laboratory, and says it acts like real lightning which misses the highest point from the ground in inverse ratio to the height of that point above the ground. In other words, a man standing up during a thunder storm is about fifteen times as liable to be struck as he would be if he were lying down.

The interior of the earth is a very rigid, hard core, Doctor Day, of the

A shrine dedicated to science

Carnegie Institution, told his audience, and volcanoes start from only 2,000 or 3,000 feet below the surface and break through a weak spot in the crust when a great quantity of molten matter is about to solidify.

Warfare Involves Application of Science

War was a favorite topic. Major General Patrick stated that the world flight has shown that no nation is now safe from air attack, that it would be next to impossible in these days of finely developed military aircraft to transport an army to France, and that the only way to meet an air attack is with an air force. General Squier suggested that in the next war manless, radio-controlled aircraft may fill the air with an anaesthetic and put a whole nation to sleep long enough for the enemy to overrun its country. General Carty was interested in the communication side of war and compared the first telephone shown at a Franklin Institute exhibition in 1884 with the 19 radio stations and 49,000,000 miles of wire in use when General Pershing bade farewell to his Army chiefs. Major General Williams described Uncle Sam's new guns. There are lighter and more rapid firing rifles and machine and antiaircraft guns; trench mortars, field pieces, howitzers, and railway siege guns with a greater range and wider sweep that throw larger and more destructive missiles; and more powerful bombing planes and bombs than were used in 1918. General Williams does not believe that the air plane has made the big battleship useless.

Director Charles Reese, of the DuPont de Nemours Co., used the diverting of powder from war-time to peace-time uses as his theme. At the close of the war there were millions of pounds of powder and powder materials on hand. Dumping large quantities of it in the ocean was seriously considered. That was not done and most of it has been used in building roads, in mines, in general construction work, and on farms. Only recently the Government placed an order for pyrotol, a new kind of dynamite, which was the largest peace-time order of explosives ever placed.

Discussions Above the Understanding of Laymen

Of course, a layman could grasp very little in detail of all that was shown and discussed at the meetings, however carefully he might attend and pay attention, but he could get an impression of strong men from the great universities and business organizations of the world talking of commonplace things and with the magic touch of science and of scientific research turning them into miracles. He could watch them as with the wonderful optimism of intelligence justified by actual accomplishment they pictured all the great forces of nature harnessed and at work for man; instruments of destruction turned into instruments of industry, social problems solved by experiment and investigation, the final divisions and ultimate nature of matter determined, and a world governed on a scientific, rational basis.

Encomiums Upon Franklin, the Scientist

None of the speakers failed to pay a tribute to Benjamin Franklin as a scientist or to Franklin Institute for its leadership. The institute came into being because a young mechanic, Samuel Merrick, angry and disappointed at being refused admission to a mechanics' lodge, enlisted the help of Professor Keating, of the University of Pennsylvania, and at a public meeting directed the founding of an organization better than the one that blacklisted him. At its beginning the institute laid out an ambitious program.

Most of that program has been carried out. A list of only a few of the things the institute has done includes: Carrying on classes for young people in employment; conducting series of lectures given for the most part by experts in their special fields; collecting books for and maintaining a scientific library of more than 82,000 volumes; publishing a high-class scientific journal, the Journal of Franklin Institue; making investigations into the causes of explosions of steam boilers, the strength of materials, and the relative values of building stones; and holding exhibitions to encourage science and the manufactures.

Resources of Institute from Private Sources

Throughout its first century of life the institute has been a strong leader in the promotion of the sciences and mechanic arts. It still occupies the building erected 98 years ago.

All its work has been done without monetary aid from State or Nation. The resources are and have been wholly private. The institute received no large gifts at any one time until recently, when there came to it by bequest from the late Henry W. Bartol, a former member, $1,300,000 to establish the Bartol Research Foundation. The temporary building well equipped for investigations in physics and chemistry was formally opened and the foundation inaugurated on the last day of the celebration. In the presence of a large group of the scientists, Teresita Bartol Dalley, 13-year-old grandniece of Mr. Bartol, drew aside the veil from the Bartol memorial tablet and Doctor Tutweiler, vice president of Franklin Institute, offered the services of the new foundation to research workers of all countries.

To Develop a Nation of Sportsmen

Congress Under Auspices of Playground and Recreation Association of America Seeks to Promote Ethical Standards

TO MAKE good sportsmen of all Americans, to help them all learn to play the game, is the aim of the national recreation movement, 600 representatives of which from every State in the Nation recently met in Atlantic City, N. J., for the Eleventh National Recreation Congress under the auspices of the Playground and Recreation Association of America.

"Good sportsmanship is the development of the highest ethical standards for one's own life and for one's relations with others, and it is the opinion of this convention that this result can best be accomplished through recreation," said Joseph Lee, president of the Playground and Recreation Association of America. "The secret in the importance of play which warrants serious consideration for its promotion at a great national convention such as this is the fact that it teaches honesty, fairness, quickness of decision, self-control, resourcefulness, and loyalty. With these qualities developed to their highest degree in every American, we shall truly become the nation of the greatest sportsmen the world has ever known."

Delegates to this congress, who include people from every walk of life, State and city officials, industrial and labor leaders, school, church, and civic representatives, as well as those directly engaged in recreational work, met to determine how the cities and communities of America may find for their people the greatest happiness, health, and sane living through development of recreation.

Our inventions and mechanical progress have shortened the Nation's hours of labor. America has spare time as it never had before, according to Matthew Woll, vice president of the American Federation of Labor. This convention, therefore, sought the solution of one of the most important problems in American life in fostering spare time recreation as a necessary antidote to the incessant grind of the wheels of this age of machinery.

Every phase of recreation was discussed in order that the delegates might take back to their communities a broader picture of the possibilities of this great force, together with a practical working knowledge of how to accomplish the greatest good at the least expense through methods discovered in the different sections of the country and made available to them through the exchange of information and opinion provided by means of this nation-wide conference.

New Books in Education

By JOHN D. WOLCOTT
Librarian Bureau of Education

AMERICAN CLASSICAL LEAGUE. The classical investigation conducted by the advisory committee of the American classical league. Part one. General report; a summary of results with recommendations for the organization of the course in secondary Latin and for improvement in methods of teaching. Princeton, Princeton university press, 1924. 305 p. tables. 12°.

This study considers in detail the question of secondary-school Latin and the positive and comparative results obtained under present conditions and also makes definite proposals for improvement. In order to bring instruction in Latin up to the standard proposed, faults in teaching and the imperfect arrangement of the course should be remedied. After reducing the amount of material now included in the Latin course, the residue should be modified and better distributed. The supply of Latin teachers is inadequate to meet the present demand, and to supply this deficiency and to raise the quality of service, better facilities for the training of teachers are required. The total number of secondary pupils in Latin is now a little greater than the combined number of pupils enrolled in any or all other foreign languages, and is increasing, which makes the outlook for Latin study encouraging in America.

BETTS, GEORGE HERBERT. The curriculum of religious education. New York, Cincinnati, The Abingdon press [1924]. 535 p. illus., diagrs. 8°. (The Abingdon religious education texts.)

The plan of this volume is (1) to give a brief but sufficiently comprehensive outline of the origins and historical development of the present religious curriculum; (2) to formulate the educational principles and state the fundamental theory which should govern in the making of a curriculum of religious education; (3) to describe and in some measure estimate the essential value of the current curricula of our church schools. As a basis for section 2, the established principles of general educational values are accepted and not restated. Since no standardized religious curriculum now exists, the various prominent series of curriculum materials, denominational and independent, are described in Part 3.

CHAPMAN, J. CROSBY, *and* COUNTS, GEORGE S. Principles of education. Boston, New York, [etc.], Houghton Mifflin company [1924]. xviii, 645 p. 12°. (Riverside textbooks in education, ed. by E. P. Cubberley.)

The view maintained in this treatise is that education is a form of adjustment, meaning by this the adaptation of the organism to its environment and also the control and shaping of that environment. A sound philosophy of education formulating the nature and objectives of the educational process is an indispensable basis for all educational work. The authors of this volume restate the basic principles of education in a form consistent with modern progress in knowledge, industry, and politics, and with the results of scientific research in education. The discussion deals with the place of education in individual and social life, the psychological and sociological foundations of education, and the principles which govern the conduct of schools of various grades and types. The philosophy presented centers about the six fundamental life needs—health, family life, economic adjustment, civic life, recreation, and religion. It is held that the philosophy of education is more than a contribution to professional training—that education as a social study must come to occupy an important place in the general field of the humanities.

COBB, WALTER FRANK. Graded outlines in hygiene. Book two. Yonkers, N. Y., World book company, 1924. vii, 337 p. tables. 12°.

The outlines in this volume are for the fourth fifth, and sixth school years. The author says that to develop in the pupils helpfulness, as well as healthfulness, should be the goal of health teaching. He adopts the principle that the lessons ought to be related to the opportunity for health service just as much as to the need for health practice.

HALL-QUEST, ALFRED LAWRENCE. Supervised study in the elementary school. New York, The Macmillan company, 1924. xiii, 473 p. tables, diagrs. 12°. (Supervised study series, ed. by A. L. Hall-Quest.)

The author does not attempt to distinguish sharply between teaching and supervised study. He accepts teaching that aims to train the pupil to teach himself as a working definition of supervised study. Supervised study, then, is directive teaching. The book gives directions for the administration of supervised study in general, and also with reference to the particular subjects of the elementary school curriculum.

MORGAN, JOHN J. B. The psychology of the unadjusted school child. New York, The Macmillan company, 1924. xi, 300 p. 8°.

Mental deviations from the normal, both slight and more pronounced, are common, and their study is a subject which interests most people, but abnormal psychology is hardly ever presented in language which is intelligible to a layman. The author of this book discusses in a clear, nontechnical style the condition of the school child who is unadjusted to his environment. The nature and causes of abnormal behavior in children are taken up, and various examples are cited. If mental peculiarities are noted early in life and proper treatment applied, they may often be removed before they become fixed and dangerous to the person affected. So to instruct teachers and parents that they may deal intelligently with this problem is the object of this manual, which covers the field in a comprehensive way.

PETERS, CHARLES C. Foundations of educational sociology. New York, The Macmillan company, 1924. x, 447 p. 8°.

According to the author, the educational sociologist should show the adjustment of education to the needs of society, and the bearing of group phenomena upon the educational procedures by which these needs must be met. In comparison, the educational psychologist shows how education should be adjusted to the needs of the individual. More research is still necessary in order to build up a complete science of educational sociology, which in the process must cease to be a philosophy and employ the quantitative methods of science. Doctor Peters' study gives the present status of knowledge of the subject and indicates the path for future progress.

PYLE, WILLIAM HENRY. Psychological principles applied to teaching; a manual for teachers. Baltimore, Warwick & York, inc., 1924. vi, 197 p. 12°.

Observing that courses in general psychology and in educational psychology are ordinarily of little practical use to teachers, the author has prepared this manual, which presents a fairly complete list of all the principles in the psychology of learning, which the teacher should apply in her classroom work. The alternate pages are left blank for notes by the teacher regarding her own experience, and references are given to full discussions of the various principles in the author's Psychology of learning.

SEARS, JESSE B. *and* CUBBERLEY, ELLWOOD P. The cost of education in California; a statistical study of the costs for elementary, secondary, and higher education in the State, based on the returns for the school year 1921–22. A report reviewed and presented by the Educational finance inquiry commission, under the auspices of the American council on education, Washington, D. C. New York, The Macmillan company, 1924. xviii, 353 p. front. (map) tables, diagrs. 8°. (The Educational finance inquiry, vol. VII.)

This study aims to give the facts necessary to show a cross-section of the financial status of education in California for the school year 1921–22. To do this it presents a treatment of the character and extent of the State school program, a statement of the number of people actually served, an explanation of how this program is financed, an analysis of the costs of education, a consideration of the extent to which education costs are equalized over the State, and a discussion of the economic burden imposed by these costs upon the wealth of the State.

SHARP, RUSSELL A. Teaching English in high schools. Boston, New York [etc.], Houghton Mifflin company [1924] xi, 163 p. 12°. (Riverside educational monographs, ed. by H. Suzzallo.)

The methods of teaching English which are presented in this book have all been tested by practical experience in the classroom. Some of the topics treated are the qualifications and preparation of the teacher, objectives in English, the course of study, English classics and composition, reading and spelling, segregation according to learning ability, and extra-curricular activities.

UHL, WILLIS L. The materials of reading; their selection and organization. New York, Newark, [etc.], Silver, Burdett and company [1924]. xiv, 386 p. tables, diagrs. 12°.

For the assistance of supervisors and teachers of reading and literature in selecting and organizing content for their courses, this volume presents the results of extensive teaching experience and of the researches of investigators. The primary concern is the content of courses, but chapters are also included on laboratory investigations, classroom teaching, testing, and diagnostic and remedial work. Standards based on scientific knowledge, for evaluating materials for courses in reading and literature, are formulated and applied. The objectives of present-day courses in these subjects are stated to be (1) the control of the mechanics of reading; (2) ability to comprehend and interpret what is read; and (3) the attainment of general culture through the ability to enjoy literature. The author devotes much attention to children's interests in reading and to its social worth.

WASHINGTON : GOVERNMENT PRINTING OFFICE : 1924

SOME RECENT PUBLICATIONS OF THE UNITED STATES BUREAU OF EDUCATION

While the limited supply lasts, single copies of these publications will be sent upon application to the Commissioner of Education, Washington, D. C. When the free supply is exhausted, or if larger quantities are desired, the documents may be purchased at the prices stated from the Superintendent of Documents, Government Printing Office, Washington, D. C. Do not send money to the Commissioner of Education in any event

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A basis for music in the work-study-play school. Will Earhart. 5 p. (City school leaflet no. 17) 5 cents.

The chief State school official. Ward G. Reeder. 67 p. (Bulletin, 1924, no. 5) 10 cents.

After giving a chapter to the history of the office of State superintendent, the author discusses such topics as qualifications for holding office, methods of selecting the incumbent of the office, term of office, salary, relation to State board of education, duties of the office, etc.

The county unit in New Mexico. John V. Conway. 10 p. (Rural school leaflet no. 28) 5 cents.

The inauguration, the results, and the cost of the county unit in New Mexico.

The daily schedule in the high school. J. B. Edmonson, W. E. Bow, I. Van Tassell. 17 p. (Bulletin, 1924, no. 15) 5 cents.

Shows how the daily schedule is made in certain schools, gives suggested schedule routine in a Detroit high school, and summarizes practices in schedule making.

An evaluation of kindergarten-primary courses of study in teacher-training institutions. Nina C. Vandewalker. 44 p. (Bulletin, 1924, no. 3) 5 cents.

Contains representative two-year, three-year, and four-year courses of study for teacher-training institutions.

Government publications useful to teachers. E. E. Windes. 34 p. (Bulletin, 1924, no. 23) 10 cents.

Sources of Government material that can be obtained at small cost.

Industrial schools for delinquents, 1921–22. Advance sheets from the Biennial survey, 1920–1922. 22 p. (Bulletin, 1924, no. 2) 5 cents.

Statistics.

Intelligence of seniors in the high schools of Massachusetts. Stephen S. Colvin and Andrew H. MacPhail. 39 p. (Bulletin, 1924, no. 9) 10 cents.

Results of a study made to determine the number and proportion of high-school students who might be expected to enter the higher institutions of the State of Massachusetts and their intellectual capabilities to pursue studies in these institutions.

List of references on money value of education. 7 p. (Library leaflet no. 24) 5 cents.

Manual arts in the junior high school. William E. Roberts. 89 p. (Bulletin, 1924, no. 11) 15 cents.

Considerable attention is given to courses of study, including courses in mechanical drawing, simple mechanics, woodwork, metal work, and printing. Equipment for teaching such subjects is described and a bibliography is appended.

Practices and objectives in training for foreign service. Glen L. Swiggett. 27 p. (Bulletin, 1924, no. 21) 5 cents.

Report of the National conference on foreign training, Washington, December 26, 1923.

Preparation of teachers. William T. Bawden. 36 p. (Industrial education circular, no. 22) 5 cents.

Schools for adults in prisons. A. C. Hill. (Bulletin, 1924, no. 19) 5 cents.

Discusses the function of schools in prisons. The appendix contains views of persons engaged in prison work on various phases of the subject

Secretarial training. Glen L. Swiggett. 33 p. (Bulletin, 1924, no. 12) 5 cents.

Report of the National conference held at the College of secretarial science, of Boston University, October 27, 1923.

Sources of useful information for the teacher of home economics. Emeline S. Whitcomb. 18 p. (Home economics circular, no. 19) 5 cents.

Statistics of public high schools, 1921–22. Advance sheets from the Biennial survey, 1920–1922. 69 p. (Bulletin, 1924, no. 7) 10 cents.

Statistics of teachers' colleges and normal schools, 1921–22. Advance sheets from Biennial survey, 1920–1922. 76 p. (Bulletin, 1924, no. 10) 10 cents.

Three hundred and eighty-two institutions engaged in preparing teachers are represented.

A type rural high school; Mount Vernon union high school, Skagit county, Washington. C. A. Nelson and E. E. Windes. 36 p. (Bulletin, 1924, no. 4) 10 cents.

Contains courses of study for the work in home economics, agriculture, typewriting, etc.

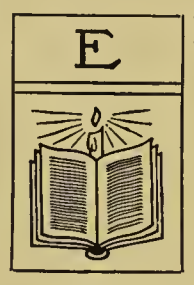
Types of courses of study in agriculture. Adapted to grades 7 and 8 of elementary schools or rural junior high schools. E. E. Windes. 35 p. (Rural school leaflet no. 26) 5 cents.

An outline of agriculture for grades 7 and 8 developed for the rural high schools of Currituck county, North Carolina, and outlines now in use in Missouri, New York, and North Carolina.

Visual education departments in educational institutions. A. P. Hollis. 36 p. (Bulletin, 1924, no. 8) 5 cents.

Part I deals with the professional status of visual education officers. Part II deals with the evaluation and distribution of visual aids.

Vocational education in Geneva, Switzerland. Elise Hatt. 24 p. (Industrial education circular, no. 23) 5 cents.



DUCATION, from one point of view, is a debt which the adult generation owes to that which is to succeed it. This civilization to which we have attained, these general ideas, these intellectual resources, these moral principles, these habits and customs of proved utility—how are they to be passed on to those who are to succeed us? By education—that is to say, by mental contact and moral sympathy between those who know and those who as yet do not know. That is the problem in its most general aspect.

Here we may make two reasonable assumptions: First, that all we have learned the rising generation may also learn; second, that possibly, nay probably, it is not worth the while of the rising generation to learn all that we have learned. We can not teach our children more than we know, but we can teach them less than we know, and so leave room for their own independent acquisitions. It behooves us, therefore, to sift our knowledge and whatever else we have to impart, and to consider very carefully what is worth passing on and what is not.

—Ascribed to
Popular Science Monthly, 1896.

SCHOOL LIFE

Volume X
Number 4

December
1924

MAIN ENTRANCE, EASTERN HIGH SCHOOL, WASHINGTON, D. C.

Published Monthly [except July and August] by the Department of the Interior, Bureau of Education, Washington, D. C.

GOVERNMENT PRINTING OFFICE

CONTENTS

SCHOOL LIFE is an official organ of the Department of the Interior, Bureau of Education, Washington, D. C. It is published monthly, except in July and August. The subscription price, 50 cents a year, covers only the actual cost of printing and distribution. Subscriptions should be sent to the Superintendent of Documents, Government Printing Office, Washington, D. C., and not to the Bureau of Education.

SCHOOL LIFE does not specialize in any portion of the educational field, and the articles are never technical. Every primary teacher and every high-school teacher should know what the higher institutions are doing, and every university professor should be in close touch with the work of the schools below. This is the idea which governs the policy of SCHOOL LIFE; it furnishes current information useful to everybody engaged in educational work of any grade.

Specimen copies will be sent free upon application to the Commissioner of Education, Washington, D. C.

SCHOOL LIFE

PUBLISHED MONTHLY *by the* DEPARTMENT OF THE INTERIOR, BUREAU OF EDUCATION

Secretary of the Interior, HUBERT WORK - - - - *Commissioner of Education,* JOHN JAMES TIGERT

VOL. X WASHINGTON, D. C., DECEMBER, 1924 No. 4

America's One Great Staple Product Is Worthy Men and Women

All Industry, Transportation, Commerce, Arts, and Sciences are Merely Means to That End. Fortunes of Every Citizen Among Us Go Up or Down with Welfare of the Farmer. Heavy Responsibility Rests Upon Those Who Direct Land-Grant Colleges. Deficit Instead of Surplus in Agricultural Products Now Threatened

By CALVIN COOLIDGE
President of the United States

PERMANENT maintenance of our country's superior level of human comfort and well-being requires that our agriculture be made and kept the most efficient in the world. Our agricultural community must be maintained, through constant improvement of methods and constant strengthening of the place it holds in the social structure, more prosperous, better educated, more contented than that of any other nation. If we ever permit our farming population to fall to the level of a mere agricultural peasantry, they will carry down with them the general social and economic level. Every citizen among us has a personal concern for the welfare of the farmer. The fortunes of all of us will in the end go up or down with his.

The general effect of the land-grant colleges has been to raise agriculture to a new standard. It can no longer be associated with a rude and uncultured existence, but has become the occupation of a broadly trained and well-educated element in our social structure. The men and women on the farm no longer pursue their calling in a haphazard rule of thumb method, but with a scientific accuracy that insures the best possible results. No longer content with a narrow and forlorn existence, they wish to raise crops, but they wish also to read books. They want to know the market quotations for their products, but they want also to know what is going on in the world.

Farmers are Merchants as Well as Producers

Up to the present time the main emphasis of our agricultural education has been placed upon production. I believe that was right, because unless there is economy and efficiency in production there is no need for thought in any other direction. But our experience of the past few years has demonstrated that it is by no means enough. The farmer is not only a producer; he is likewise a merchant. It does him no good to get quantity production; in fact, it may do him harm, unless he can likewise have a scientific marketing. I feel that too little thought has been given to this most important phase of agriculture. I want to see courses in cooperative marketing and farm economics alongside of soil chemistry and animal husbandry. The agricultural problem of to-day is not on the side of production, but on the side of distribution. I want to see a good farmer on a good farm raise a good crop and secure a good price.

Must Contribute to Better Rural Civilization

It is for these reasons that I emphasize so earnestly the responsibility that rests upon you men and women of the land-grant colleges. The record of what you have done and are doing to-day warrants all confidence that your accomplishments hereafter will be adequate to the demands upon you. Without assuming that your work is by any means limited to the industry of agriculture, I recognize it as highly important in that field. You are concerned in contributing in every possible way to making a better rural civilization. Your efforts comprehend all the problems of better farming methods, of larger and cheaper production, of conserving all resources of the soil, of more efficient marketing, of better homes, better rural schools, better places of religious worship, and more intimate and helpful neighborly kindness among the people of the open country. They look to wise and intelligent cooperation in all the business operations which affect the farmer, so that wasteful and unnecessary processes may be eliminated. They contemplate the establishment of a closer contact, a better understanding, a more sympathetic and helpful relationship, between the people of the farms and those of the cities and the industrial areas.

If you make retort that I am giving you a large order, my rejoinder will be that we are going to omit no effort to prevent a repetition of the misfortunes which in recent years have involved agriculture. We are not nearly a generation ahead of the time when our country will witness a reversal of its relation to world agriculture. I mean, that in a very few years the natural increase of population and the inevitable tendency to industrialization will place us among the nations producing a deficit rather than a surplus of agricultural staples. We were fairly on the verge of that condition when the World War gave a temporary and artificial stimulation to agriculture which ultimately brought disastrous consequences.

Consume More Food than We Produce

Even to-day, if in making up our balance sheet we include our requirements of coffee, tea, sugar, and wool, we already have a considerable agricultural deficit. It may not be generally known, but even now we consume more calories of food in this country than we produce. The main reason is that we do not raise near enough sugar. Our only agricultural exports of consequence are cotton, meat products, and wheat; and as to the two latter, it must be plain that the scales will shortly turn against us. We shall be not only an agricultural importing nation, but in the lives of many who are now among us we are likely to be one of the greatest of the agricultural buying nations.

Portion of address before Association of Land-Grant Colleges, Washington, D. C., November 13, 1924.

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In this lies the assurance to the American farmer that his own future is secure enough. But he must readjust his methods of production and marketing until he comes within sight of the new day. Our immediate problem has been to carry him through the intervening period of abnormal and war-stimulated surpluses. After that, we shall face the real problem of our long future, the problem of maintaining a prosperous, self-reliant, confident agriculture in a country preponderantly commercial and industrial. It has been attested by all experience that agriculture tends to discouragement and decadence whenever the predominant interests of the country turn to manufacture and trade. We must prevent that in America.

Continuing Increase of Population Expected

I believe the land-grant college is the main great agency for its prevention. It has added a new element to the equation which has never before been in it. You must make that element decisive. It is true there are some countries in which the balance of these elements has been so well maintained that agriculture has continued to flourish alongside prosperous industries and successful commerce. But these are found where the population is approximately static and the community comparatively self-contained. It is not our destiny to be a community of that kind. We must look forward to a long-continuing increase of population. We must realize that our relationships with the outside world, already enormously important, will increase in number, complexity, and importance in their influences on our social structure.

Wastefulness Can Result Only in Calamity

We can not begin too soon to prepare for this future. It may seem contradictory to suggest that in a time when we are embarrassed with surpluses for which markets are not easily to be found we must begin to plan for exactly opposite conditions. But it is not really a contradiction. The organizations and methods which look to economies and efficiencies in producing and distributing will be equally useful, equally necessary, in either set of circumstances. To fail in establishing these instruments will commit us to that most inexcusable of economic sins, a deliberate policy of sheer wastefulness. And wastefulness, whether in disposing of a surplus or permitting a deficiency, in the end can only result in calamity.

Ability and Character; Patriotism and Devotion

Finally you will remember that America has but one great staple product. We till the soil, we operate our industries, we develop transportation, we engage in commerce, we encourage the arts and sciences, but these are only means to an end. They are all carried on in order that America may produce men and women worthy of our standards of citizenship. We want to see them endowed with ability and character, with patriotism and religious devotion. We want to see them truly American, while ready and eager to contribute a generous share to world welfare. We want to see them honest, industrious, and independent, possessed of all those virtues which arise from an adequate moral and intellectual training joined to experiences which come from the open country.

Education Week Celebrated in a Bohemian City

Cesky Brod, a city of Bohemia, celebrated "Education Week" June 15 to June 21 with great success. On the opening day a great poem, "The Warrior Zizka before the City of Prague" was dramatized and a pageant was arranged by the school children. Both these entertainments were to celebrate the five hundredth anniversary of the great Czech hero, Jan Zizka Trocnova.

Other features of the week included pupils' contests in singing, recitations, and dramatizations and exhibitions of manual work by boys and of school cooking by girls. The exhibitions were open every evening during the week.—*Emanuel V. Lippert, Prague.*

Evening courses in chemistry are given at Western Reserve University. These classes provide an excellent opportunity for professional men and women to carry on research under favorable conditions, and furnishes an opportunity for Cleveland chemists to receive instruction in recently developed fields.

Study Local History and Cultivate Good English

A "local history contest" in the schools of Douglas County, Oreg., sponsored by the extension division of the University of Oregon, has offered a new significance to local history and has increased a spirit of pride and interest in the community and State.

In writing their stories for the contest the children were limited to events and incidents within the territorial boundaries of their respective school districts, although they were permitted to go into other districts and interview former residents.

Anything of historical interest was permitted in the contest, such as the first settler in the district; the first home; the history of the school; the church; the first store; the first roads and how, perhaps, they grew out of the old pack trails and developed into the splendid highways of the present day; the history of the transportation system; any special industries in the district and the history of their development; Indian legends and stories of battles between Indians and whites; and of points of historic interest in the community.

Gathering and writing local history stories was made the basis of much interesting and valuable work in English. Scarcely a village, town, or community exists but has its pioneer stories, legends, or traditions. In the contest held in Douglas County some of the reports were valuable contributions from a historical standpoint. In the newer States many such stories may be gathered now from those who had a part in their making, which in a few years will be forgotten.

The Extension Monitor devotes the entire space of a special local history number to the contest and prints the prize-winning papers.

IN CASTING a view over the civilized world we find a universal accordance in opinion on the benefits of education, but the practical exposition of this opinion exhibits a deplorable contrast. While magnificent colleges and universities are erected and endowed and dedicated to literature, we behold few liberal appropriations for diffusing the blessings of knowledge among all descriptions of people. The fundamental error of Europe has been to confine the light of knowledge to the wealthy and the great, while the humble and the depressed have been as sedulously excluded from its participation.

More just and rational views have been entertained on this subject in the United States. Here no privileged orders, no factitious distinctions in society, no hereditary nobility, no established religion, no royal prerogatives exist to interpose barriers between the people and to create distinct classifications in society. All men being considered as enjoying an equality of rights, the propriety and necessity of dispensing, without distinction, the blessings of education followed, of course.—*De Witt Clinton.*

A Modern City High School, Typical of Approved Ideas of To-Day

New Eastern High School, Washington, Designed to Embody Best Recent Methods in Construction and Management for Public Secondary Schools. Site Covers 14 Acres in Populous City. Cost of Land, Building, and Equipment, about $1,750,000. Academic, Technical, and Business Courses are Offered.

By ROSEMARY ARNOLD
Teacher of English, Eastern High School

"ALL OUT for the end of the world!" calls the conductor every morning at the end of the Lincoln Park car line, and scores of children with their books push good naturedly from the car. They have been crammed in tightly, for this is one of the "Eastern specials" as they like to call it. About 20 minutes to 9 it reaches the end of the line, spilling out the boys and girls, who must walk a good two blocks farther to their destination. That same street-car conductor has echoed the same announcement—"End of the world"—for more than a year now, but the children love it. They never disappoint him by failing to laugh.

Locality Not Yet Fully Built Up

The end of the world! Truly, it might seem so. You leave the street car and follow the procession down two long blocks, with a neat parkway centering the avenue, a pleasant bit of speedway for autoists. Suddenly the street ends; there is no more of it. The rows of houses end. Ahead is a stretch of land and just beyond a branch of the Potomac. Before long Congress is going to make a beautiful park down there and connect it with Potomac Park, now the unexcelled driveway in Washington. Across the river rise the hills, the east edge of the District of Columbia, with Maryland a step farther. The street ends, it is true; the city limits end; but to our left stands a red brick building, impressive and inviting—the new Eastern High School.

"Plenty of air and sunshine" welcome the windows. Concrete boxes with flowers nod gaily from the sills. The lawn is graded slightly upward, as is the driveway to the entrance. You note the garden urns of tiny shrub trees along the wall up the steps. Directly in front of the school towers the bronze flagstaff memorial, dedicated to the alumni who died for humanity in the Spanish American and World Wars, a loving tribute from their classmates. A circular concrete seat at its base, the Stars and Stripes overhead—who could fail to catch inspiration even in passing?

Inspiring View from Entrance

At the entrance pause a moment and admire the view. Those wooded hills shelter on the east and north; in the west, only a mile away, shines the superb dome of the United States Capitol. And see, just beyond peeps the Washington Monument. Here in sight are all that stand for nobleness and good citizenship.

Within, and you are at the foot of a marble stairway. One fancies one's self in a palace or some famed gallery of art. It is a joy to tread those steps, to cross the marble hall at the top, and to enter the assembly hall with its fourteen hundred seats. Here are held the weekly chapel exercises, the rallies for games, all evening meetings, and, of course, the plays. Eastern is so well equipped that when a play is given all work of staging, costuming, and decorating can be done at the school by the students. The stage is spacious and is flanked by a cycloramic dome, the only one south of New York, by which, with the splendid lighting system, marvelous effects can be produced. Very little scenery is needed. The dome lends perspective and unusual sense of distance. "A Midsummer Night's Dream" has been given for a spring play and has proved the possibilities of the new school. The woodworking department makes furniture for the stage; the domestic art department sews the costumes; the print shop furnishes the programs.

Equipment Leaves Northing to be Desired

On the ground floor are the laboratories, science rooms, workshops, even one for auto mechanics, where future

Eastern High School, Washington, D. C.

Chemical laboratory

owners of automobiles overhaul machinery. The lunch room, well supplied with white-tile tables and good, wholesome food, occupies the center of the ground floor. Then there are two gymnasiums, a boys' and a girls', fully equipped with all necessary physical training apparatus.

On the first and second floors come the assembly hall, the bank, the offices, the classrooms, while on the third floor are still more classrooms and a fine music hall with seats in tiers and a stage for orchestra practice. There, too, is the domestic science department, where girls learn sewing and cooking. A very interesting feature is the model apartment, built and furnished like an up-to-date home. Regular house furniture is used. Here girls are taught how to entertain and serve as charming hostesses.

Complete Provision for Physical Exercise

In the rear of the building is a remarkable stadium, seating 6,000 people. At one side are the big soccer field and eight tennis courts just completed. The whole site of the school covers 14 acres. The building and grounds cost $1,500,000, the equipment one-fourth of a million.

The school, with a faculty of 70, has 1,600 students enrolled at present, though 2,000 may be accommodated easily, and will, no doubt, soon be, as the number of pupils everywhere seems to be steadily increasing.

Academic Course Usually Elected

The courses are departmental. Academic work is chosen by most of the students. This is the college preparatory course. If desired, it can be mixed with the technical or business courses. The academic course requires for graduation four years of English, two of a language, a year of American history, one of a natural science, and two of mathematics. The other subjects, six year credits, are elective. A four-year graduate has, then, 16 year credits, besides two years of free-hand drawing and four of singing and of physical training. These are called minor subjects and are taken once or twice a week instead of daily, as are the major subjects. Of course it is well if those pupils who intend to go to college follow entrance requirements very carefully. Colleges differ somewhat in these.

There are two business courses, one of four years and one of two. The first includes a number of the academic subjects. It requires four years of English, one of American history, two of a foreign language, one of a natural science, one of arithmetic, two of typing, and two of either shorthand or bookkeeping. The other subjects are electives. The two-year business course requires two years of English, one of arithmetic, two of either shorthand or bookkeeping, two of typing, one of general science, one of commercial geography, and one of some other business subject.

Technical Studies Equal to Academic

The technical course is like the academic in requirements. The pupils study the technical subjects, auto mechanics, printing, woodworking, and domestic art and science as electives.

Pupils may take as one of their major subjects music of some kind. They study with private teachers and are examined weekly by a teacher in the school and every semester by a group of examiners. A pupil in major music is required to take an hour lesson per week and to practice at least an hour per day. Students may take orchestra or chorus work as a major study if they choose. Two new courses at the school are those in journalism and dramatic art.

The school day is divided into seven periods of 43 minutes each. On some days a pupil may have a study period, or even two of them; on other days that particular hour may be filled by music or physical training or drawing. There are also laboratory hours, when work is done in the

Automobile workshop

Lunch room

science rooms. The technical subjects run for two continuous periods. During the fourth and fifth periods of each day the students have lunch, half of them eating while the others are in class. After a pupil finishes his lunch he may spend the rest of the period out of doors or in dancing in the armory or in studying in a room assigned for that purpose. Each study hall has a teacher in charge. On rainy days there is music in the assembly hall to entertain the pupils who have finished eating. On days when there is an "assembly," or chapel, the periods are necessarily shortened, each having a few minutes taken from it so as to end the day promptly at 2.30.

Military Drill Under Army Officers

The Washington high schools have a military organization—the high-school cadets. All boys are privileged but not compelled to join. Each school has a number of companies with their own officers. These companies together form three regiments, or a brigade. Commissions for officers are by competitive examination. The War Department appoints a staff of Regular Army officers to oversee the cadets. Drilling is done every Monday and Thursday from 2.30 to 4. In the spring there are a brigade review and regimental, battalion, and company competitive drills. The highest distinction a high-school boy can gain is, at least in the students' minds, to be the captain of the winning company. The high school which has this company wears a glory all its own until the next competitive drill. In the summer a special training camp for cadets is held.

Eastern High School belongs to the interhigh-school league, taking part in all major sports. Much enthusiasm is felt for athletics. For the past two years Eastern has won the championship in basket ball, not only in the interhigh league but for the entire South-Atlantic section.

With every device to make learning attractive, with a principal whose interest and affection are everywhere felt, with a faculty filled with good-fellowship, we feel that Eastern High School reaches near the pinnacle of modern education.

Clearing House of Information for Classics Teachers

An exchange of ideas on the teaching of Latin and Greek in the secondary schools is the purpose of the Service Bureau for Classical Teachers. Material and information of interest to classical teachers is collected and arranged in a form suitable for inspection and study. A correspondence department is conducted, material is loaned or sold for a nominal price, and a leaflet called "Latin Notes" is published eight times a year. The bureau is supported by the American Classical League and Teachers College at Columbia University, New York.

Daring Life Saving Varies Monotony of Routine Duties

Nineteen shipwrecked men of the Canadian schooner *Lady Kindersley*, of the Hudson Bay Co., owe their lives to the skill of Capt. S. T. L. Whitlam, master of the U. S. S. *Boxer*, a Bureau of Education schooner plying between Seattle and Alaska.

For 27 days the *Kindersley* had been drifting at about 35 miles a day. Though leaking only slightly, the boat was hopelessly imprisoned in the ice 40 miles off Point Barrow, and it is reported that not a man would have been saved had not the *Boxer* gone to their rescue. Captain Whitlam battled with the Arctic ice for two weeks, but finally brought the *Boxer* through a lead in the ice within about 6 miles of the Canadian vessel. Its crew then launched their boats and worked their way out to him.

The *Boxer* is a wooden vessel, with a carrying capacity of 500 tons. It is used for the transportation of teachers, physicians, and nurses and in carrying supplies to the native schools of Alaska, which are under the supervision of the Bureau of Education. Many of the settlements in which the bureau's work is located are far beyond the limits of regular transportation and mail service. Some of the villages are on remote islands or on isolated points where only once or twice a year they are brought into touch with the outside world when visited by a United States Coast Guard steamer or by the supply vessel of the Bureau of Education.

Any city or town in Georgia may dedicate and set apart for use as playgrounds, recreation centers, or other recreation purposes any lands or buildings owned by the municipality not in use for some other necessary purpose, according to the laws of Georgia, 1923.

INSTRUCTION of the people in every kind of knowledge that can be of use to them in the practice of their moral duties as men, citizens, and Christians, and of their political and civil duties as members of society and freemen, ought to be the care of the public, and of all who have any share in the conduct of its affairs, in a manner that never yet has been practiced in any age or nation. The education here intended is not merely that of the children of the rich and noble, but of every rank and class of people, down to the lowest and poorest. It is not too much to say that schools for the education of all should be placed at convenient distances and maintained at the public expense. The revenues of the State would be applied infinitely better, more charitably, wisely, usefully, and therefore politically in this way than even in maintaining the poor. This would be the best way of preventing the existence of the poor.—*John Adams.*

National Development is Forcing Thrift Upon American People

Habit of Prodigality came Naturally from Abundant Resources and Limited Population. Danger is Recognized and Means are Preparing to Combat it. Thrift Successfully Taught in Schools

By JNO. J. TIGERT
United States Commissioner of Education

WE AMERICANS are a proud people conscious in a high degree of our many strong material traits, but none of us by the broadest possible conceit could think of ourselves as a thrifty people. However immodest we might be in our claims, none would be so reckless as to compare us in frugality with the Scotch or the French or some other peoples. True, there are thrifty individuals, groups, and even races among our population, but as a Nation we are extravagant, wasteful, and careless of our resources as compared with the older nations of the world.

The reason for our prodigality as a people is easily explainable and altogether natural, but this does not excuse or justify it. God has dowered our continent with an abundance of natural resources which, coupled with our vast area of fertile soil lying entirely in a temperate climate, gives to us products of nature unrivaled in any other portion of the earth's crust. When we compare our density of population with Old-World countries, we find that our people are relatively as sparse as our natural products are abundant. Compare England, for example, with the State of Kentucky. About the same in area as Kentucky, England has more than thirty millions of population, while Kentucky has slightly more than two millions. Or compare France with Texas; slightly smaller than Texas in geographical extent, France has a population about ten times as great as the Lone Star State. We have never been compelled to be a careful or thrifty people. We have found it possible to waste much of our wealth and still maintain a higher standard of living and enjoy more luxury than most other peoples.

Magnificent Profligacy and Measureless Bounty

In collecting raw materials for industry it is common for us actually to destroy, ruin, or throw away more of a product than we secure. After this fashion much of the timber of America was cut. We have destroyed more timber by wasteful methods of cutting, by forest fires, by carelessness, and in other ways than we have ever used. We have denuded our forests, but scarcely thought of the future or reforestation. Many forests in other countries are handled so that the timber cut makes possible a greater growth all the while and the potential supply is not diminished by the cutting. Timber cutting is typical of many other things that we do in this country. With magnificent profligacy and measureless bounty we have pursued our national growth, apparently oblivious that the future will bring a day of reckoning for posterity.

To-day the American people actually spend more money on luxuries than upon the essentials of life. Nearly 30 per cent of the annual expenditures of the American people go for things which are not only unnecessary but some of which are known to be positively harmful and injurious. Only about 25 per cent of our expenditures are for food, clothing, shelter, and other necessities of living.

In spite of all, we have made a material progress that is the miracle of the centuries. Common sense, common reason, and common prudence must compel us to recognize that our present wasteful methods can not be indefinitely prolonged. Our rapidly diminishing natural resources and our constantly increasing population must inevitably bring us to a more rational, careful, and economic development or to national tragedy on a scale more vast than any yet which has visited the many unfortunate peoples of history.

Timely Measures to Avoid Calamity

Fortunately our people are becoming aware of the calamity which the future holds for a profligate nation. Accordingly, conferences have been called to discuss thrift, organizations have been formed to combat waste, campaigns have been waged to educate the people in the ways of economy, books have been published and plans put forward to teach ways and means of saving. These movements are timely and vital to our continued prosperity and national welfare.

The nation can not be otherwise than those who compose its citizenship. If our citizens are wasteful and careless, our national life will eventually disintegrate. If our citizens are industrious, prudent, and frugal, our Nation will grow stronger and continue its remarkable prosperity. The future of the Nation will rest upon the character of the average citizen. The thrift of the Nation is the thrift of its individual citizens; the extravagance of its citizenship will destroy the national wealth, however great it may be and regardless of the soundness of policies of taxation, expenditure, or administration of the Government.

Thrift in the citizen involves a number of virtues. In some degree, great or small, it involves industry, patience, vision, prudence, self-denial, and ambition. Secretary Mellon has said: "Every boy and girl and every man and woman must have certain assets to achieve success—not material assets alone, but assets of character, and among the most important of these are ambition, industry, personality, and thrift."

No Economic Progress Without Labor

Industry and the desire to work, or at least a willingness to work, is a primary and fundamental characteristic of a thrifty person. No matter how high our ideals may be, unless we are willing to work and struggle to acquire the things of this world, we shall fail. Without the patience and endurance to toil with our hands and brains, there can be no accumulation of economic values. Booker T. Washington's exhortation to his race applies to all our people: "We shall prosper in proportion as we dignify and glorify labor and put skill and intelligence into the common occupations of life."

The origin of thrift and national wealth is found in daily application of the citizens to the production of commodities that will satisfy the needs of society. The school should inculcate and inspire the willingness to work and struggle. Every child, regardless of actual or possible inheritance or favored opportunity, should learn the lesson of industry. James J. Davis, the Secretary of Labor, complains that our schools are literally turning out millions of "armless children." Their hands are skilled in writing, but not in practical arts. This defect in our educational program is rapidly being overcome by the progressive and continuous development of trade and industrial schools.

Train Children to Face Difficulties

Protracted inactivity deadens the ambition and shackles the will. To train boys and girls to apply themselves in the face of difficulties is the greatest benefit that the school can bestow. The Divine injunction, "In the sweat of thy face shalt thou eat bread till thou return unto the ground," must be applied to all.

It is not to be supposed that our people must labor all the time. Certainly there

Portions of an address before the Conference on Thrift Education, Washington, June 27, 1924.

must be time for recreation, amusement, social intercourse, and intellectual as well as spiritual improvement, and yet most of the people must toil much of the time, and all of the people, except those physically and mentally deficient, should learn to do so. No one should oppose the proper restriction of working hours. No one will interpose objection to employing more of the time for improvement as machinery and labor-saving devices are introduced for the economy of man's effort. And yet a "machine-made millenium" in which no one would be required to work would be a dire calamity that would wreck society by stifling ambition and deadening effort. It has been predicted that the time will come when farmers will be able to plant, cultivate, and reap their harvests in a few weeks of the year and thus be able to give nearly all their time to leisure, recreation, and intellectual improvement. It is a serious question just how far this process of labor-saving can be carried, even if such ideas prove practical, without undermining character and ambition.

Schools Teach the Lesson of Saving

Steady toil and persistent industry are the origin of wealth, but thrift implies likewise a wise husbandry and a prudent conservation of the results of labor. Saving is often more difficult than acquiring. Everywhere to-day our schools are teaching the children the lesson of saving. Banks operated by school children are numerous, and few schools fail to utilize the hoarding instinct in children for the development of habits of saving. Some schools succeed in getting 100 per cent of the pupils to deposit, and nowhere have there been failures where proper methods have been employed.

Primary Teachers' Association Celebrates Tenth Anniversary

A meeting of the National Council of Primary Education, celebrating its tenth anniversary, will be held in Cincinnati, February, 1925. Organized with only 12 members, the council has grown until its membership now reaches 3,000.

Reports concerning the status of primary education in the United States have been made each year. Among those most in demand are: Time allotment devoted to hand work in the day's program; Bases of promotion from kindergarten and first grade; The best schoolroom equipment necessary for administering an up-to-date primary school program; and, What constitutes an acceptable day's work in a primary school.

Alta Adkins, assistant superintendent of schools, Hammond, Ind., is secretary of the council.

Modern Foreign Language Study Under Investigation

Researches of Classical League Have Stimulated Like Effort in Behalf of Other Foreign Languages. Leading Professors and Teachers of Languages Join in Supporting the Undertaking. Three Investigators Employed Full Time

By CARLETON A. WHEELER
Special Investigator

ONE OF the striking results of the introduction of new subjects into the curriculum of the secondary schools is the new life which they arouse in the older fields of instruction. That which is most worth while in the established courses stands forth more strongly than before, and much that has lost its usefulness for the present day is the more rapidly discarded.

Present Day Psychology Affects Latin Teaching

An excellent example of this tendency is given us in the classics. Those who have followed instruction in Latin for the past decade in the best schools know how vitally present-day psychology has affected the work of teachers of Latin. With the close of the three years of intensive investigation which the Classical League has just finished and the appearance of the first volume of its report, such a definite and strong impetus has been given to the bettering of Latin teaching that we may well thank those who have been responsible for this quickened thought indirectly by introducing into the curriculum the various vocational studies of recent years.

The classical investigation illustrates, moreover, the present distinct tendency in American education to progress by careful and extended scientific studies of the problems under discussion in the fields of content and method. It is most natural, therefore, that close upon the heels of the researches of the teachers of the classics should come "The Modern Foreign Language Study," now in the preliminary months of its work.

Bureau of Education is Cooperating

In a later issue of SCHOOL LIFE an outline will be given of the various problems which this national and international study has set itself to consider. The committee on direction and control, made up of a score of the leading professors and teachers of French, German, Spanish, and Italian, and representing all branches of instruction and all sections of the country, are working under the auspices of the American Council on Education and with the cooperation of the United States Bureau of Education.

The main office of the study has been established at 561 West One hundred and sixteenth Street, New York City, and a second office at Ellis Avenue and Fifty-eighth Street, Chicago. Three special investigators are working under the direction of the committee and it is hoped that all modern language teachers who desire to have a share in this extensive study will get into touch with the work.

New Ideas on Teachers' Everyday Problems

To present new ideas on some of the everyday but difficult problems of grade teachers is the purpose of the Teachers' Association of the State Normal Schools of New Jersey in their plan to issue a series of 10 leaflets in 1924–25. These leaflets, for the most part, are prepared by the faculty of the Montclair State Normal School. Each number covers one topic and gives a complete outline of suggestions for carrying out the project.

"Seat Work—a Thinking Process" is the topic of the first leaflet, and the remaining list includes: Economy in Teaching the Primary Number Facts; Poetry Teaching in the Grades; Song Material as Related to Project Teaching; Cultivating Curiosity; Objectives of Geography Teaching in the Intermediate Grades; The Endless Chain within a Tree Bud; The Doll as a Teacher; Around the World in a Classroom; and Growing Professionally, Advertising Our Profession.

Modern Educational Institutions in Palestine

A technical institute has been established at Haifa, Palestine, and was formally opened in April, 1924, according to a report from George Gregg Fuller, American vice consul at Jerusalem. A large attendance is expected by workers of the lower and middle grades in courses in the building trades and mechanical and electrical engineering. Classes are held both day and evening. Hebrew is the language of instruction.

Plans are also under way for a university at Jerusalem, for which three American physicians are helping to organize the medical college with funds raised in the United States.

A Jewish national library has been started for use in connection with the Hebrew university. This library has received generous contributions from both the French and Spanish Governments and already has a patronage of more than 3,000 readers monthly.

Nearly a Million Studying Latin in American Institutions

Report of Investigation by American Classical League. Aggregate Time Given to Latin Greater Than That Given to Any Other Secondary School Subject. Latin Students Surpass Others in General Academic Efficiency.

By JAMES F. ABEL
Assistant Specialist in Rural Education, Bureau of Education

COURSES in Latin are enrolling more high-school students than courses in all the other foreign languages combined. The average daily time outside the class now given by Latin pupils to the preparation of their lessons is considerably greater than is required for any other subject in the secondary school. Latin students surpass non-Latin students in the mastery of other subjects, and the superiority seems to be due to something gained from the study of Latin rather than to greater initial ability.

The percentage of secondary schools offering Latin is greater than that of such schools offering any or all other foreign languages, and the percentage of those giving four years of Latin is greater than that of those giving three years of French, the foreign language next highest in enrollment. In addition to the 940,000 young people studying Latin in the secondary schools, 40,000 more are pursuing courses in it in the colleges. Of 609 colleges in the continental United States 606 will accept and 214 require Latin for admission to an A B course. One-half the State departments of education are distinctly friendly to the study of Latin, 15 are sympathetic, 7 neutral, and only 2 unsympathetic or unfriendly.

Teachers in Small Places Lack Preparation

Approximately 22,500 teachers of Latin are employed in the secondary schools, and the demand for well-trained teachers is steadily increasing. In places of fewer than 2,500 population nearly 40 per cent of the teachers of high-school Latin have never gone beyond the secondary school stage in their study of the language. The number of secondary pupils who study Latin is 9.8 per cent fewer than it was in 1914–15, but this is due to the enormous increase in high-school enrollment, and is about equal to the percentage decrease in combined modern foreign language enrollment for the same period.

Greek occupies a much less important place than Latin in secondary and collegiate instruction. About 11,000 high-school and 16,000 college students are studying that language. Only 20 colleges require a knowledge of Greek for admission to an A B course, though 559 will accept it. Eight of the State departments of education are friendly toward the study of Greek, one-half are neutral, and 16 unfriendly.

These are the main facts about the status of Latin and Greek in our secondary schools as they were found in a three-year investigation carried on under the direction of the American Classical League.

General Cooperation Produced Excellent Results

The league, through an advisory committee of 15 members, the General Education Board, 8 regional committees, 48 leading professors of education and psychology, the United States Bureau of Education, the State Department of Education of New York, the College Entrance Examination Board, and 8,595 teachers, mostly of the classics, carried on the work. Educational history records no finer attempt on the part of school people to evaluate fairly some part of their school program and to find ways of bettering it. Interest in the survey has been very keen and the final report eagerly awaited. The first part has recently come from the press. (The Classical Investigation Conducted by the Advisory Committee of the American Classical League. Part 1, General Report. Princeton University Press, Princeton, 1924.)

With nearly a million young people studying Latin, 31 per cent of them for more than two years, it was necessary, of course, to inquire into what good the student may get from a course in that language, what the school should try to give him through it, and how the courses should be planned and carried out to be of the most help to him.

In trying to find out what the aims of the Latin course should be the committee gathered objective data by means of scientific studies, including tests and measurements, and subjective data in the form of expert opinion from experienced secondary teachers of Latin, teachers of various other subjects, and professors of education and psychology. The final simplified list of aims that are considered valid, since they express the advantages that students derive from a course in Latin, include: Greater ability to read and understand Latin and to understand those elements in English related to Latin; greater ability to read, speak, and write English and to learn other foreign languages; development of correct mental habits, of an historical and cultural background, of right attitudes toward social situations, and of literary appreciation; gaining a knowledge of the simpler principles of language structure; and improvement in the pupil's written English. Mere ability to read new Latin after the student leaves high school or college and increased ability to make formal logical analyses are not considered as proper aims of the course.

To answer the question "What should be taught in Latin in order to benefit the student most in the things set out in the aims?" the committee again made use of a large number of tests and measurements and the opinions of experienced teachers. In the general recommendations as to what the course should be, "reading Latin" is defined as understanding thought directly through Latin as it stands, without translation into English. Much of the time in the first three semesters should be given to reading large quantities of well-graded easy Latin, so selected as to help the pupil gain a power to use and think in the language and at the same time give him a knowledge of the history and life of the Romans. Formal study of the vocabulary and grammar of the language, the committee reports, should be considerably reduced in amount and so arranged as to assist in developing power to read and understand Latin. Practice in writing Latin should be continued throughout the first three years of the course. Teachers should be allowed freedom of choice in the authors to be read, so that they may select the material they think best suited to bring the historical and cultural benefits of Latin to their pupils.

Transfer of Training Fully Discussed

Judging the best methods of teaching Latin brought up the old question of formal discipline and of transfer of training. The possibility of transferring good mental habits, right social attitudes, and independent application of facts and processes acquired in the study of one field to achievement in another field is generally recognized. Moreover, pupils may be taught to increase the amount of transfer.

The position of the committee is that in teaching Latin both teacher and pupil must have continued practice in developing habits of generalization and consequent transfer, first, by training in a desired habit or trait; second, by putting those habits or traits in their most generally usable form; third, by teaching the pupil to apply them to situations not connected with Latin; and, fourth, by creating strong motives for the transfer

to some particular field or fields. A habit or trait repeatedly applied to other fields may become automatic. The committee believes that habits of mental work, tendency to neglect distractions, ideals of thoroughness, accuracy and precision, and right attitudes toward study are some of the mental traits that may be acquired through the study of Latin and transferred to other lines of endeavor. Specific directions as to the teaching methods to be used in attaining these ends are given in the report.

Are secondary students of Latin stronger in other school subjects than those students that do not enroll in the Latin courses? If they are, is the difference due to native ability or to something in the study of Latin itself? The committee gathered a large body of evidence from the reports of classical and non-classical pupils to determine the answer to these questions.

More Latin Means Greater Superiority

The records of 10,000 candidates for college entrance made in the 10-year period 1914–1923, inclusive, show that the Latin students do better by about 13 per cent than the non-Latin students in all subjects outside of Latin and Greek, and in general the greater the amount of Latin studied the greater the superiority. Three tests made to determine the reason for this superiority indicated that of the 13 per cent about 2 per cent or 3 per cent was due to initial ability and 11 per cent or 10 per cent to something in the study of Latin. The advocates of formal discipline seem to have been right about the disciplinary values of Latin.

This report of the Classical League will undoubtedly be a classic in educational investigations. The care, thoroughness, and impartiality with which it has been carried on, the spirit of scientific inquiry which has animated it, and the moderation and reasonableness with which the conclusions have been drawn, all commend it as a remarkable project.

The findings will come as a surprise to many who have thought that the classical languages are fast disappearing and should disappear from our schools. The study of Greek is disappearing, but to find more students of Latin than of all other foreign languages combined giving more hours a day to Latin than to any other high-school subject does not argue any decrease in vital interest in the classics. Neither can one safely say that the subject which attracts the pupils of higher initial ability and the study of which gives them something that greatly increases their superiority should be dropped from the curriculum. The proponents of a study of the classics are in a stronger position now than they have been for many years.

19510°—24——2

New School of Citizenship and Public Affairs

Syracuse University Announces Endowed School as Integral Part of Liberal Arts College. Instruction for Entire Student Body in Fundamental Ideas of Citizenship. Graduate Studies Lead to Master's Degree

TO PROVIDE the entire student body with broad training and preparation for the duties and practice of citizenship is the chief object in the specially endowed school of citizenship and public affairs opened at Syracuse this year as an integral part of the liberal arts college. It is the purpose of the founder of the school to impress upon university men and women the responsibility of becoming and producing well-informed and competent leaders in public affairs, to assist in training teachers for the high schools and colleges in modern methods and material of instruction in government, and to prepare selected men and women for careers in civic administration and research and for an intelligent official relation to the general public and modern public organizations, local, State, and national.

To acquaint freshmen in as simple a manner as possible with what government is and the way in which it works, to arouse an interest in public affairs, and develop a sense of responsibility for exercising leadership is the general aim of the basic or fundamental course given in the first year of the school.

Intensive Study of American Government

A more intensive study of American government is arranged for the junior year. Important state papers, the presidential and gubernatorial messages, and the great debates of American history are sources of forum discussions.

More technical in character are the courses offered in the junior year. Political parties, European governments and foreign relations, and constitutional and international law are the subjects covered. They are treated in a more intensive way than in the earlier years, but the general method of approach is the case or problem method.

In the senior year an attempt will be made to show the relation between the course of development in political action and the underlying principles of political philosophy. Practical problems of government and psychological aspects of politics are included in this year's work. A seminar will be conducted in the investigation of these problems and the administration of government generally. An original thesis on some practical phase of administration will be expected of students in the seminar and a considerable amount of field work will be required of each majoring student. On completion of the course the regular degree of bachelor of science will be conferred.

Provision has been made for graduate study leading to the degree of master of science. Official surveys in local, State, and National Government will furnish the basis for theses. In graduate work the school at Syracuse will be affiliated with the National Institute of Public Administration of New York City. A fellowship fund has been provided for graduate students of marked ability.

Child Health Demonstration for the West

A child health demonstration has been arranged by the American Child Health Association in Marion County, Oreg. The county is rural, its population 90 per cent American born, and its crops so varied as to indicate a greater variety and stability of resources than in a one-crop or one-industry community. With the well organized and expanding Extension Division of the University of Oregon, the Oregon Agricultural College and Oregon Normal Schools, it seems reasonable to expect the effective spread of whatever sound standards, methods and procedure the demonstration may develop.

What the American Child Health Association is trying to do is to develop a sound community health program which the average community can carry on permanently. It should provide for health service beginning with the prenatal period and extending to adult life, and for all general health measures affecting the health of the community's children. In Marion County it is the purpose to make this program give special consideration to western needs and western conditions.

In some counties in Alabama children receive nine months' schooling in both elementary and high schools, but in other counties in the same State children have only four and a half months in poorly equipped schools, often taught by only one teacher. J. T. McKee, of the State Normal School at Florence, writing for the Alabama School Journal, decries this situation and makes a plea for equal opportunity in education.

Landscape architecture, introduced this year in Kansas State Agricultural College, has attracted a large enrollment. The course leads to the degree of bachelor of science in landscape architecture.

· SCHOOL LIFE ·

Issued Monthly, except July and August
By THE DEPARTMENT OF THE INTERIOR, BUREAU OF EDUCATION

Editor - - - - - - James C. Boykin
Assistant Editor - - Edith F. Holmes

Terms: Subscription, 50 cents per year, in advance. Foreign (not including Canada, Mexico, Cuba), 75 cents. *Remittance* should be made to the Superintendent of Documents, Government Printing Office, Washington, D. C., and should be by cash or money order

DECEMBER, 1924

Teach the Constitution in the Schools

HOW MANY Americans give serious thought to the Constitution of the United States, its significance, and the reasons for its adoption? What did the framers of the Constitution have in mind? There is a widespread belief among many of the uninformed of our citizens that the Constitution of the United States somehow impairs the rights and privileges of individual citizens and transfers them to some group or groups of bureaucrats in Washington.

All students of the Constitution and its formation know that the deepest concern of the framers of that remarkable document was to devise an instrument that would forever protect and preserve the rights of the States and their citizens. The tendency of too much government in the past has been toward tyranny and despotism. The tendency of too little government was always toward mobocracy and anarchy. To find a balance of government which would, above all things, preserve individual and State rights without the possibility of ever becoming autocratic, while at the same moment having sufficient power not to lapse into anarchy, was the task that the framers of the Constitution faced. The old Articles of Confederation vested no power in the central government, with the result that it was only an object of contempt and conditions were little short of anarchy.

The result of the work of the framers of the Constitution was successful beyond any human expectation. It is difficult to account for it except on the postulate that it was inspired by more than earthly wisdom. Aside from the Holy Scriptures themselves, no other written instrument in the history of the race can compare with it in form and excellence. Even though it can not perhaps claim Divine inspiration, it is well known that the convention which framed the Constitution made little progress until the philosophical Franklin suggested that Divine guidance be invoked. No wonder Gladstone called it "the greatest piece of work ever struck off at a given time by the brain and purpose of man," and that Pitt said "It will be the wonder and admiration of all future ages and the model of all future constitutions."

The chief difficulty in getting the Constitution adopted was the fear that the Government created by it might invade the rights of individual citizens, and it was only adopted after it was agreed that certain amendments should be submitted to the First Congress which would preserve these rights. Accordingly, 10 amendments, which are regarded as a part of the original instrument, were adopted at the First Congress and are known as the "Bill of rights." They include specific protection of the natural rights of citizens and hence set up a machinery which protects them from encroachment on these rights by the Government. These rights include freedom of religion, of speech, of the press, the right of petition, and freedom from search and seizure of property without proper warrant, the right of trial by jury, equal protection under the law for all citizens, and compensation for private property taken for public use.

The Constitution of the United States, therefore, not only does not impair the birthright of the citizen, but it is his chief protection against invasion by the Government or any branch of it.

But we can not expect to receive the benefits of our form of Government without fulfilling our obligations and duties as citizens. Ours is not a monarchy where one man rules or a despotism where a small group governs. In this country it is the business of all the people, men and women, to participate in the Government. The economic and political questions we are asked to express our opinion about to-day are very complex—more complex than ever before in our history. If we place our ballot in the ballot box or otherwise exert our influence on members of the legislature and persons in official positions without basing our opinions on some knowledge and information concerning the questions at issue, we do not act intelligently. We are not helping to solve these questions if we vote and help to formulate public opinion without knowing anything about what we do.

What is the answer to this situation? Some of the privileges which come to us as a result of our Constitution and laws have been emphasized. But equally true is the fact that the success of the Constitution and laws depends on education—upon education sufficiently widespread and thorough as to enable all the people to use the Government established under the Constitution wisely and intelligently. In other words, popular education is the basis, the very foundation stone of a successful democracy. We must educate our citizens or be ready to give up our ideal of popular Government.

In this process of popular education one of the first steps is the study of the Constitution itself in the schools. At the present time, according to the information which has come to the Bureau of Education, 28 States have enacted laws requiring that the Constitution of the United States be taught in the schools. Doubtless in all the other States also the teaching of the provisions and principles of the Constitution is required by local regulation or custom. It is clear, therefore, that the crisis of the World War made us all appreciate more deeply the blessings of our democratic form of government.

And, then, how about those millions of immigrants who have come to this country during the past 20 years? They came to America because it is the land of opportunity; but some of them have not realized that America is the land of opportunity only because our form of government makes it so. We must teach them. We must establish evening classes in the public schools and other places where they may learn their obligations and duties as citizens as well as the benefits which they secure in our country.

There are many other people, perhaps many millions, in the United States who do not know what is in the Constitution. How long is it since the average American has read it? Yet, it would take only a few minutes to do so, and the adult who reads it in the light of the experience of his life will find some meanings in it that he never appreciated before.

Interest in Public Education a Measure of Patriotism

PATRIOTISM in times of peace finds its highest expression in America in the support of public education. All that the Nation is and all that it will become depends upon the extent to which knowledge is diffused and upon the character of that knowledge. Zeal for the welfare of the country is, properly, inseparable from zeal for education.

That theory of national education which would give high culture to a favored few and little or nothing to the masses of the people is wholly unsuited to the spirit of the American Republic. Every citizen of the United States bears through his ballot responsibility in the conduct of public affairs equal to that of every other citizen.

Education must be provided for every individual according to his capacity, and that mental training which comes from purely academic study is but the beginning of it. Recognition of the rights of others not only in theory but in practice;

knowledge of the structure of our Government and of the possibilities and proper limitations of governmental action; understanding of the interdependence of each nation upon the others and of every class of our people upon every other class; and, above all, that intangible thing which we call "character"—all these must be included in the objectives in the education of citizens of a democracy if it is to endure.

Equal opportunity must be provided for such training without regard to social condition or any other consideration. Only by the maintenance of a complete system of public education can this equality of opportunity be assured. The crowning glory of the Nation is that every State does maintain such a system. It is in turn the duty of every citizen not only to uphold his State in maintaining its schools, but he must go to the limit of his ability in supporting every reasonable development which will extend the opportunities of his fellow citizens for advancement. To fail in this is to fail in patriotism.

Education offered without cost to the children of all the people, extending from the primary grades through the university, constitutes America's distinctive contribution to civilization. No other country has a system of public education so fully developed. Americans are thoroughly accustomed to it, and the present generation finds difficulty in understanding any other condition.

Yet it has not always been so. In the early days of the Republic it was frequently argued that it was as equitable to take a man's ox to plow another man's field as to tax one man to pay for educating the children of another. Unfortunately that idea has not been entirely overcome even now. When the free textbook system was first advocated, arguments of that sort were freely brought forward. "Why," it was said, "should a taxpayer be required to contribute to the purchase of books for another's children?"

Similar objections still arise when it is proposed to provide playgrounds, to build new high schools for the crowding applicants or to establish local junior colleges for avoiding the necessity of sending young people prematurely from home to the State universities, and for enabling those institutions better to attend to the needs of mature students.

All these and more are essential to the scheme of equal opportunity for the children of all the people, and therefore essential to the progress of the Nation. To support them is to support the best interests of the country and to give evidence of patriotism of the most practical and effective sort.

Physical well-being of its citizens is of utmost concern to the State and to the Nation. Some of the world's greatest minds have been in frail bodies, and all about us are men who have overcome physical pain to do their part in the world's affairs. Notwithstanding these exceptions, the strength of any nation depends so far upon the strength of its citizens that it is the patriotic duty of each one of us not only to look to his own health and vigor but to contribute to the maintenance of physical strength in his compatriots.

The time has long gone by when an elementary education was enough to give sufficient mental equipment to meet the duties of life. High-school training is required of artisans, and college education is not too much for clerks. The standards of life steadily rise and men habitually demand for their children greater educational advantages than they themselves enjoyed. Competition between individuals and between nations constantly increases. Our people must be prepared for it and our educational institutions must be extended to meet the need.

Let us avow allegiance to the flag without ceasing; let us recite at every opportunity the glorious achievements of our armies and navies; let us declare to all the world the proud place which the United States of America occupies among the nations of the earth in all that relates to material progress.

But let us not forget that these are dependent upon earnest effort on the part of individual communities, and that the Nation's greatness can continue and increase only by trained efficiency in the mass of its citizens. To contribute to that efficiency by maintaining popular education in its best form is the patriotism that counts for most.

Unusual Privileges Granted to Finnish University

Helsingfors University, Finland, enjoys the following privileges: (1) No taxes, payments, or fees; (2) the free importation for its collections of objects of natural history, art, and antiquity, also ethnographic and other objects; (3) the exclusive right to publish for sale or distribution among the people, directly or indirectly, almanacs and calendars in Finnish and Swedish; (4) the privilege of keeping a chemist's shop of its own in Helsingfors; (5) the privilege of getting, free of cost, copies of any printed matter appearing in Finland; (6) the privilege of getting, free of cost, one silver and one brass copy of any medal coined in Finland and one copy of any coined money or printed bank note.—*Barton Hall, American charge d'affaires, Helsingfors.*

To Encourage Cooperation With School Officers

Cordial and unrestrained cooperation with school officers and teachers is essential to the highest success of parent-teacher associations. Even more; without that cooperation the association is likely to produce discord and, consequently, actual harm to the schools whose interests they are designed to promote.

In order to help parent-teacher associations to inform themselves before they begin a campaign in any phase of school betterment, the United States Bureau of Education has planned a series of "home education letters" to be issued monthly for the use of these organizations.

Four of these letters are already in circulation and are entitled: No. 1, Suggestions for Parent-Teacher Associations; No. 2, Ten Questions a Parent-Teacher Association Should Ask Itself Before Beginning a Campaign for the Health of School Children; No. 3, What Parents Should Look for in Visiting the Schools, and No. 4, Ten Questions a State Parent-Teacher Association Should Ask Itself Before Beginning a Campaign on School Legislation. The next letter will appear directly and is entitled: No. 5, The Parent-Teacher Association in Rural Communities.

Czechoslovakian Ministry Offers Subvention for Adult Education

Renewed encouragement for educational courses for adult women has been offered by the Czechoslovakian Ministry of Education. The program of the courses is expected to comprise: (1) Civics, (2) pedagogy and self education, (3) hygiene, and (4) domestic science. It is provided that the lessons shall cover at least 24 hours in all and that they shall be arranged on Sundays in the winter. The lecturers must be experts in the subject matter that they teach and the lessons must be in the form of discussions. The Ministry of Education offers a subvention of 800 Kc for each approved course, provided its organizers do not already receive support for adult education in the community.—*Emanuel V. Lippert.*

NEXT to the mother, the school teacher molds the Nation's youth, and the youth of to-day determines the Nation's destiny to-morrow. All honor and encouragement, therefore, to the faithful, unselfish guardians and instructors of our future citizens.—***Lawrence C. Phipps.***

Measures Affecting Education Determined in Recent General Election

Constitutional Amendments Proposed in Many States Relate to Taxation. Measures in Michigan and Washington Designed to Eliminate Private Instruction Defeated by Heavy Votes. State Publication in Colorado Defeated. A Few Typical Bond Issue and Charter Amendment Votes Described

By EDITH A. WRIGHT
Editorial Division, Bureau of Education

SUMMARY OF RESULTS

Alabama

Constitutional amendment No. 3.—Provides constitutional authority for the collection of a 2-mill school tax in Mobile County. *Passed.*

Constitutional amendment No. 5.—Authorizing a tax not to exceed 5 mills for school purposes in Moulton, Town Creek, and Landersville school districts in Lawrence County. *Passed.*

Jefferson County (local).—School bond issue ($500,000) to be used for schools in the rural sections of the county. *Passed.*

California

Constitutional amendment No. 13.—Provides for a levy of an annual poll tax of not less than $5 on male adults between 21 and 50 years of age, except those paying real or personal property taxes of not less than $5 a year, and also ex-service men, the insane, etc. Returns from the tax to be applied to the schools. *Defeated.*

San Francisco charter amendment.—Proposition 37, authorizing supervisors to establish retirement system for teachers in school department. *Passed.*

San Francisco charter amendment.—Proposition 42, providing for a tax levy for playgrounds, authorizing an addition to the tax rate of not less than 5 cents nor more than 7 cents for playground commission. *Passed.*

Colorado

Constitutional amendment No. 1, initiated.—Provides for the establishment of the office of State printer and a printing building commission, prescribing the powers and duties thereof, and making a tax levy to carry out the purposes of the amendment. *Defeated.*

Florida

Constitutional amendment.—Creating special school tax districts with authority to issue bonds up to 20 per cent of the value of the taxable property in the district. *Passed.*

Constitutional amendment.—Authorizing the legislature to provide a uniform rate of taxation and special tax rates on intangible property not to exceed 5 mills on the dollar and to exempt from taxation property owned for municipal, educational, scientific, literary, religious, or charitable purposes. *Passed.*

Kansas

Constitutional amendment No. 2, tax amendment.—"The legislature shall provide for a uniform and equal rate of assessment and taxation, except that mineral products, money, mortgages, notes, and other evidence of debt may be classified and taxed uniformly as to class as the legislature shall provide." *Apparently passed.*

Kentucky

Louisville (local).—Bond issue ($750,000) for parks and playgrounds. *Defeated.*

Louisiana

Constitutional amendment No. 1.—New Orleans school tax amendment, authorizing the school board to increase the percentage of assessed valuation of property on which taxes can be levied. *Defeated.*

Constitutional amendment No. 5.—"Caddo school amendment." (Increases local school tax.) *Passed.*

Constitutional amendment No. 6.—"Sabina school amendment." (Increases local school tax.) *Passed.*

Massachusetts

Referendum.—To ratify an amendment to the Federal Constitution prohibiting the employment of children in industry. *Defeated.*

Michigan

Constitutional amendment No. 1.—Amendment to Article XI of the constitution: "Section 16. From and after August 1, 1925, all children residing in the State of Michigan between the ages of 7 years and 16 years shall attend a public school until they have graduated from the eighth grade. Section 17. The legislature shall enact all necessary legislation to render said section 16 effective." *Defeated.*

Constitutional amendment No. 2.—Authorizing the enactment of an income tax law. *Defeated.*

Missouri

Constitutional amendment; initiative proposition No. 8.—Providing for the exemption from taxation of certain property used exclusively for religious worship, and property including endowments or income used exclusively for educational or charitable purposes or for agricultural or horticultural societies not formed for profit. *Passed.*

Montana

Constitutional amendment; chapter 97.—Relating to qualification of county superintendent of schools and school district officers. Amended to read as follows: "Section 10. All persons possessing the qualifications for suffrage prescribed by section 2 of this article as amended and such other qualifications as the legislative assembly may by law prescribe shall be eligible to hold the office of county superintendent of schools or any other school district office." *Passed.*

Constitutional amendment; chapter 134.—Provides for the acceptance and administration by the State of gifts, etc., for the creation of State permanent revenue fund, for the creation of a State permanent school fund, permanent revenue fund for the University of Montana, etc. *Defeated.*

Code amendment; initiative No. 28.—Metal mines tax law. Provides for a metal mines license tax, a tax on the gross production of the metal mines. *Passed.*

Nevada

Constitutional amendment No. 3.—Proposes to divert all fines collected under the penal laws of the State from the general school fund to other funds. *Apparently defeated.*

North Dakota

Initiated measure; tax law.—Relating to revenue and taxation; reducing and limiting the taxes, revenues, and expenditures of all departments of government, including State, county, city, village, township, school district, and park district. *Defeated.*

Ohio

Columbus (local).—School levy of 2.4 mills to be used in continuing the local

school program for the next three years. *Passed.*

Dayton (local).—School-tax levy for an additional levy of taxes for the purpose of providing the necessary funds with which to operate the schools of said district, not exceeding 2 mills for not to exceed five years. *Passed.* School bonds issued in the sum of $4,000,000 for providing funds with which to purchase, erect, and furnish schoolhouses and enlarge, repair, and furnish existing schoolhouses. *Passed.*

Sandusky (local).—Continuance of the 3-mill school-tax levy. *Passed.*

Youngstown (local).—Renewal of the 1.6-mill tax levy for schools. *Passed.*

Oregon

Constitutional amendment; voters' literacy amendment.—To amend section 2 of Article II of the constitution by adding to the qualifications of voters the requirement that they shall be able to read and write the English language and authorizing the means of testing the ability of such citizens to read and write the English language to be provided by law. *Passed.*

Pennsylvania

Easton (local.)—School bond issue for $270,000. *Passed.*

Harrisburg (local).—School loan for $1,750,000. *Passed.*

Hummelstown (local).—School loan of $63,000 for building a new school. *Passed.*

South Carolina

Constitutional amendment.—A joint resolution proposing amendment to section 1, Article II, of the State constitution, by providing a four-year term of the State superintendent of education. *Returns not yet available.*

Constitutional amendment.—A joint resolution proposing an amendment to section 5, Article XI, of the constitution, relating to the area of school districts. *Returns not yet available.*

Constitutional amendment.—A joint resolution to amend section 6, Article XI, of the constitution, relating to an annual levy of 3-mill tax for school purposes in the State. *Returns not yet available.*

State bond issue.—Bond issue of $10,000,000 for State educational, penal, and charitable institutions. *Defeated.*

Washington

Initiative measure No. 49.—Compelling children between 7 and 16 years of age to attend the public schools, and prescribing penalties. *Defeated.*

Initiative measure No. 50.—Relating to the taxation of real and personal property and limiting the aggregate annual rate of levy thereon for general State, county, municipal, and school district purposes to 40 mills. *Defeated.*

Wyoming

Constitutional amendment No. 1.—Authorizing the levy of a severance license tax on mines and mining claims. *Defeated.*

Constitutional amendment No. 2.—Authorizing the application of 33⅓ per cent of royalties arising from lease of school land to the support of public schools. *Passed.*

SIGNIFICANCE OF THE NEW PROVISIONS

Alabama

If amendment No. 3 to the constitution of Alabama had not been passed, the 2-mill school tax, which has been regularly collected in Mobile County, would have had to be abandoned.

Colorado

The constitutional amendment providing for the establishment of the office of State printer was condemned by two educators, the president of the University of Colorado and the president of the Colorado Agricultural College, who would have become members of the proposed State textbook commission had the amendment been adopted.

Florida

As a result of the constitutional amendment to Article 12, a special election on a $1,000,000 school-bond issue in the Tampa special school tax district will probably be called within a short time by the board of public instruction of Hillsborough County. An extensive building program is needed to relieve the congested school-housing situation in the city.

Kansas

The tax amendment to the constitution was apparently carried. The returns so far show 87,296 votes for the amendment and 65,670 against it. It is claimed that this amendment will increase the revenue of the State and make possible better support of schools, roads, etc.

Louisana

The New Orleans school-tax amendment, which was defeated, was favored by the school board forces. The objection urged against the amendment by its opponents was that instead of providing increase in the rate of taxation the amendment gave the New Orleans school board the authority to increase the percentage of assessed value of property on which taxes could be levied. Although the measure affected only New Orleans, the vote of the entire State was required. The home-rule argument was another reason for opposing it, opponents claiming that it was a question for the city to vote upon and not for the entire State.

Massachusetts

The Massachusetts referendum to decide whether the State shall ratify the child-labor amendment to the Constitution of the United States met with overwhelming defeat. Active campaigns were waged on both sides, and the vote on the question was large. The referendum was defeated by more than 400,000 majority; 696,119 votes were cast against the measure; 247,221 votes for it.

Michigan

Michigan electors for the second time overwhelmingly defeated the proposal to close the private schools of the State. Had the amendment been passed, every primary and grade parochial, denominational, and private school in the State would have been closed.

It is claimed that the income tax law amendment, had it passed, would have very materially reduced the primary school interest fund by causing a reduction in the rate at which public utilities could be assessed. The uncertainty of the effect of this amendment on the State revenue for schools was such that for the protection of the school fund the measure was opposed.

Both of these measures were overwhelmingly defeated. With approximately four-fifths of the vote counted, the returns on the school measure were 326,274 for and 625,359 against the measure. The returns on the tax measure were 162,014 for it and 714,585 against it.

Montana

Constitutional amendment, chapter 97, deals with the question whether or not county superintendents of schools shall be required to have professional training. There is no such requirement now. This measure gives the legislature the power to prescribe the qualifications of county superintendents.

Constitutional amendment, chapter 134, was attacked on the ground that within its provisions there is a section whose effect will be further to increase taxation. Section 9 provides: "The legislative assembly may provide other and additional ways and means for beginning or increasing the fund created or authorized in this article."

The mines tax amendment was adopted by more than 12,000 votes on returns from 1,087 precincts. It is said to be probable that an attack will be made upon the constitutionality of the measure in the courts of the State. By the provision of the act one-half of the total receipts from the tax goes to the support of the schools. The estimated income from the tax is $500,000. This measure

had the indorsement of the executive council of the Montana Educational Association.

Nevada

Incomplete returns from 11 of Nevada's 17 counties indicate that constitutional amendment No. 3, which was vigorously opposed by the State superintendent of public instruction and the Nevada Education Association, was defeated by a two-to-one vote. The amendment proposed to divert all fines collected under the penal laws of the State from the general school funds to other funds without providing any means to reimburse the general school funds. It also proposed to deprive the legislature of the power to prescribe how State school funds should be invested and restrict investments to such securities as are named by the constitution. The amendment was opposed on the ground that it took away school funds without the possibility of compensating the State school fund for the loss, because of the limitation of the State school tax to 2 mills contained in article 22, section 6. In effect it limited the support and maintenance of the university and the common schools to the 2-mill tax.

North Dakota

The tax law, known as the Gunderson bill, called for sharp tax reductions, especially for the schools of the State. It was claimed that this bill would cut 25 per cent from the amount spent on schools in 1923. Opponents argued that the measure was unfair inasmuch as the voters at large do not know local conditions and therefore can not tell whether such forced reduction is reasonable.

Ohio

The school levy of 2.4 mills for Columbus is a substitute for the 3-mill levy voted five years ago, which expires next summer.

The new school-bond issue in Dayton means new school buildings, new additions to old buildings, and adequate housing for all the children.

The passage of the 3-mill tax in Sandusky was a necessity in order that the schools be allowed to continue without serious interruption. A levy was passed in 1920 for five years. This levy expires before the next election.

Youngstown voted approximately $533,000 yearly for school-operating expenses when they passed the renewal of the 1.6-mill tax. Because of the extensive building program anticipated during the next five years the renewal of the 1.6-mill levy was necessary for maintaining these new schools. The present school rate, through the renewal, remains at $7.05, with an additional $3 for building purposes, provided in a levy two years ago, which runs for four years.

Pennsylvania

The school loan of $1,750,000 for Harrisburg is designed to complete the William Penn High School, now building, at a cost of $550,000, and to erect and equip the John Harris High School, at a cost of $1,200,000.

South Carolina

Numerous proposals, comprising about 50 amendments to the basic law of the State, were submitted by the general assembly to the electorate of South Carolina, but on account of the confusion in the ballot, the counting of the vote has been difficult and the final returns are not yet known. Four-fifths of the proposals are to allow school districts, counties, or municipalities to increase their bonded indebtedness beyond the limits fixed by the State constitution. The State bond issue was defeated by an overwhelming vote. The amendment providing for a four-year term for the State superintendent of education is still in doubt. The advocates of the amendment claim that better service will result from a four-year term.

The amendment to section 5, Article XI, apparently applies to Pickens County and is to allow the general assembly to fix the school districts there without respect to the general conditions named in the constitution.

The amendment to section 6, Article XI, concerns the 3-mill school tax. Tax reformers urge its repeal. They claim that the constitutional 3-mill school tax is one of the chief obstacles to tax reform. Opponents of the amendment say that the abolition of the 3-mill tax would accelerate the development of a policy relative to taxation for schools which they regard as unsound.

Washington

Initiative measure No. 49, which was overwhelmingly defeated, would have made it mandatory that parents and guardians of children between the ages fixed in the act send these children to public schools for the full time such schools are in session. It provided heavy penalties for failure to do so. It was claimed by its opponents that it would place an additional heavy burden upon the taxpayers.

Initiative measure No. 50, also defeated, declared that all tax levies should not in any year exceed 40 mills on the dollar of assessed valuation, which assessed valuation should be 50 per cent of all true and fair value of any such property in money. It also declared that the taxes levied should be limited so that the State for all purposes should not make a levy of more than 5 mills on the dollar, the county not to exceed 10 mills, including the county school fund, the school district not to exceed 10 mills, and the levy of a city or town not to exceed 15 mills.

The measure carried a proviso that the limitations imposed should not prevent the levying of additional taxes to pay the interest on principal on outstanding bond issues by State, county, city, or school district, nor prevent any increased assessments through special elections, which are provided for. The opponents of this measure claimed that its passage would spell ruin for the common schools and mean that the University of Washington would have to close its doors. Total taxes in the State now average 71 mills. The total tax reduction in the State's income would approximate $30,000,000 under the 40-mill plan. The measure was opposed by the State branch of the National Congress of Parents and Teachers and by the Washington Educational Association. A similar tax limitation law in Ohio was repealed in 1923.

Bureau of Education's Latest Publications

The following publications have been issued by the United States Bureau of Education during the past month. Orders for them should be sent to the Superintendent of Documents, Government Printing Office, Washington, D. C., accompanied by the price indicated:

Biennial survey of education, 1920–1922. Vol. 1. 773 p. (Bulletin, 1924, no. 13.) $1.

List of books for a teacher's professional library. A classified list of 100 titles. 15 p. (Teachers' leaflet no. 17.) 5 cents.

List of references on rural life and culture. 12 p. (Library leaflet no. 26). 5 cents.

Quest of youth. A pageant for schools. Hazel Mackaye. 102 p. (Bulletin, 1924, no. 33.) 10 cents.

CONTENTS.—Pt. I.—1. "The Golden Age." 2. Early Chinese education. 3. Early Hebrew education. 4. Education in Greece. 5. Education in in Rome. 6. Early Christian education. Pt. II.—1. Education during the Renaissance. 2. Education in England. 3. The little red schoolhouse. 4. School of to-day.

Statistics of universities, colleges, and professional schools, 1921–22. Advance sheets from the Biennial Survey of Education, 1920–1922. 161 p. (Bulletin, 1924, no. 20.) 20 cents

An exhibition of Chinese achievement in art and culture has been arranged by Columbia University. The exhibit will be open to the public from November 14 to December 13.

Some of the Problems which Concern the Land-Grant Colleges

Recent Setbacks to Agriculture Have Caused Diminution in Enrollment in a few Institutions. Agricultural College Students Usually Remain in Agricultural Work. Three Subjects Which Deserve Emphasis

By RAYMOND A. PEARSON
President Association of Land-Grant Colleges

DECREASE in agricultural enrollment is a recent problem in a few land-grant institutions. In others there have been increases. This is not an unnatural happening. Agriculture as an industry has not been prospering these past few years. We are told that more than 1,000,000 farmers have left the farm and taken up work elsewhere. Whatever the ups and downs have been in other occupations, this large number of farmers and their sons and their other help have turned away from agriculture. This has aided the readjustment. But it is a mistake to think that the future of agriculture in the United States is insecure. It is a mistake to think that education in agriculture will not yield good returns. We can only express our regret that a few young men who are adapted to farm life and would be a credit to farm life have been lost to us because they and their advisors have misinterpreted the agricultural situation.

Trained Farmers to Meet Trained Business Men

No one believes that all of the 6,000,000 farmers of the country should be college graduates, but at least a few of them should be. With a very much larger number of persons in agriculture than in business, it is fair to say there should be at least as many college graduates on farms as in stores and banks and offices. It is unfortunate in an agricultural State to see college courses in commerce filling up and overflowing, while those in agriculture remain stationary or even decrease in attendance. When the farming class does not possess as many highly educated people as the class with whom they do business, then farmers will have gone a long, long way toward peasantry, with all the impositions on the farmers that the word means in its worst sense. Agricultural prosperity will return. Agricultural enrollment in the colleges will regain its losses. It may come back with a great rebound. Our attendance problem is likely to become the problem of caring for a large increase of agricultural students.

In connection with agricultural enrollment, two points should be clearly understood by the public. The first is that the great majority of agricultural students remain in agricultural work after securing their college education. The second point is that all students who have taken an agricultural course should not be expected to engage in agriculture. It is all right, in fact it is desirable, occasionally for an agricultural graduate to secure additional preparation and enter upon other work outside of the recognized agricultural and allied fields, such as teaching agriculture in colleges and schools and agricultural journalism. We are glad to see an occasional agricultural graduate going into banking or business or preaching or Government service whenever the work to be performed relates especially to farmers and farm communities. Some agricultural graduates have found their places in these outside lines of work and are succeeding and are rendering valuable service to the farmers with whom they deal. More of this kind of trained service would be a benefit to the country.

Portions of address before Association of Land-Grant Colleges, Washington, D. C., November 12, 1924.

How May Service Be Enlarged?

The most natural question to arise in this annual meeting of official delegates from all land-grant colleges and universities is as to how our institutions might more fully care for the responsibility that rests upon us. This question relates to both the present time and the future.

Three subjects may be suggested upon which land-grant institutions should place special emphasis. They are not new nor strange and they do not require extended discussion, although hours could be given to them.

Permanent Agriculture

First, the development of a permanent agriculture. This is important to every citizen. It means profitable agriculture and good farm homes, owned by the occupants. Progress is being made with the aid of better farm practice, farm machinery, rural mail delivery, telephones, automobiles, good roads, consolidated schools, reading matter, and radio. But we still mine the soil, tenancy increases, organizations do not function as they should, rural schools serve the town rather than the country, and agriculture does not occupy the position of leadership that it deserves.

Men and women with the best minds will not remain in an occupation that fails to show profits and other advantages fairly equivalent to what is offered elsewhere.

Our late Secretary of Agriculture, Henry C. Wallace, was an active advocate of a well-rounded farm life resting upon a profitable agriculture and including good homes where sturdy people would thrive and learn to think independently and with clearness. He favored the development of a permanent agriculture. This is no selfish move. It will come finally through the efforts of organized farmers, well supported by other agencies, especially the land-grant colleges. If the public should object to the cost, it is only necessary to remind them of their dependence on agriculture for food, clothing, raw materials, business, and, most of all, new people with fresh blood to keep up the ranks of those in the great business and industrial centers who are failing to maintain their own numbers.

Natural Resources

The second subject deserving more earnest attention is the conservation and proper use of our natural resources. The wealth, safety, and life of a nation depends upon its natural resources. Every person is concerned.

This problem should be adopted as one of our own. It matters not how many others are working on it. Sufficient progress has not been made. The United States Department of Agriculture and the Geological Survey could do more effective work in protecting natural resources if the land-grant institutions were actively and aggressively interested from both the research and educational standpoints. The best information on natural resources should be found in our institutions; also, the highest appreciation of their value and the keenest realization of the importance of conservation.

The special work which has been assigned to us by Federal and State laws requires the land-grant institutions to come in direct contact with natural resources in the raw state. Many other institutions and people deal with these resources after refinement. We must know about them at their sources because of our intimate contacts. We should be among the first to know the serious conditions. Persons who buy and sell foods or machines should not be supposed to know as much about the failing natural resources as those who deal first hand with soil fertility and ore iron. This fact and the fact that land-grant institutions represent the only large group of educational and research agencies supported by the Government throughout the States are reasons and justification enough for the land-grant institutions

to adopt the problem of natural resource as their own.

Citizenship

The third problem for emphasis is more and better instruction in citizenship. This also should be adopted as one of our own major problems regardless of who else may be working on it. Decreased use of the ballot and increasing disregard of law and other symptoms are interpreted as evidences of decreasing interest in citizenship. This is thought to be so serious that associations of prominent citizens are now passing resolutions calling attention to the lack of citizenship training in colleges and universities and asking for better service. The suggestion has come that if land-grant institutions, founded on Federal laws, do not make suitable instruction in citizenship a required subject, it will be made incumbent by law to do so.

It is unfortunate that students are graduated without being well grounded in the principles of citizenship. The land-grant institutions should take the leadership in remedying this fault in the field of higher education. Already some land-grant institutions have arisen to the need. At the University of Missouri a course on citizenship is required of all freshmen. It has been developed as a continuation of a course on war issues which was offered to the Student Army Training Corps during the war and was intended to provide students with a historical background and survey of social, economic, and political problems. A unique feature is that this course is combined with training in English. Lectures are given to all the students in large classes three times a week. Small quiz sections of about 25 students each are conducted by instructors in the English department, who have been chosen with reference to their training in the social sciences as well as in English. The students are held accountable both for the content of the course and for their oral and written expression. There may be others doing as good work as this. A considerable number are giving some instruction.

Promote Sympathy between Classes of Citizens

A part of the instruction in citizenship might well relate to the activities of the States in which we live and in our Nation with a view to helping one group to better understand and sympathize with other groups. One reason why we have so many classes and so much class consciousness is that we do not know our neighbors nor their problems and, therefore, we do not sympathize with them. It would be well for an agricultural student to take a two or three hour course to learn about the extent of engineering and industrial activities in his State and enough about the difficult problems in those lines of work to give him appreciation and respect and sympathy for the persons engaged.

Likewise it would be well for an engineering student or a home maker to receive some instruction upon the importance of agriculture and the seriousness of farmers' problems so as to give him or her appreciation and sympathy and to make them less hasty in arriving at judgments concerning those employed differently from themselves.

Just how far land-grant institutions should proceed along these special lines might well be debated. Perhaps some have gone far enough. We are operating under a group of national laws which definitely require certain activities and definitely permit others without limit. In some States the work is appropriately limited by State laws or regulations because of division of activities between two or more institutions. But it would seem that every land-grant institution could properly give much attention to the lines that have been indicated.

A Study of Land-Grant Institutions

A thorough study of the scope and the work of land-grant institutions needs to be made. The task should be assigned to a group of well-qualified persons who are familiar with the land-grant education movement and the needs of the country. These institutions have been operating half a century, some of them much longer. They have made countless changes in response to pressure of the moment. The original legislation has been supplemented by numerous laws. The situation throughout the country is vastly different than it was when the first Morrill Act was passed. Problems have multiplied. Other agencies have been created. Very much has been learned from our own experience. And we have come to realize that tax-supported education pays best when it is given to persons of good character, real patriotism, and actuated by a genuine purpose to render useful service in the world as well as to promote their own private interests.

We now should have a study of the basic laws and the whole problem with a view to show how to eliminate the least desirable, reduce that which is least profitable, and magnify that which is best suited to the purpose these institutions should serve. There is good precedent in the recent study of medical education which was financed by Rockefeller funds and has resulted in greatly strengthening education in medicine. Already engineering education is under investigation by a group of engineering educators and the work is financed by Carnegie funds. This leaves agriculture and home economics education especially in need of such a study as is proposed. Ample funds should be secured for this purpose and the work should not be done hurriedly. I believe the time has come for this constructive study, and I recommend that steps be taken to this end.

Practical School of Fisheries for Nova Scotia

A school of fisheries will be established at Halifax, Nova Scotia, in the near future. A portion of King's Wharf will be transferred to the biological board and a large building remodeled and converted into a school building and biological station.

It is expected that the school of fisheries will be to the fishing industry of this country exactly what an experimental farm is to the agricultural interests of Nova Scotia. It will work toward the development of the fishing industry, experimenting in every practical phase of it, and be a source from which those interested in the development of the fishing industry of Nova Scotia may procure information and advice.

A staff of scientists will be appointed by the biological board of Canada, and the school will function in cooperation with Dalhousie University and with the Nova Scotia Technical College. A scientific station will be maintained at St. Andrews, New Brunswick.—*W. Henry Robertson, American consul general, Halifax.*

Reward for Best High School Health Programs

All secondary schools of the United States are invited to join in a school health program contest to be conducted by the American Child Health Association. For the best three programs, judged by professional men in the health field, $1,000 will be evenly divided, the money to be used by the schools to promote health projects.

Programs submitted for the contest will be judged according to such factors as permanency, scope, workability, and community and civic significance. In more detail, these are to cover its relation to the rest of the school program; the percentage of teachers and pupils affected by it; the degree to which the program extends into the homes and communities; the practical results in relation to the money expended; and the extent to which it would appear to affect the pupils in later life.

Further information on the contest may be obtained by addressing the Secretary of the High School Project, American Child Health Association, 370 Seventh Avenue, New York City.

School Teaching Under Difficulties in Settlements of the Southwestern Desert

Extraordinary Effort Made to Provide Education for Isolated Settlers. Many Districts Employ Teachers for Children of a Single Family. Homes of Teachers Often of Crudest Description. Valuable Studies by Meredith L. Laughlin and Nellie Leona Meyer, University of Arizona Students

By JAMES F. ABEL
Assistant Specialist in Rural Education, Bureau of Education

PEOPLE of the semiarid States of the western highland are generous in their thought about providing public schools. Much of the area is desert, so dry and so unproductive that no one could possibly make a living on it. But outside of the few cities, along the streams where there is water for irrigation, in the mountains where enough of some valuable mineral has been found to support a mining camp, and on the railroads where there are trading centers or water-supply stations, there are small villages or communities. Often the community has not more than two or three families; sometimes only one, if one family may be considered a community.

Settlement of Desert Must be Encouraged

To utilize all the resources of those States men must go out into isolated places and live and work and take their families with them. The kind of men and women most needed are not satisfied to rear their children without education. nor can the State permit it. On the contrary, it must encourage settlement by being liberal in maintaining schools, So Nevada allows a school to be established where there are five census children and maintained if there are three in attendance. New districts may be formed in Arizona for 10 children. Schools for eight pupils or fewer may be held in Wyoming. In Utah, where community life is developed more highly than in any other part of the United States and the schools are centralized to an unusual degree, there are 125 one-teacher schools for about 2,500 children. New Mexico supports nearly 700 little isolated schools, Wyoming about 1,200, and Arizona 270 for 4,000 pupils.

San Xavier school and teachcrage

The people of those States in general understand thoroughly the advantages of the larger graded schools and are using transportation, school dormitories, the county unit, and anything else possible to have such schools, but at best there must be many one-room schools, often "one-family" schools. There is no way of avoiding it.

The teacher who gives a year or more of her life to one of those little schools may have a very interesting and profitable time. The probabilities are, though, that she will not.

The teacher at Vail, Pima County, and her home

Excellent accounts of the conditions of rural teaching in some of the counties of Arizona have recently been prepared by two graduate students of the University of Arizona, Meredith L. Laughlin, in a paper entitled "Status of the Rural Teacher of Pima County," and Nellie Leona Meyer, whose production is called "Status of the Teacherage of the Rural Schools in Pima County, Santa Cruz County, and Maricopa County." Neither study has yet been published.

The particular county Laughlin studied is typically southwestern, large, three-fourths desert, one-fourth productive, and that one-fourth contiguous to a small-sized city. There are a few mining camps, some very large ranches, and the usual Government stations for the Reclamation Service or for the education of the Indians.

Over half the teachers are in one-room schools. In general, these western one-room schools do not draw from the great body of normal and college trained teachers. They attract a varied group: Young women and men just out of high school who must earn something before they go on to college or the normal school—if they ever do go; older women whose families have been broken up for some reason and who must support themselves and one or two children; elderly

men and women who can not easily find places in the larger school systems; adventurous girls from Eastern States who fancy the moving-picture West to be the real West and are lured by ideas of freedom and change; homesteaders who must tide over the first unproductive years of the ranch with some outside income; seekers after health. These make up a teacher group, earnest, for the most part capable and energetic, but not so homogeneous as the grade-school group. In age they range from 20 to 67 years.

Their training varies, in so far as training may vary, as greatly as do their ages and their reasons for being in the profession. Nor is there much chance for training in service. The county superintendent, who must travel all day to visit one school or an entire week to visit two or three schools, and occasionally camp out because there is no place to stay overnight, spends more time in traveling than in supervision; and the teacher is fortunate who receives in a year more than a few hours of help from the administrative office. The western county does not as a rule hold an annual county institute. The group would be too small and the expense too great. There is the university summer school for teachers and the State institute is usually held in the fall. Transportation to and from one or both is either paid by the school or reduced fares are allowed by the railroads and stage lines.

The States hold the power of certification, and teachers from other States are granted certificates on diplomas granted in those other States on examination or records of experience and graduation. The experience is usually very limited, not more than one or two years; but here again the range is great, amounting in some cases to from 35 to 40 years and including nearly every kind of educational work.

These schools hold teachers only a short time. The pupils are few, often 10 or less, and averaging about 22; the grades number generally four or more; the day is crowded with short period recitations; the classes are of one, two, three, and four pupils, not enough to rouse interest and enthusiasm; and the school library, if there is one, consists mostly of encyclopedias, books of knowledge, and other sets dear to the heart of the book agent. They are none too acceptable to the teacher and wholly lacking in the power to draw and hold the interest of children.

A schoolhouse and teacher's home in the desert

The energetic young normal graduate who is seeing America by teaching from State to State moves on at the end of the year; the high-school boy or girl, under the urge of the superintendent or stirred by the example of former classmates, goes on to college or into other lines of work; the mother teacher finds a better place, for the sake both of her child and herself; and the homesteader, after a year or two of teaching, either puts his claim on a paying basis or gives it up and goes away. Then the little school casts about for another teacher.

One-fourth or more of the school buildings are privately owned and rented or the use is given free to the district. Such buildings are almost sure to be unfitted for school purposes, badly lighted, with no arrangements for ventilation, built of adobe or, at best, rough lumber, and unsanitary and unsightly in the last degree. There is little equipment and no playground apparatus. The district-owned buildings are better. A county superintendent will not, can not afford to, let the public money be wasted, and the larger part of the publicly owned buildings are reasonably well adapted to school use.

Salaries average about $1,250 a year in Arizona. They are considerably less than in New Mexico, Nevada, Utah, and Wyoming. Very few of the Arizona teachers reporting to Laughlin had any income other than the salary, little more than half were carrying insurance, more than one-fifth were supporting dependents, and about half were able to save something each year.

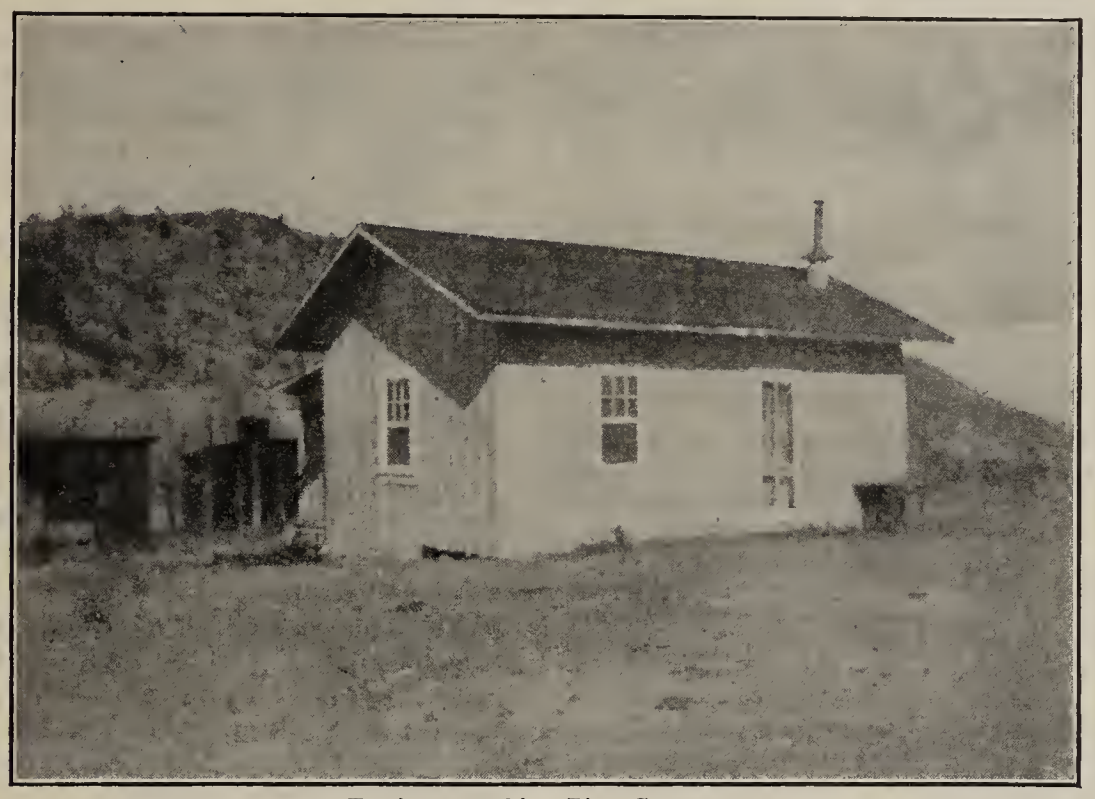
Teaching a school—any school—and doing it well is hard, trying work. The person who undertakes it should be comfortably housed, have good wholesome food, and a reasonable amount of pleasant recreation. In Laughlin's group of

Teacherage at Rillito

teachers one-fourth rented homes and kept house, one-fourth paid for board and room at the rate of about $40 a month, and a little more than one-third lived in teacherages. Half those who boarded said that living conditions were unsatisfactory either because there were no white families in the community or the best

homes were not open to the teachers. Miss Meyer tells of one teacher who boarded but cooked one meal for herself and her child "because they could not live on beans, bread, and jerky."

Teacherages would do much to solve the living problem, and in southern Arizona they are used to a considerable extent. Twenty-two out of 27 districts in Pima County have no families that will board the teacher, so teachers' homes are a necessity. There are 23—9 owned by the county, 2 by the National Government, and 12 by private corporations or persons. Those owned by the county were built at an average cost of $500 each, were erected on no definite plan, and range from a one-room shack made of railroad ties to a modern five-room cottage. Those built by the mining companies to accommodate the teachers of the mining camps are comfortable, convenient, and sanitary. Those rented to teachers by private individuals are for the most part unsatisfactory in the last degree.



Teacherage at Zinc, Pima County

The county claims to have at San Xavier the first publicly owned teacherage built in the United States. An energetic pioneer teacher, Carlos H. Tully, succeeded in getting the boundaries of the district extended until it was 8 miles wide and 46 miles long. The resulting school census of 98 children drew so large an apportionment that after Mr. Tully's salary as teacher had been paid there was $1,800 left for a teacherage and furniture. Against the opposition of the county superintendent but with the approval of the territorial superintendent, and finally with a court decision in his favor, Mr. Tully built the teacherage in 1886.

One of the rural districts of the county uses a box car for a combined schoolroom and teacher's home. In a near-by county a teacher uses as a residence a deserted section house. In another county two old school buildings were remodeled. In still another instance the district rented the teacher a tent at the rate of $5 a month. One teacher pays $8 a month for a one-room adobe house and $2 for a chore boy to carry water; she lives 18 miles from the railroad and sends in twice a month for supplies; there is no telephone and no mail service.

Thus the urge of necessity is met in a more or less aimless way by providing something or other as a "teacherage." No definite, forceful direction has yet been given the movement, nor have its principles been established.

Added to the difficulties of doing good work in the one-room school, the low salary, and the poor living conditions, there is a lack of social life. This is an important consideration for any ambitious teacher and especially so to those young people who realize that professional growth is dependent as much upon social contact and interchange of thought as it is upon study and experience.

A little more than half the rural teachers in this southern Arizona county spend their week ends in the community in which they teach. Some of the schools have parent-teacher associations and the school buildings are used for meetings of various kinds. More than half the communities offer no form of social recreation. Naturally there is little inducement for the teacher to return for a second year.

Teacher's home at Flowing Wells, Ariz.

Consolidation Is Improving South Carolina Schools

The State department of education of South Carolina, through its official journal for the year 1924–25, is promoting school consolidation. The State rural school supervisor reports, for 1922–23, 1,256 consolidated schools and only 782 one-teacher schools. Reports from 22 county superintendents state that nearly all of these counties are carrying on programs of consolidation, building better schoolhouses, extending the term length, and transporting pupils. Already in this school year Union County has consolidated 5 districts and eliminated 4 one-teacher and 2 two-teacher schools. The superintendent of Spartanburg County says that landlords in districts where there is a good school have no trouble renting their lands. This county is bettering its schools and having to enlarge many buildings because of the families that are attracted by the opportunities for their children. Among the fine consolidated schools of the State is the Fletcher Memorial School, erected as a tribute to the war service of Robert T. Fletcher by his father and his uncle.

As a means of interesting school children in the conservation of wild life a birdhouse contest was recently conducted in the public schools of Baker, Oreg. Two homing pigeons were awarded to the first successful contestant to attract a pair of birds (other than English sparrows) to make their home in a bird house of the participant's own construction.

New Books in Education

By JOHN D. WOLCOTT
Librarian Bureau of Education

BUREAU OF VOCATIONAL INFORMATION, New York. Training for the professions and allied occupations; facilities available to women in the United States. New York, N. Y., Bureau of vocational information, 1924. xii, 742 p. 8°.

The various occupational fields for women described in this volume are 23 in number, including agriculture, architecture, art, business, dentistry, dramatic work, education, engineering, home economics, landscape architecture, languages, law, library work, medicine, music, nursing, personnel work, pharmacy, public health, religious work, science, social work, and writing. Each section has a general survey giving the trend of the occupation and the status of training, and a directory of institutions where preparation for the particular occupation may be had. Under education, besides the subject in general, attention is given to the "major fields" of educational administration, educational research, and teaching, the latter both in general and with special reference to the kindergarten and to physical education. The entire field of vocational opportunities for women is covered in a comprehensive and thorough manner.

DESCHAMPS, JEANNE. L'auto-éducation a l'école appliquée au programme du Dr. Decroly, avec une introduction du Dr. Decroly. Bruxelles, Maurice Lamertin, 1924. 141 p. diagrs. 12°.

The system of auto education devised by Doctor Decroly, of Brussels, proposes to follow nature by recognizing the individual aptitudes of the pupils and giving them freedom of choice and initiative. In this respect it resembles various other methods, such as that of Madame Montessori, the Dalton and Fairhope plans; and the procedure employed in the public schools of Winnetka, Ill., and of Los Angeles. In this book a collaborator of Doctor Decroly tells how she applied his method in her teaching.

HARAP, HENRY. The education of the consumer; a study in curriculum material. New York, The Macmillan company, 1924. xxii, 360 p. tables. 8°.

Material is here presented for the study of the principles of education for effective consumption. The need is indicated for the utilization of quantitative evidence as a basis for curriculum reconstruction, for which a complete method is proposed requiring the cooperation of the sociologist, the psychologist, and the administrator in education. The task undertaken by the writer is the determination of educational objectives for effective economic life with special reference to the consumption of commodities. Quantitative evidence regarding the present habits of the American people is adduced and compared with efficient practice and approved standards, respecting foods, housing conditions, household materials and skills, fuel, and clothing. The conclusions from this comparison are presented as objectives of education with reference to consumption.

KANDEL, I. L. The reform of secondary education in France. New York city, Teachers college, Columbia university, 1924. viii, 159 p. 8°. (Studies of the International institute of Teachers college, Columbia university, no. 2.)

The changes in French secondary education which were decreed in 1923 under M. Léon Bérard as minister of public education and fine arts are described in these pages, with a statement of the historical development preceding the measure. The present government of France has decided not to put these changes into effect. The greater part of Doctor Kandel's volume consists of an appendix containing documentary material relating to the proposed reform.

KELLY, ROBERT L. Theological education in America; a study of one hundred sixty-one theological schools in the United States and Canada. New York. George H. Doran company [1924] 456 p. plates, tables, diagrs. 8°.

This inquiry was made under the auspices of the Institute of social and religious research, New York. In view of the fact that no thoroughgoing study of American theological seminaries had ever been made, it was believed that a careful investigation of Protes tant seminaries and a presentation of the results might be helpful in increasing the number and bettering the quality and distribution of Christian ministers. The data for the study were collected by means of questionnaires, supplemented by numerous personal visits to institutions and the consultation of printed sources of information. The material was subjected to thorough criticism and verification before publication. The book is not merely statistical, but it undertakes also to interpret the spirit and the tendencies underlying the service of the seminaries. Some topics discussed are the efficiency of theological seminaries as at present constituted, the grade of scholarship produced by them, the relation of the seminary to the university, seminary curricula, and the types of ministerial character created. The available facts do not show that there is a falling off in recent years in the proportion of men studying for the ministry of Protestant white churches.

KOOS, LEONARD V. The high-school principal; his training, experience, and responsibilities. Boston, New York [etc.] Houghton Mifflin company [1924] xiv, 121 p. diagrs. 12°. (Riverside educational monographs, ed. by H. Suzzallo.)

The chief purpose of the investigation underlying this volume, according to its author, is to inquire into the extent to which the high-school principalship has been professionalized, as well as to assist in marking out the lines of its further professionalization. To supply the data for this study, inquiry blanks were received from the principals of 421 high schools, comprising groups representing all sizes of schools and all the principal divisions of the United States. Topics covered are the sex distribution and salaries of principals, the principal's training, his experience and professional stability, his time for administrative and supervisory activities, and his responsibilities. The book gives a concise summary of the main results of a comprehensive inquiry into the present status of American high-school principals.

LISCHKA, CHARLES N. Private schools and State laws. Washington, D. C., National Catholic welfare conference, Bureau of education, 1924. 220 p. 8°. (Education bulletins, no. 4. October, 1924.)

This book is especially intended for the information and guidance of those who administer and control private education in America. It gives only the text of laws and decisions, without attempt at interpretation. Contains the text as well as a classified summary of all State laws governing private schools, in force in 1924, together with State constitutional provisions and some important judicial opinions; also State laws and State Supreme court decisions governing Bible reading in the public schools.

OSBURN, WORTH J. Corrective arithmetic; for supervisors, teachers, and teacher-training classes. Boston, New York [etc.] Houghton Mifflin company [1924] x, 182 p. tables. 12°.

How the teaching of arithmetic in the schools may be made more effective, is told in this study by the director of educational measurements of the Wisconsin State Department of public instruction. Analyzing the errors in arithmetic made by children in various cities, Dr. Osburn finds that they are typical and not merely of a haphazard nature. Having determined this fact, he undertakes to devise a method to meet these typical difficulties. Dr. R. B. Buckingham contributes an editor's introduction to the book, which is designed to aid teachers of arithmetic, and their trainers and supervisors.

RANDOLPH, EDGAR DUNNINGTON. The professional treatment of subject-matter. Baltimore, Warwick & York, inc., 1924. 202 p. 8°.

The special concern of this study is with the treatment given to subject-matter in professional schools devoted to the education of teachers.

SPAIN, CHARLES L. The platoon school; a study of the adaptation of the elementary school organization to the curriculum. New York, The Macmillan company, 1924. xviii, 262 p. illus., diagrs., tables, plans. 12°.

Every new type of school organization must stand the following tests: It must square with the past; it must serve the present; it must hold abundant hope for the future. The present monograph by the deputy superintendent of schools, Detroit Mich., undertakes to subject the platoon school organization to these tests. It traces the evolution of the American elementary school curriculum from its European beginnings to the present, including twentieth century tendencies. The evolution of the elementary school organization is then similarly outlined, culminating with the reorganization of the Detroit elementary schools, 1918-1924, and the adoption of the platoon school in that system. Next comes the evolution of the elementary school building, and a discussion of educational results, costs, and the personal equation in the Detroit platoon schools. Various controversial questions concerning the platoon school are then taken up and answered. In conclusion, reasons are given for considering the platoon school system a success.

WAPLES, DOUGLAS. Procedures in high-school teaching. New York, The Macmillan company, 1924. xx, 346 p. illus. 12°. (American teachers college series. J. A. H. Keith and W. C. Bagley, editors.)

This text makes an application of the problem method of attack to the teaching of methods of instruction in high schools. A number of typical problems which arise in the school room are presented in such a way that while the students are securing a solution of these problems, they are at the same time learning the general methods and principles. The principles of teaching are not elaborated in the text, but in the references supplied in connection with the various problems.

For The Christmas Program

Seven Good Christmas Books

The Book of Christmas. New York. Macmillan. 1909. 369 p.

In the eight-page introduction by Hamilton Wright Mabie he says, "At the end of nearly two thousand years Christmas shows no signs of decrepitude or weariness; its danger lies not in forgetfulness but in perverted use and over-stimulated activities. . . . If Christmas is to be saved from desecration and kept sacred not only to faith but to friendship its sentiment must be revived year by year in the joyful celebration of the old rites." The book thus introduced, in its interesting accounts of customs, beliefs and revels, as truly as in its inclusion of beautiful carols and hymns, has certainly helped to revive these beautiful old rites. An extract from F. Hopkinson Smith's "Colonel Carter's Christmas" forms a fitting ending. Almost overwhelmed with the joyousness of the season, the reader sees "Aunt Nancy float into the room like a bubble blown along a carpet." Even those beset by care find themselves transferred to a room in which a window has been opened "letting in sunshine and the perfume of flowers."

Brown, Abbie Farwell. The Christmas Angel. Boston. Houghton Mifflin Company. 1910. 82 p.

Many young teachers will remember with joy their delight in this book when as children from eight to fifteen it was read to them by their teachers or placed on the children's Christmas shelf in the public library! They will want their pupils to know it. The author was doubtless steeped in Dickens' "Christmas Carol" and was inspired by it to write this story. The somber house in which eccentric Miss Terry lives alone is contrasted with the happy home in which Angelina Terry, 50 years before, lived and frolicked with her brother. Did such strange adventures ever before befall battered toys? Every Noah's ark and every cherished doll, whether or not named Miranda, are forever afterward dearer to child readers of this story. The happy sequel, when the reunited brother and sister and the little waif Mary sit down together to Nora's hastily prepared Christmas dinner, is almost as fascinating as its well known prototype, the Cratchitt family party which included Tiny Tim.

Phillips, Ethel Calvert. Christmas Light. Boston. Houghton Mifflin Company. 1922. 128 p.

This story of Naomi, the little Jewish girl, the daughter of Samuel the weaver, is well told. The household customs, the familiarity of all with the Old Testament stories, the unexpected opportunity which came to Naomi to accompany her aunt to Jerusalem, and the vision of the great gold and white temple of the Hebrews are incidents preparing the reader for the climax—the sight of the King in lowly Bethlehem.

Pringle, Mary P. *and* Urann, Clara A. Yuletide in Many Lands. Boston. Lothrop, Lee & Shepard Co. 1916. 197 p.

A series of pictures passes before us. The Yuletide greetings and mistletoe of the Druids; the Saxons drinking from the quaint, round-bottomed tumblers which, as they could not stand, had to be emptied at a draught; the English Yuletides—"the merriest Yuletides of the past were in England"; the German Christmas with its happy families around the Christmas tree, for Christmas in no other country is so fully and heartily observed in every household; Miguel and Dolores in Spain; until finally the American Christmas known and loved by all is described. The book is a fitting record of the fact that through many centuries and in many lands Yuletide has brought joy and happiness to young and old.

Schauffler, Robert. Christmas. New York. Moffat, Yard & Co. 1907. 325 p.

In an introduction of 11 pages the compiler declares his intention to introduce parents and teachers "to the host of writers, learned and quaint, human and pedantic, humorous and brilliant and profound, who have dealt technically with this fascinating subject of Christmas." The accounts of the origin, celebration, significance, and spirit of Christmas time add much of the background often lacking. The range of poems and stories is varied: Dickens, Milton, Walter Scott, Margaret Deland, Irving, Phillips Brooks, and Hans Christian Andersen contribute of their classic store. Perhaps Bret Harte's "Santa Claus at Simpson's Bar" which closes the volume finds itself for the first time associated with such decorous companions. Nevertheless, no reader who follows the tragedy of poor Dick until the cheap, flimsy toys in his pack are revealed as his contribution to Johnny's "Chrismiss" fails to find his interest aroused in helping the unfortunate children of poverty, wherever they are found, to get more Christmas cheer into their forlorn lives.

Skinner, Ada *and* Skinner, Eleanor. The Pearl Story Book. Stories and Legends of Winter, Christmas, and New Year's Day. Duffield. 1919.

The sister compilers rightly believe that Christmas is a part of winter and that its celebration depends upon its setting. Many new selections that are certain to prove favorites are included. A delightfully whimsical one is John P. Peters' fanciful tale of The Animals' Christmas Tree. The authors' happy thought in including Oscar Wilde's "Happy Prince" will be appreciated. Children in the intermediate grades will gladly read this book without any help from teachers or parents.

Smith, Elva S. *and* Hazeltine, Alice I. Christmas in Legend and Story. Boston. Lothrop. 1915. 283 p.

The compilers of this book from their vantage ground of experience in the Pittsburgh Carnegie and the St. Louis Public Libraries found it very difficult "to find Christmas stories and legends which have literary merit, are reverent in spirit, and are also suitable for children. This collection has been made in an endeavor to meet this need." In no other collection perhaps is the Christmas of the Middle Ages so faithfully set forth. Fiona MacLeod's story of the children of the wind and the clan of peace is told as the old Highland woman told it to her, "in words simple and beautiful with the ancient idiom." The mystic thorn which blossomed at Glastonbury, England, from the planting of Joseph of Arimathea's staff is adapted from traditional sources by Selma Lagerlof. In eight pages Adelaide Steel tells the story of Babouscka who will not stop; only on Christmas Eve will she come upstairs into the nursery and give each one a present from her old apron. Sophie Jewett tells from her "God's Troubadour" the story of the Christmas at Greccio where St. Francis met with his people and the ringing bells, lighted torches, glorious hymns, and joyous shouts made one of the most vivid of all recorded Christmas times.

A Few Additional Titles

Four Collections Which Are Deservedly Popular

A Christmas Anthology. New York. T. T. Crowell & Co. 1907.

Deming, Norma H. *and* Bemis, K. I. Pieces for Every Day the Schools Celebrate. New York. Noble & Noble. 1922. 349 p.

Dickinson, A. D. *and* Skinner, A. M. Children's Book of Christmas Stories. New York. Grosset & Dunlap. 1917.

Stevenson, B. E. *and* Stevenson, E. S. Days and Deeds. New York. Baker & Taylor Co.

Seven Stories With Christmas as Their Theme

Alden, Raymond M. Why the Chimes Rang. Indianapolis. Bobbs Merrill Co. 1920.

Brady, Cyrus Townsend. A Christmas When the West Was Young. Chicago. A. C. McClurg & Co. 1913.

Dickens, Charles. A Christmas Carol. New York. E. P. Dutton & Co. 1914. 124 p.

Gladden, Washington. Santa Claus on a Lark. New York. The Century Co.

Stuart, Ruth McEnery. Solomon Crow's Christmas Pockets, and Other Tales. New York. Harper & Bros.

Van Dyke, Henry. The Story of the Other Wise Man. New York. Harper & Bros. 1913.

Wiggin, Kate Douglas. Bird's Christmas Carol. Boston. Houghton Mifflin Co. 1916. 69 p.

Poems Specially Appropriate to Christmas

[These poems are included in the foregoing books, though not all are in any one of them. Eighteen are in "Christmas" (by Schauffler), 11 are in "The Book of Christmas," 9 are in "A Christmas Anthology," 6 are in "Days and Deeds," etc. Many other books contain them.]

1. O Little Town of Bethlehem. Phillips Brooks.
2. The Earth Has Grown Old with Its Burden of Care. Phillips Brooks.
3. Like Small Curled Feathers White and Soft. Margaret Deland.
4. 'Twas the Night Before Christmas. Clement S. Moore.
5. Why Do Bells for Christmas Ring? Lydia A. C. Ward.
6. It Was the Calm and Silent Night. Alfred Domett.
7. God Rest You Merry Gentlemen. Dinah Maria Muloch.
8. As Joseph Was A-Walking. Old English Ballad.
9. I Saw Three Ships Come Sailing In. Old English Carol.
10. There's a Song in the Air. J. G. Holland.
11. Now Has Come Our Joyful'st Feast. George Wither.
12. Under the Holly Bough. Charles Mackay.
13. Brightest and Best of the Sons of the Morning. Reginald Heber.
14. Christmas Bells. H. W. Longfellow.
15. The Three Kings. H. W. Longfellow.
16. On Christmas Eve the Bells Were Rung. Walter Scott.
17. Good News from Heaven the Angels Bring. Martin Luther.
18. While Shepherds Watched Their Flocks by Night. Nahum Tate.
19. The Mahogany Tree. William M. Thackeray.
20. What Means This Glory Round Our Feet? James Russell Lowell.

—*Annie Reynolds.*

[AMERICAN EDUCATION WEEK—1924]

By the President of the United States of America

A Proclamation

EDUCATION for the children of all the people, extending from the primary grades through the university, constitutes America's noblest contribution to civilization. No child or youth in the United States need be deprived of the benefits of education suited to his age and degree of advancement.

Nevertheless, either through negligence or because of unfortunate circumstances which might be controlled with sufficient effort, large numbers of children do not receive the full preparation for their life's work to which they are justly entitled. Many have reached maturity without even the rudiments of education.

This condition demands the solicitude of all patriotic citizens. It involves not only the persons immediately concerned and the communities in which they live, but the Nation itself, for the welfare of the country depends upon the character and the intelligence of those who cast the ballots.

Education has come to be nearer to the hearts of the American people than any other single public interest. The plan of maintaining educational institutions from public funds did not originally prevail in most of the States, and even where it was in use it was but feebly developed in the early days of the Republic. That plan did not arise spontaneously in the minds of all citizens. It was only when the suggestion came forcefully, convincingly, and repeatedly from a few pioneers that popular interest was fully aroused. Vigorous campaigns were required not only to establish the idea of public education, but also for its maintenance, and for its important extensions.

Campaigns of national scope in behalf of education have been conducted annually since 1920, and they have been increasingly effective with each succeeding year. They have concentrated attention upon the needs of education, and the cumulative impetus of mass action has been peculiarly beneficial. It is clearly in the interest of popular education, and consequently of the country, that these campaigns be continued with vigor.

In the last few years we have placed much emphasis on vocational training. It is necessary for men to know the practical side of life and be able to earn a living. We want to have masters of our material resources. But it is also necessary to have a broad and liberal culture that will enable men to think and know how to live after they have earned a living. An educated fool is a sorry spectacle, but he is not nearly so dangerous to society as a rich fool. We want neither in this country. We want the educated to know how to work and the rich to know how to think.

NOW, THEREFORE, I, Calvin Coolidge, President of the United States of America, do designate November 17th to 23rd, inclusive, as American Education Week. I urge that the citizens do all they can to advance the interests of education. It is especially recommended that the Governors of the States issue proclamations emphasizing the services rendered by their educational institutions, and calling upon their people to observe the occasion by appropriate action. Further, I urge that all civil officers whose duties relate to education, and all persons connected with the profession of teaching, exert themselves to diffuse information concerning the condition and needs of the schools and to enhance appreciation of the value of education. Patriotic, civic, religious, social, and other organizations could contribute by conducting meetings and demonstrations to promote the desire for knowledge. Ministers of religion and members of the press are asked to exercise the means within their power to increase enthusiasm for educational advancement and to stimulate zeal for enlightened citizenship.

In Witness Whereof, I have hereunto set my hand and caused the seal of the United States to be affixed.

DONE in the City of Washington on this 14th day of November in the year of our Lord One Thousand Nine Hundred and Twenty-four and of the Independence of the United States, the One Hundred and Forty-ninth.

[SEAL]

Calvin Coolidge

By the President:
CHARLES E. HUGHES
Secretary of State.

SCHOOL LIFE

Volume X
Number 5

January
1925

ARMY WAR COLLEGE, THE APEX OF THE EDUCATIONAL SYSTEM OF THE UNITED STATES ARMY

Published Monthly [except July and August] by the Department of the Interior
Bureau of Education Washington, D. C.

GOVERNMENT PRINTING OFFICE

CONTENTS

SCHOOL LIFE is not an educational newspaper, nor an educational review. On the one hand, the field is so broad and the happenings are so many that no one periodical could possibly print accounts of all the events of even reasonable importance. On the other hand, profound discussions of abstruse questions would not in general come within the Congressional injunction to diffuse educational information and would not appeal to the major part of the teaching fraternity. That field furthermore is fully covered by the technical journals of special character.

The effort is made to present a magazine so diversified as to be of value and of interest to all who are engaged in the work of education. The hope is entertained that the constant reader of SCHOOL LIFE, whoever he may be, will have a good understanding of the conditions and tendencies of education in the United States and a reasonable knowledge of educational trends in other countries. Personalities, mirth, and pedantry are equally avoided, for there is no space for them.

To say that SCHOOL LIFE is an organ of the Bureau of Education means not only that its contents are examined and approved by the head of the Bureau but that it has the benefit of the participation and the contributions of the members of the staff of the organization.

SCHOOL LIFE is published monthly except in July and August. The subscription price, 50 cents a year, covers only the actual cost of printing and distribution, and does not include any cost of preparation or of the mechanical processes which precede actual printing. Advertisements are forbidden by law. Subscriptions should be sent to the Superintendent of Documents, Government Printing Office, Washington, D. C.

SCHOOL LIFE

Published Monthly, except July and August, by the Department of the Interior, Bureau of Education
Secretary of the Interior, HUBERT WORK - - - - - *Commissioner of Education,* JOHN JAMES TIGERT

VOL. X WASHINGTON, D. C., JANUARY, 1925 No. 5

Army's Principal Peace Problem to Teach Soldiers to Train Others

Standing Army Necessarily Small and Insufficient in Serious Emergency. Facility for Rapid Expansion of Military Resources the Essential Objective. "Applicatory Method" of Instruction Developed and Put in Successful Operation. Modern Military Operations Depend upon Small Units. Individual Intelligence a Prime Factor. Civilian Educators Aid in Developing Military Texts

By JOHN W. WEEKS, *Secretary of War*

CIRCUMSTANCES control the educational methods which have to be adopted by the military establishment. Our national policy with reference to armed forces requires the maintenance of a standing army relatively very small in proportion to the size of the forces we should have to raise in any except very minor emergencies. We depend, by and large, upon the utilization of the citizen man power of the country and upon their adaptability from the ways of peace to the methods of war. With such a policy, the safety and security of the country depends, to a large degree, upon the efficiency of our methods of instruction—upon the rapidity and thoroughness with which those already familiar with military matters will be able not only to train and instruct those not normally concerned with such matters, but also to perform duties far more difficult than any duties of their pre-war rank.

Superficially, the chief difference between civilian occupations and military work seems to be a difference in equipment. The soldier wears a uniform; the civilian wears a sack suit. The soldier carries a rifle; the civilian a cane or an umbrella. The soldier walks; the civilian takes the street car or travels by automobile. It might appear, at first glance, that the principal thing to be done in converting a civilian into a soldier would be to furnish him with a uniform, to arm him with weapons of the branch of the service in which he will fight, and to train his muscles and nerves to the physical effort which military operations require. It is also, of course, necessary to prepare and redirect manufactories and material resources from peace to war purposes and effect an industrial mobilization closely correlated with the development of man power.

Yet, there is more than this. Battles are not won by drawing up balance sheets of man power, armament, and physical strength. The victory goes to that force which can most intelligently apply its material factors in an effective way. Battles are won by the same principle, the same factors, and the same traits of character which bring success in the industrial and commercial world.

In order to insure the success of our arms in the defense of this country, the War Department has developed and successfully put into operation what is known as the applicatory method of instruction. This method consists chiefly in giving the student a problem in which he is required to apply the material at hand according to the sound principles of method in order to accomplish the result required.

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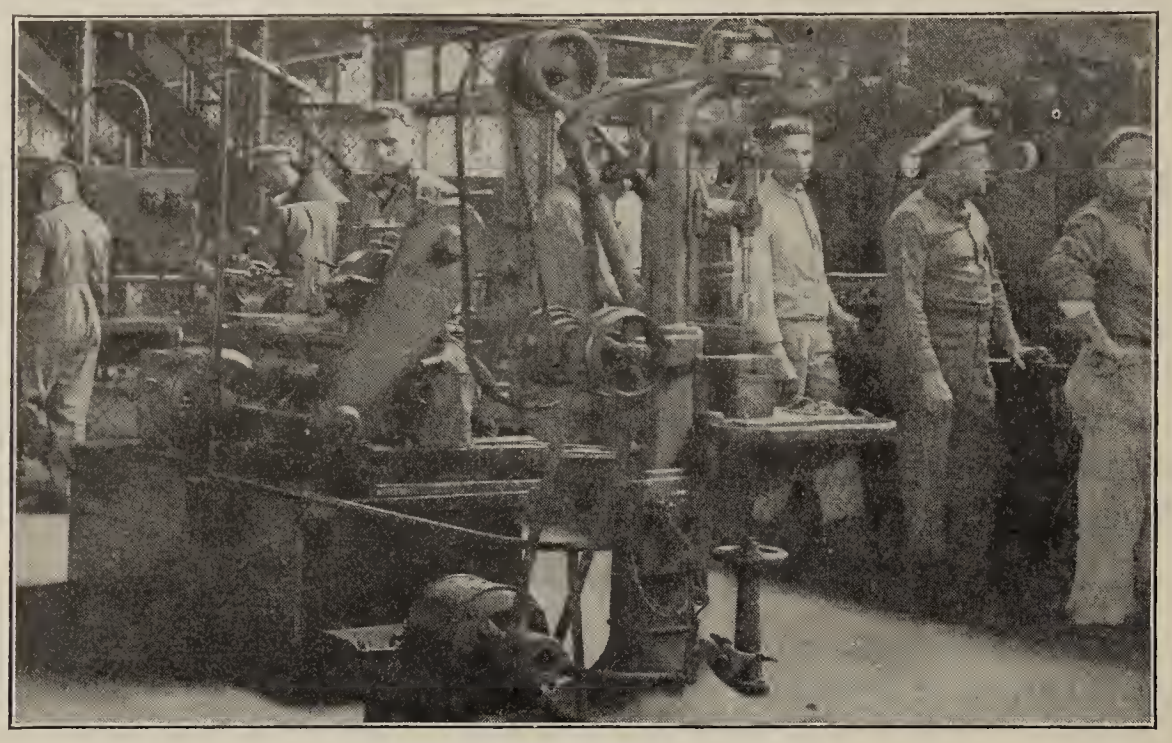
After the student has solved a series of problems of this sort he acquires facility in the art of executing the details of his work. The situations in the problems given him vary because the situations in the Military Establishment continually vary. The principal need is to develop in the student clear thinking and efficiency in working with his materials according to sound principles. These things are developed by this method. By this method the American Army expanded itself during the World War almost forty times.



Electrical laboratory at Motor Transport School

This method of military instruction has been applied to all things that have to be done in Army work. Since the modern army in active operations is a large organization with complicated equipment, utilizing all the appropriate devices of modern civilization and modern science, it naturally follows that training given Army men deals, in a large number of cases, with the same type of material as civilians use in civilian occupations. It is apparent, even to the uninitiated, that the Army has its doctors, lawyers, clerks, accountants, motor mechanics, blacksmiths, teamsters, and a host of other specialists. It has radio experts, telephone experts, transport experts, and administrative experts. In developing the technique of instruction in these matters, the Army has contributed in no small degree to the development of educational technique and method in general.

Each Individual for His Proper Place

When a nation transforms its civilian man power into military man power, the first essential is to place individuals where they will be of the most use. Since the Military Establishment includes a large number of specialists whose work parallels and is correlated with special work in civilian occupations, it is necessary to place those experts in a position where their previous experience will be of greatest practical value. The first step in our educational organization has therefore been concerned with standards. It has been to draw up specifications for the various military occupations with the assistance of expert educational leaders.

The War Department has prepared a series of minimum specifications for all military occupations. For instance, the degree of skill and knowledge and the personal traits required for troop leaders, mess sergeants, supply sergeants, radio operators, automobile mechanics, and specialists of all classes has been carefully determined in consultation with labor experts. Next, tests have been devised to determine rapidly the exact degree of qualification of each person in the work which will be assigned to him. Then methods of training have been adopted which will shorten the periods of practice and instruction in order to develop the skill and impart the special knowledge required of these individuals. This work, which has been going on ever since the World War, has reached a point where it is possible to say that in many lines the Army work in defining instruction and classifying it into unit operations represents a distinct advance in the educational field. Although there are exceptions, and although the "problem method" or "project method" of instruction has been used to some degree in civilian educational circles, it can nevertheless be stated that the Army is taking the leadership in this work.

Army's Experience Useful to Civilian Education

Civilian educators at the University of Nebraska, University of Minnesota, and Columbia University have spoken in the highest terms of the psychological soundness and practical efficiency of military methods of instruction. The series of training pamphlets thus far completed—dealing with instruction in rifle marksmanship, close-order drill, communication work, carpentry, motor mechanics, and other similar subjects—have been scrutinized by scholars in educational method and have been uniformly indorsed. Uniformity in instruction and insistance on the attainment of certain standards before beginning learning, and at the end of the learning process, will, it is believed, do much to improve educational method and to stimulate efficiency among expert workmen throughout the country whether these be in the Army or outside.

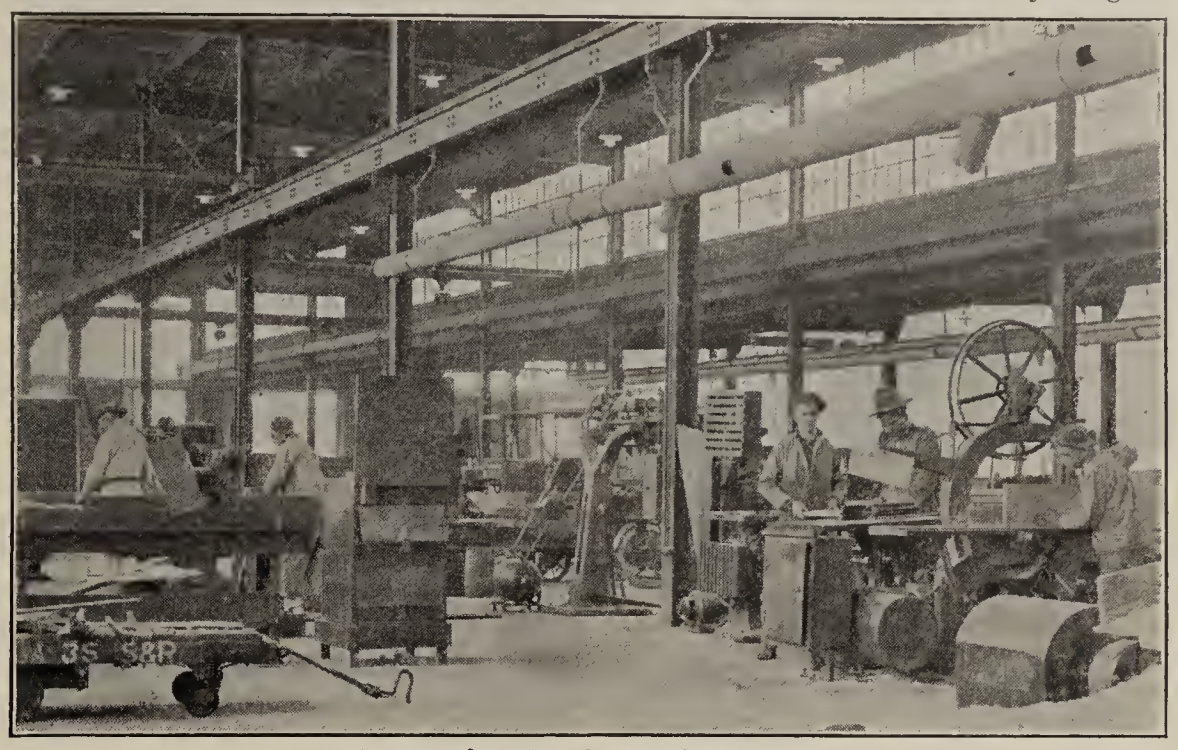
Enlisted group instructed by an Army finance officer

The essence of the military spirit lies in an appreciation of the need of cooperation for the furtherance of the common plan and in the development of individual responsibility and initiative within the scope of the activities of the individual. The applicatory method is not a mere "problem method" nor a "project method" devised to create interest. It does not cater to the whims or the individual fancies of separate persons. It has been developed so as to obtain the greatest good for the greatest number and to secure uniformity in operation and a loyal consistency in performance within the Military Establishment. There is no inclination to make Army work essentially agreeable or pleasant or to consider instruction periods in any sense dependent upon a "play spirit."

Develop Interest and Pride in Achievement

Military instruction is carried on always under the impelling demand for practicality and an intense seriousness of purpose for the good of the country. By defining objectives and standardizing our tests, we develop the natural motives of competitive interest and pride in achievement. A driving force is not needed. The instructor leads because he is qualified to lead and because all are headed in the required direction.

An inclination still seems to exist to interpret military affairs in terms of mere obedience. There is a tremendous difference between mere obedience and loyalty. Loyalty and discipline in the Army imply a sense of duty and attitude of mind which will insure each individual's doing his own job in conformity with the common plan. The individual has his sphere of action. Within that sphere he has his responsibilities. His responsibilities impel him to work and make his own decisions and act, when occasion demands, on his own initiative. Subordination is not subordination of the individual, but rather the allocation of the individual to his own particular part of the general task, upon the successful accomplishment of which individual part the successful accomplishment of the general task depends.

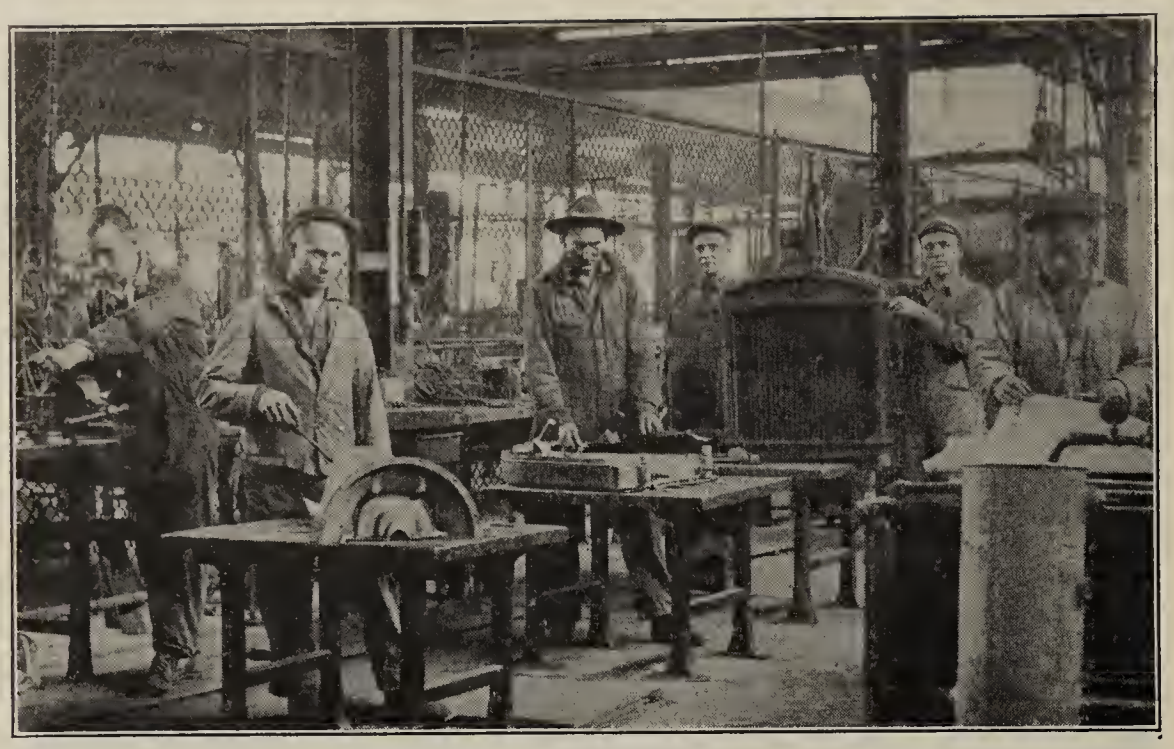


An up-to-date shop for teaching carpentry

In other days, generals stood on hilltops and directed their armies in person. Colonels have led their lines of soldiers into action. But now the subordination is so complete and extends so far that individuals of high rank have lost direct control. They give instructions and general directive orders. The work of an army now depends upon the coordination of the activities of separate platoons, of separate squads, and even, in a large number of cases, of separate individuals, for now troops on the battle line are scattered over a wide area. There are no serried rows of soldiers marching to the assault. There are groups of men, each assigned to its objective, groups sometimes as large as a platoon or company, and sometimes as small as individual squads of eight men, and even in the squads the individuals are scattered over a width of 40 yards instead of standing shoulder to shoulder like the red coats of the historic British squad or the veterans who faced one another at Gettysburg.

With such a method of warfare imposed upon us and with the necessity of each individual knowing his job, and with our military policy of depending in the main upon citizen man power, the major military problem is a problem of training. It is not only a problem of training the individual soldier, but it is also a problem of training the individual soldier how to train other soldiers. When Regular Army units are expanded in time of war; when inactive units are filled to their full complement; when Guard units add recruits to their numbers; when reserve officers enroll and train the citizen man power of the country; when organizations which have come through early engagements have

Training in radio transmission and receiving at Plattsburg Barracks, N. Y.



Sheet metal and radio repair laboratory

to receive additions and replacement, the essential problem is, necessarily, training and instruction.

Problem of Utilizing Man-Power

We do not train our entire citizenry to the tasks of war as the citizenry of Switzerland is trained under compulsory service. We train those whom we enroll in time of peace, and teach them how to train others. We train our leaders; we train our instructors; every man who wears the uniform will have to become, in the hour of emergency, an instructor of those men who do not know the military ways or the military means. By attaining efficiency in training methods, by devising training methods in conformity with the temper of the American mind, and the spirit of the American people, the Military Establishment is conforming to the principles by which we hope to secure that common defense of the American States which the Federal Constitution was devised and adopted to secure. National defense is a problem of the utilization of man power. Training for active operations to-day is a complicated problem in training man power. But so are other things problems of training in the mass. Man power must be trained to develop the best results in industry and in civic education.

Although we are officially concerned with training methods, only as they affect our military problems, we are naturally glad if, in solving our own difficulties, we live up to the historic tradition of the American Navy and develop ideas and practices of general benefit to the American people. The Army serves the country, and serves it, not only in time of war but also in time of peace, by providing a host of by-products of which the peaceful activities of the Nation can take profitable cognizance. Looking at our educational method in such a manner, we like to believe that we are rendering service to the American people in other than military ways. That we are devising means by which all the potential possibilities of our population may be developed.

Hundred Visiting Teachers in United States

"Liaison Officers" to Maintain Contact Between Home and School. Regular Teacher Unable to Visit Pupils' Homes

By EDITH A. LATHROP
Assistant Specialist in Rural Education Bureau of Education

THE VISITING TEACHER: Once the teacher "boarded round" and incidentally became acquainted with the home life of her pupils, but those good old days have disappeared. The teacher, however willing she may be to visit the homes in her community, can not find the time after teaching all day and preparing for her next day's work. In order to connect the home and the school in a more vital way the visiting teacher has made her appearance. This teacher visits the homes to discover the causes of maladjustment between the child and the school and to assist in its readjustment.

There are at present more than 100 visiting teachers in the United States, representing practically two-thirds of the States, more than 50 cities, and a few counties.

In Monmouth County, N. J., the visiting teacher works with the county psychiatric clinic, the public health nurses, and the general social workers.

In Huron County, Ohio, the visiting teacher has undertaken a county program for community betterment. One of the means for carrying out this program is the adoption of a community score card.

Boone County, Mo., has recently employed a visiting teacher. Her work is assured the hearty cooperation of the school boards, the county superintendent, department of sociology of the State University, and the dean of Stevens Junior College. Both of these institutions are located at Columbia, the county seat.

Home Economics Leading to Science Degree

A new general "major" in home economics, with minimum science requirements, has been installed this year at the University of Wisconsin. "Food, clothing, shelter, and applied psychology relating to the family group" may be combined with the regular college requirements in English, foreign language, and science, leading to the B. S. degree.

By this arrangement a double teaching major may be obtained through combination of the education courses required for a teacher's certificate with a major in letters and science and the general major in home economics. A graduate may thus be prepared for positions in the field of interior decoration, advertising, or journalism.

Oil Royalties Used for Current Purposes

A question has arisen in Wyoming as to whether or not distribution of oil royalties accruing from State school lands is legal. The act admitting Wyoming to the Union provided that the proceeds of the sale of school lands should be made a part of the State permanent school fund. The supreme court of the State has held that the sale of oil is a sale of the land, because it is a part of the land and part of its permanent value. A majority of the voters at the recent election expressed approval of an act by the legislature which would permit current distribution of oil royalties up to one-third of the amount received. Some contend that this one-third also should be placed in the permanent fund.

Recent Marked Growth of Colombian Library

The National Library of Bogota was founded in 1767 with a basis of about 4,000 volumes, practically all theological or text books. The following year it was made the nucleus of the Royal Library, and in 1823 it was opened in new quarters as the Biblioteca Nacional. At that time there were about 12,000 volumes. Its shelves now contain more than 100,000 bindings.

The main library is open to the public for reference, and a monthly review is issued to acquaint readers with the facilities of the institution. Books are loaned at a rental of 20 centavos a week.—*Samuel H. Piles, American Legation, Bogota, Colombia.*

Service the Needed Spirit of Modern Science Instruction

Best Secondary Education is Best, Regardless of College Attendance. Public Funds Most Readily Procured for Science Teaching. Constant Increase in Number of Students of Science. Unprecedented Growth in Branches of Science. Secondary Courses Strikingly Similar to College Courses. Dissatisfaction with Many Introductory Courses. "General Science" Shows Remarkable Growth in Favor.

By OTIS W. CALDWELL
Director Lincoln School, Teachers College, New York City

THIS DISCUSSION proceeds upon the theory that the best education for young people of secondary school age should be best for them whether they do or do not go on to college. Further, it is assumed that those who go to modern colleges, as those who do not go, are in great need of a sound general education touching upon the knowledge and the arts which enter into current life. All need an education which shall illuminate knowledge and art and by use of them shall develop attainable social and personal ideals concerning those aspects of modern knowledge and arts which enter into the lives of young people. It may even be argued that those who go to college are, in proportion to their numbers, more greatly in need of a socially meaningful secondary education, since they are later to have opportunities for larger intellectual influence and thus need to be more secure in their understanding of the real human services of modern secondary and collegiate scholarship. A further basis of this discussion is found in the fact that much more study has been made in the past decade bearing upon improvement of secondary school subjects and methods than has been made in college subjects and methods. Therefore, it is appropriate that college subjects and requirements shall be studied, to the end that they may adequately continue the slowly but definitely improving secondary school subjects.

Advancement in Science Exceeds Other Branches

In the following discussion of the sciences, it is not to be inferred that they are regarded as being either more or less important than other subjects of instruction. It is probably true that more advancement has recently been made in science instruction than in most other secondary subjects.

II. *The public believes in science.*—It is not news to state that appropriations of public funds are more readily procured for agriculture, for household arts, or for engineering than for most other purposes. So well recognized is this fact that programs for general education or for other purposes are frequently associated with applied science for the sake of the increased hope of successful support. The common people believe in the kinds of science which yield benefits which they can see clearly and soon. They are slowly, but steadily, coming to believe in the development of scientific principles whose fruits may be more ultimate but possibly more important.

Benefits of Scientific Discovery Quickly Accepted

III. *The public uses science.*—The public use of science is so constant as to make even a meager picture of it impossible. All our working days and all our sleeping nights are ordered upon the uses of modern sciences. Surely no advocate of an improved science teaching can quibble about the public's being slow to use the material fruits of modern science knowledge. There may be a few belated users of science, but natural processes of removal of the ill-adjusted seems soon to catch those who lag too far behind the advancing crowd of modern peoples. Educationists need have no great worry as to whether the immediate material benefits of scientific discovery will be accepted by most people. Whatever may be thought or said about the educational use of the sciences in schools and colleges, current life has accepted the sciences, and constantly asks, expects, and receives the cumulative material benefits of modern scientific thought.

IV. *Science is everywhere, both in affairs and in schools.*—The quantitative use of the sciences in common affairs and in schools and colleges is now more extensive than at any preceding time. Dr. E. R. Downing, who has given much time to a study of the sciences in Europe and in America, says that we teach as much science in elementary schools as is taught in Europe, and that it is done better in this country. Also during the past 10 years there has been an increase in science in the elementary schools of the United States.

In high schools there has been large increase in the quantity of science instruction, the greatest increase having been in those commonwealths in which definite programs of science sequences have been adopted. In Pennsylvania, for example, in the State report of 1923, a student registration increase of 19.8 per cent is recorded in one year, based upon a calculation including all four-year high schools within the State. So far as recorded this is the largest yearly increase in any State.

In colleges and research institutions, there has been great increase in the provisions for and acceptance of opportunities for work in the sciences. Independent industries have very generally established research departments which are adequately supported and are manned as well as it is possible for them to be with the present training of research workers. New science knowledge is constantly coming from these and other centers of careful study, to such an extent that we are no longer surprised to have our daily paper make announcements of discoveries of very great import. Great discoveries are now so frequent that we note them almost as the expected content of the daily press.

Secondary Courses Summaries of College Courses

V. *What has caused the change in the science situation in high schools?*—The recent and unprecedented growth and refinement of science knowledge has produced many new branches of science, each with its own "ology"; each with its own body of special knowledge, methods, and special workers. In many cases these special and highly refined subjects were crowded into the secondary schools, and at the same time the ancestral body of common aspects of science were crowded out. The secondary courses became summaries of collegiate courses, not elementary insights into significant topics for young people. The extent to which this is true is not realized by those who have not made a study of the facts in the case.

Let us take collegiate and secondary physiography as an example, and compare

a comprehensive college textbook in the subject with a secondary schoolbook in the same subject by the same author. Possibly the best college text ever written in this subject is Salisbury's Physiography, which appeared in 1907. His high-school text appeared in 1908. The college text is for students who elect the course in any college year. The high-school text is for use, as the author says, "For first or second year high-school pupils." The college text has 770 pages; the high-school text, 531 pages. The college-book pages are larger than those of the high-school text. The college book has 707 illustrations; the high-school book has 469, the latter being almost always identical with the same number used in the college book. There are 24 maps in the high-school book, 14 of which are identical with 14 of the 26 in the college book, 7 others being almost identical with those of the college book, thus making 21 of the 24 maps almost or quite identical with those of the college book. There are 26 chapters in the college book and 20 in the high-school book; however, 17 of those of the high-school book are the same as 17 of those of the college book; one other high-school chapter is composed of 2 college chapters combined, without material change of the topics or contents; and another high-school chapter on the topic "The ocean" consists of a combination of 5 college chapters which in the college text are upon subdivisions of the topic, "The ocean." In the high-school book the chapter dealing with the ocean has five subdivisions, each of which has exactly the same heading as that of the corresponding college chapter. Within the text matter many sentences are identical with those of the college text, the condensation having been secured in the main by clipping—not by rewriting.

Differences in Typical Text Made by Others

We have, however, accounted for but 19 of the 20 chapters of the high-school book, though we have accounted for the 26 chapters of the college book. The added high-school chapter which does not appear in the college book is upon the topic "Physiography and its effects on plants and animals," this chapter having been written not by the physiography author but by two teachers who had taught younger people.

It is not likely that such a close analysis could be made for many such cases, but the same point may be clearly demonstrated by a study of college and high-school books in physics, chemistry, zoology, botany, and physiology.

In a sense, it may be said that the very success of scientific advances in our time has caused the objectionable high specialization in secondary schools. College specialists have set special technicalitics as the body of requirements to be learned by secondary pupils.

Dissatisfaction With Introductory Courses

VI. *Dissatisfaction with technical work in science for the early years of high school.*—Dissatisfaction became most notable in the early years of secondary schools. Many so-called introductory science courses were tried in one part of the country or another. These included courses in physiology and hygiene, physiography, biology, or separate course in botany and zoology; or even occasionally there were introductory courses in physics, chemistry, geology, and astronomy. With all this array of so-called introductory science courses, dissatisfaction with science instruction increased, while science knowledge itself grew in value and public recognition. The college science men, when they spoke of the results of secondary science, seemed to take little more comfort in the situation than did educators in general, though the illogical conclusion was often stated that young people would do better and like sciences more if they were compelled to take more of them. Compelling people to do distasteful things always has been a delusion of formalists. It seems not to have occurred to collegiate science to look into a reflecting mirror for part of the cause of the trouble.

VII. *A new type of introductory science course.*—Some 15 years ago several groups of science teachers began to use the methods of science itself in trying to develop the contents and methods of a more useful introductory science course. These groups formulated hypotheses as to what secondary science might perchance do for young people, then selected materials and methods designed to see if the hypotheses could be realized. It was found that the various introductory courses contained much very useful factual material, and that these materials from several introductory courses then in use could be more productively organized if a topical plan of unification were used instead of the special science subject plan. Thus came the course in general science. No one who is observing the workings of this course believes, I presume, that its organization or methods or outcomes are now definitely determined. Perhaps they may not soon be, possibly should not be, but the startling and widespread success of this type of science course is one of the outstanding achievements of modern science.

General Science Courses Fruitful

VIII. *The unprecedented success of the course in general science should be interpreted.*—Various statistical studies of separate States, sections of the country, and of the whole United States show the same types of results so far as numerical evidence is concerned. Only a few of these studies can be cited here. The Pennsylvania study, previously referred to, shows that of the approximately 202,000 four-year high-school pupils in that State in 1922–23 approximately 54,000 were studying general science, and more were studying the other sciences than before general science was introduced. Dr. Edna M. Bailey, in a recently published and detailed study of California's four-year high schools of all classes, shows that in 1922–23, 71.2 per cent of all California four-year high schools taught general science; also that the subject is in the junior high schools throughout the State.

Dr. F. E. Bolton, in a study in the State of Washington, finds that one-sixth of all pupils are now registered in general science, almost one-sixth in biology, and as large a proportion in physics and chemistry as before general science was introduced.

Bureau of Education's Statistics

The report of the United States Commissioner of Education for the school year 1921–22 shows that in 13,700 public high schools there was an enrollment of approximately 400,000 students in general science.

American educators hold in their hands the destinies of this nation. Their task is not like that of the dashing soldier or the popular statesman at whom all the world gazes; but in the unobtrusive quiet of the school-room, though no eye, save that of God, witness the work, they may infuse such a love of our country and its institutions into the hearts of the coming generations of children, that the Republic, on its secure foundations, will stand as firmly as the Egyptian pyramids.—J. P. Wickersham.

The point of view of general science is slowly finding its way into the other high-school sciences. There does not seem to be a need of any reduction in quantity of learning in any special science subject; indeed it seems likely that the quantity of learning is being considerably increased. Its nature is somewhat changed, and this change toward a more significant science instruction should be useful both to high school and to colleges, but most useful of all to citizens. Are the science men, the specialists, really willing to have their subjects changed for this larger usefulness? If not, may we inquire whose property are these science subjects?

The question, therefore, of whether the public desires a new type of science instruction seems clear. It is amusing to have the question raised as to whether college boards will accredit for college entrance a course which has found a place of such service in modern secondary education. Possibly these boards wish to put their own organizing and refining hand upon the course before giving it full recognition. They are respectfully requested to recall what occurred in the special science under these same hands.

IX. *There is a world movement toward changing science instruction.*—In 1921 our Bureau of Education published a report on secondary science instruction. This report was the result of seven years of work of a committee of 50 persons. Their recommendations are most important and are based not upon theory alone but upon practice in the best schools. It is the type of science sequences recommended in that report which is now operative in Pennsylvania, California, and most other States of the Union.

In 1918 a British science commission published a very comprehensive report by a committee, of which Sir J. J. Thompson was chairman. The recommendations of that report are in spirit and in many details closely like the United States report.

Science Study a World Movement

In the Orient everywhere one goes he hears of movements to improve and increase science instruction. It is a world movement, the whole civilized world realizing that the achievements and method of thought of modern science must be possessed by those who would aspire to progress.

X. *Why a new point of view of science instruction?*—Science knowledge and scientific methods of work are conspicuous features of modern life. Nature is being brought under control by man's mind. We know more of nature's truths than at any previous time in human history. We can fly or speak around the earth. We now know of ether waves by means of which new sense organs are created, as has been done with the radio. Indeed, the radio is nothing more than a new kind of ear which hears by use of wave lengths for which nature made no ear. We know of light waves, by which we could see around the earth if only we had the right kind of eye to use these waves, and sometime we may possess such an eye. There seems almost no limit to scientific accomplishment.

Proper Use of Science the Needed Development

It is a matter of very great import to human beings whether modern science is learned by modern peoples merely that it may be used. If that is all, it is bad for those who learn it. Science knowledge has grown and will grow so that undreamed control of forces and materials will be had. Can the race be trusted with controls without an accompanying sense of responsibility for the knowledge thus possessed? The *proper* use of science in modern life, not only the *possibilities* of its use, must be developed in our courses of science instruction for young citizens in a free country. Such a sense of social and moral obligations we dare not omit, else we shall have an increased speed and quantity of living without the restraining anchorage of social responsibility. "Knowledge is power," either for good or bad ends, but knowledge for social service must supplant the mere power idea.

It is not now safe for society nor for some nations to possess certain knowledge which science now possesses. Diseased bacteria properly understood and properly placed will destroy whole cities. Until people do not wish to destroy their enemies or their competitors they must not possess the means or knowledge for doing so. Science courses for all the people must help all the people to interpret science for service, not science for power. Service, not power to control, is the needed spirit of modern science instruction.

Wisconsin University Instructs Housewives in House Decoration

Day schools in house decoration for housewives were recently conducted by the University of Wisconsin extension division in five cities. The lessons consisted of talks and lantern slides on interior decoration. By the use of material and demonstrations in arrangement of rooms, an attempt was made to show women the possibilities that exist in the careful use of the things they already have in their homes. The schools are continued for a week in each city. They will be continued on the same plan in other cities until the middle of the winter.

North Dakota's Intensive Parent Teacher Campaign

To demonstrate the possibilities of the parent teacher association in rural communities and thus to furnish an inspiration to other States, an organized campaign has been inaugurated in North Dakota by the Country Life Committee of the National Congress of Parents and Teachers. The campaign will be concentrated principally in three counties for the present, but the other counties of the State will also receive attention.

The plan adopted contemplates a program covering five years. In each year some specific rural need will be chosen as the central theme, and that theme will be emphasized in some way at every local meeting. The objective for the first year will be the development of community spirit—to get the people together and to accustom them to work as a unit for the common good.

North Dakota was selected for this demonstration because it is a typical rural State and beçause the cordial cooperation of the State and local school officers was freely offered. The State superintendent of public instruction will, in fact, direct the campaign not only by virtue of her office, but through appointment as State representative of the national chairman of the Country Life Committee of the Congress of Parents and Teachers.

This demonstration is similar to that which was conducted in Delaware with such success that in 59 communiteis a representative of every taxpaying family is an active member of a parent teacher association. A like campaign is contemplated in Alabama.

American Equipment Desired for Mexican School

An industrial school is planned for Mexicali, Lower California. Courses for boys include industrial chemistry, bookbinding and printing, plumbing and metal working, furniture making, carriage building, shoemaking, saddlery, and the manufacture of soap and perfumes; for girls courses will be given in domestic science, confectionery, shorthand, and type-writing, dressmaking, and kindred subjects.

Plans for the building at an expenditure of 400,000 pesos, equivalent to about $192,000, have been tentatively approved by the local government. All materials used in the construction and equipment of the building will be purchased in the United States, and correspondence with American dealers is invited. Letters should be addressed to "Ing. J. U. Acosta, Palacio del Gobierno, Mexicali, B. C., Mexico."—*H. C. von Struve, consul.*

· SCHOOL LIFE ·

Issued Monthly, except July and August
By THE DEPARTMENT OF THE INTERIOR, BUREAU OF EDUCATION

Editor - - - - - - James C. Boykin

Terms: Subscription, 50 cents per year, in advance. Foreign (not including Canada, Mexico, Cuba), 75 cents. *Remittance* should be made to the Superintendent of Documents, Government Printing Office, Washington, D. C., and should be by cash or money order.

JANUARY, 1925

All the Schools Concern All the People

ONE-FOURTH of our entire population is engaged in school work as pupils, teachers, supervisors, and administrators. The public schools constitute a great corporation spending over one and a half billions of dollars annually. Each citizen is a shareholder and has a voice in determining what kind of a school his community shall enjoy. Is your stock represented when school policies are determined?

The life of American children to-day is so different from that of our grandparents that they need a very different kind of help to meet these new problems. When the butcher, the baker, and the candlestick maker, as well as the weaver and cobbler, were all members of the same family things done with the hands were learned at home and their worth was appreciated. Now we phone for what we need, drive the auto around the corner or at most a few miles over good country roads for them, or else have them delivered by parcel post. Children, therefore, no longer gain industrial education in their homes. The schools are supplying as much of it as they can.

The time that children spend in school should be much greater than it used to be. It takes more time to master problems than it does to learn rules. It takes more equipment to work out the details of problems than it does to memorize the words printed in a book. To-day children are taught how to sew and cook and how to make many things they need in their work and play. They test their designs by actually making the things planned in order to prove the accuracy of their thinking.

The school should give every child an equal opportunity to attain his highest development. It should secure for him a healthy mind and body. It should imbue him with the principles of personal honesty and a strong sense of his obligations to his family, his community, and his Nation. It should give him the education and training necessary to support himself and to bear his just share in maintaining a community with high American ideals. It should develop his capacity for the wholesome use of leisure. It should inculcate a broad and understanding patriotism which insures our country's highest good.

Better understanding of the school's problems and heartier cooperation of all citizens in their solution are needed. The number of pupils dropping out of school after the fourth grade is appalling. Out of 100 pupils who enter the fifth grade, 66 fall by the wayside during the next three years; 20 more drop out during the high-school years, leaving only 14 of the original 100 entering the fifth grade to complete the high-school course.

Almost as startling is the poor daily attendance of the pupils enrolled in the schools. Of each 100 pupils enrolled in all the public elementary schools and high schools, 79 are in actual daily attendance. This irregular school attendance caused the waste of $250,000,000 last year. Taxpayers robbed themselves of this amount and at the same time suffered their children to lose an average of nearly two months' schooling in a year.

Half of the school population lives in the open country and villages. Three and a half million of them still attend one-teacher rural schools. Many of the 175,000 one-teacher rural schools have undergone little change during the past generation. Their school terms are one or two months shorter than city and village school terms. Their teachers have received the fewest weeks of professional training of any group of teachers. More than one-fourth of them are teaching their first term of school. Their average age is three or four years younger than city and village teachers.

City people should learn more about rural education. Rural people should learn more about city schools. The ultimate economic success of the merchant and the manufacturer depends to a large extent upon purchases made by rural people. People's wants are greatly influenced by the kind and amount of education they receive. Thousands of adults from the country go every year to the cities to fill places in industrial, commercial, and professional fields. The services they perform and the kind of citizens they become in their new environment depend on their early education. It is imperative that the education they receive be such as to fit them for life in the city as well as in the country.

Place of Physical Education in the School

ALL EDUCATION is physical education in a measure. Everything a teacher does with a pupil is done by, and through, the physical machinery of that pupil. He learns to read and to write and to cipher by the training of eyes, ears, fingers, and vocal cords through the connecting link of brain and nerves. The teacher takes these organs as they come to him and does his best to train them into new ways of doing or of not doing. But this is not the sum of the physical machinery with which we have to deal, for organs for receiving information and organs for doing things do not stand alone.

The finest automobile is useless without oil and gas, and the best sense organs, brain, and muscles are useless without an adequate supply of energy derived from food and air. An automobile in good repair will do better work than one with defective parts or loose screws, and the same is true of the human mechanism.

It was formerly taken for granted that children sent to school for the first time, possessed good eyes and ears, or that these parts were in as good condition as possible. It was also taken for granted that these children were well fed, that they had plenty of pure air, out-of-door exercise, and sound sleep, and that they were in good health.

Unfortunately this is not true of all children. A very large number of them have defective sense organs, a very large number are badly fueled, and many are in poor repair from lack of restoring rest. It is bad policy and, indeed, an economic waste for a teacher to work with these machines until they are put and kept in their best possible condition for school work. And so physical examinations have been instituted to find out if defects or disease are present, and to get these handicaps removed or improved. It is only through such efforts that children can be put into shape to profit as much as possible by what is done for them in school.

It might be said that this is not the work of the schools, and perhaps some day it will be done chiefly before the children come to school; but at present no one else is attending to this important work.

But we go a long step farther. Having repaired defects as far as we can, we try to get the machine well fueled, oiled, and cared for. We try to teach the use of the right foods in the right amounts, and the appreciation of pure air, sleep, cleanliness, and the few other things essential for health. But we not only tell the child what to do; we try to get him into the habit of doing. Above all, we endeavor to arouse in him the ambition to be as well and strong as his heredity will allow, and also to interest him in the things that make for the health and welfare of his fellows. Certainly the knowledge and practice of personal and public health are of more fundamental importance than anything else that can be taught in school or elsewhere.

Health work in school falls short of what it might accomplish unless it has the sympathetic help of the home. It only requires an understanding of this work to turn one from a carping critic to a staunch supporter.

There is another side to physical education, and the words are often applied to this other important phase. General bodily exercise and play is essential to growth and health and for fitting the child for his school work and for his work and enjoyment in life after school.

Those who have grown up and have put away childish things may ask whether play, whether athletics and gymnastics, are essential for education. Educators themselves asked this question a half century ago, and many of them decided that playgrounds were expensive luxuries and that time for play was time wasted. So the recess period was given over to study and the playground was sold for building lots. It seemed an economy to boil exercise down to a few minutes in the gymnasium in order to keep the pupils from getting too much stooped, and even these few minutes were grudgingly spared.

But the school men soon saw their mistakes in trying to educate the mind while neglecting the development of the body, and now 33 States have made physical education an essential part of the school program. Playgrounds are found to be necessary and are now made larger than ever, and it seems likely that all forms of physical exercise may again become as much a part of school life as in the days gone by. Few yet realize the value of games and sports, for they are a source not only of health and vigor of body, but of health and vigor of mind. Above all, moral lessons can be learned on the playground as nowhere else.

American Education Week Literature in Demand

Printed and mimeographed documents amounting to 322,600 pieces were distributed by the Bureau of Education or by the Superintendent of Documents in connection with American Education Week. This number would have been much greater but for the fact that some of the documents were unavoidably delayed in the printing, and the supply of others, especially the "Suggestions" and SCHOOL LIFE for October, was not sufficient to meet the demand, which was greatly in excess of the expectation.

Writing of education in Esthonia, Hans Leoke acting consul for that country, says there are practically no illiterate adults in the Republic. Primary education is free and compsulory. Opportunity for advanced education is provided at 122 secondary and vocational schools and two higher institutions, the Technicum and the University of Esthonia. At the university more than 3,200 students were matriculated in 1922.

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New Departure in Programs for State Teachers' Associations

Departmental Meetings at Kansas City Were Unusually Attractive and Profitable. General Meetings Were Fewer in Number and Were Devoted in Part to Music and Social Activities.

By KATHERINE M. COOK
Chief Rural Education Division, Bureau of Education

SUPERINTENDENT J. J. Maddox, of St. Louis, retiring president of the Missouri State Teachers' Association, has been doing some pioneering in the arrangement of programs. This is evidenced by the proceedings of the Missouri State Teachers' Association recently held in Kansas City. Superintendent Maddox evidently believes that departmental rather than general meetings are those from which teachers benefit most, other things being equal.

The custom usually followed in arranging programs for State meetings in the past has been to secure eminent speakers from outside the State for the large general meetings, departmental sections depending in large part on local speakers for the success of their programs. The result has been that speakers have been selected, not so much because of special contributions in particular fields of education, as for their general ability to hold a large audience, heterogeneous in their specialization in school work. There is at least some temptation that ability to entertain, to be heard in a large hall, and similar considerations enter into such selection.

Need for "Inspirational" Addresses is Passing

But education is becoming "professionalized"; fewer inspirational addresses and more discussion of scientific progress are essential. It is becoming highly specialized, with problems constantly increasing in number and importance in each specialized field. Correspondingly the number of persons of eminence in each is increasing—persons owing their reputation to specific contributions along particular lines of experimentation or investigation. Departmental groups at State meetings are relatively small; their meetings particularly adapted to concentration on specific problems or phases of problems. Those in attendance come with clearly defined purposes, are ready with questions and material for discussion taken from immediate experience. Freedom of discussion and close association is possible. The speaker is sympathetic to mental reaction; he is en rapport with his audience.

Recognizing this, the Missouri plan provided that each departmental section have its own particular "star," some more than one, most of whom were called upon to take no part in general sessions, but come to the departmental sections free to devote to them all of their time and consequently their best efforts. The general sessions were well provided for of course. A sufficient number of speakers from outside the State were brought so that all sections were equally well served. The "Who's who on the program" section in the official program of the Missouri State Teachers' Association for 1924, gives brief sketches of a total number of 23 speakers, of whom 17 participated in departmental programs; 6 in general sessions.

Better Allotment of Service is Possible

The arrangement obviates the necessity of a speaker dividing his time and interest between widely differing groups, as well as that of providing some sections namely, those which happen to represent the speciality of a particular speaker, with a kind of service not allotted to others. It makes unnecessary the custom of securing one year a specialist in one line and another year a specialist in another in order that different sections eventually have the opportunity to hear educators of note in their own field the result of course being that a majority of the sections are overlooked each year, at least so far as out-of-State speakers are concerned.

In addition, less than the usual time was allotted to general meetings; more to departmental sections. The number of general sessions devoted to addresses was fewer than usual, and opportunity was given for one general session to be devoted to a musical program and one to a play festival and general social gathering.

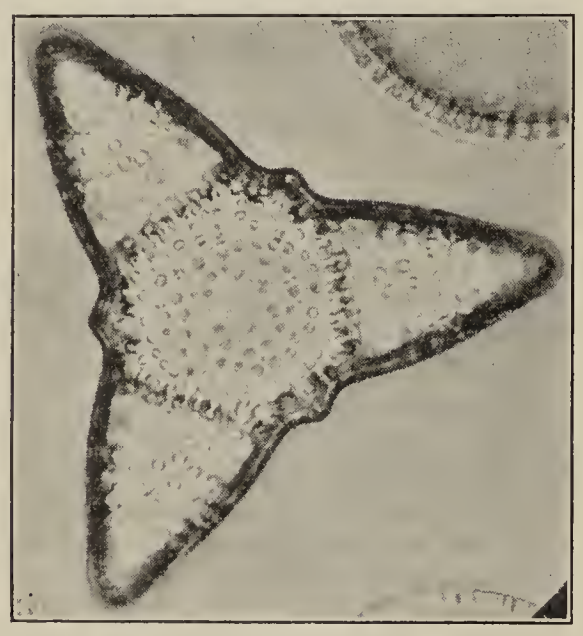
Missouri some years ago inaugurated the custom of holding sectional meetings in strategic places throughout the State early in the fall and one large meeting in November, on alternate years in Kansas City and in St. Louis. In this way ample opportunity is offered for all teachers to attend at least one State meeting without undue expense. At the same time the inspiration and opportunity for state-wide acquaintance among educationists that only a large meeting affords is preserved. The Missouri organization now has 20,000 members. Attendance at the Kansas City meeting was estimated at 12,000.

Wonders of Modern Science Displayed Within Comprehension of Laymen

Exhibit of Carnegie Institution Shows Some of the Striking Results of Research of 22 Years. Millions of Diatoms Which Make Life in the Ocean a Possibility. Delicate Instrument Measures Heat of Zones of Mars. Center of Earth Composed of Nearly Pure Iron. Investigations of Compass Variations Valuable in Telegraphy. Tracing Weather Changes in Past Ages. Simple Method of Determining Nutrition Values

By JAMES F. ABEL
Assistant Specialist in Rural Education, Bureau of Education

A FURNACE within a microscope, a meteorite that contains small diamonds, beautiful minute diatoms that furnish food for animal life of the sea, a thermo-couple that measures heat from the farthest stars, a portable



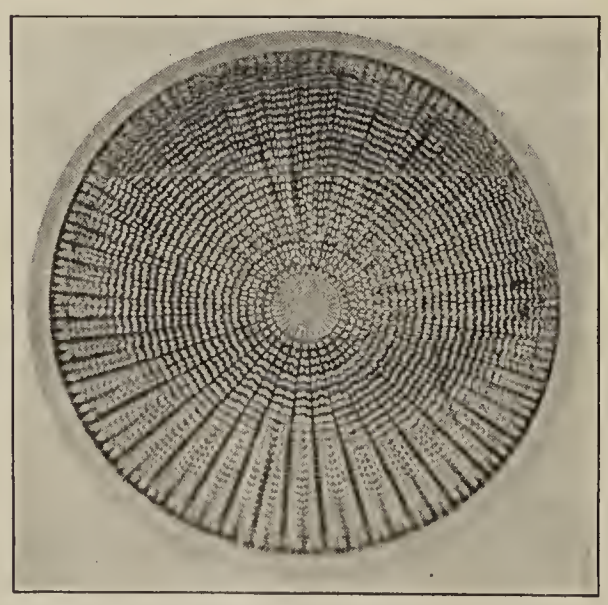
A form of diatom

seismograph that may be used in any high school, a simple machine to determine the heat units in foods, a gravity balance that makes it easier to measure the force of gravity, unique apparatus to find out how fast plants absorb and give off water, a spectroscope with a quartz lens that makes it possible to use the spectrum much farther out in the field of the ordinarily invisible ultra-violet rays of light, a globe bristling with 10,300 pins to show the places both on land and sea where observations have been taken on the earth's magnetic currents, an artistic replica of the nonmagnetic brigantine *Carnegie*, maps, charts, photographs, and models—these were a few of the very interesting and valuable things displayed by the Carnegie Institution of Washington at its annual exhibition in the administration building on December 13, 14, and 15 of 1924, and opened again in the latter part of the month for the meeting of the American Association for the Advancement of Science.

The exhibit was purely temporary, a "live" one intended to show some of the important work of the institution during the past year. Many of the new machines being used in scientific investigations were set up and in operation; plans of others were shown in drawings and charts, and all were explained by members of the research staff called in from the field and from various stations. Some one was at hand to answer in everyday language questions about all the things displayed. Even a layman could not help being absorbed in it, and a throng of visitors crowded the building during the entire time the exhibit was open to the public.

The room given over to diatom research drew many. Dr. Albert Mann explained to the curious that the diatom is a water plant, the smallest green plant in the world, only a few of the more than 8,000 species being visible to the naked eye. They inhabit all the waters of the earth. The outside of each diatom is a shell made of pure silica. Many of them are very elaborately ornamented and for that reason they are great favorites of students of miscroscopy, their varied and beautiful forms being a source of constant delight to the investigator.

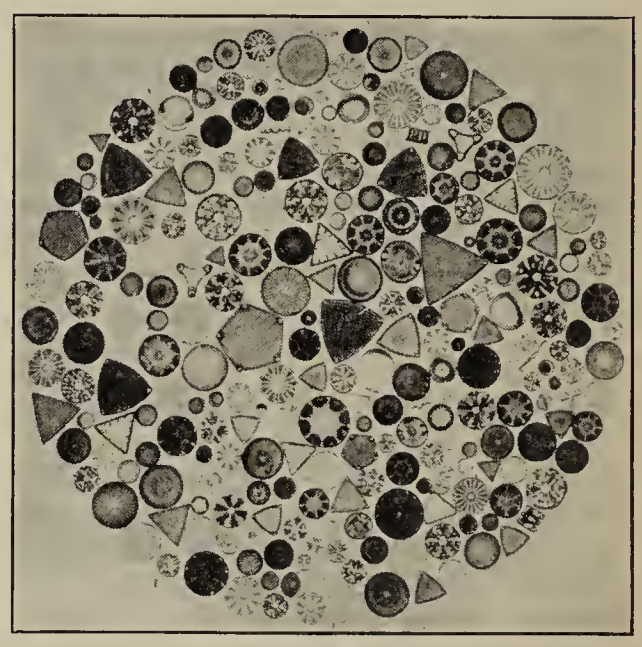
Living, they are necessary to the proper nutrition of all the animal life of the sea; they literally stand between it and starvation and, to go further, if it were not for them man would be without one of his chief sources of wealth. When



Another characteristic form

next you enjoy a shore dinner, thank the diatoms and think of the industry of fishing; how much of history, song, and story has been built around the toilers of the sea, and give credit for most of it to these invisible little plants that are always making it possible for the fishes to live. Their part is to take from the earth and water the necessary elements and change them to the compounds that animal life may use in their food.

Then, too, the diatoms, like the land plants, take in carbon dioxid and give off oxygen and so help to keep the water



A group of diatoms

filled with air for the fish to breathe. Moreover, they tell a great deal about the direction and flow of the ocean currents, for if one is careful about having a broad acquaintance with them he can take up a pail of water off the coast of Maine, let us say, and tell from the kinds he finds in it whether it came down from the Arctic Ocean or up from the Gulf of Mexico.

Fossilized diatoms are nearly as common as the living ones. There is one enormous bed of them covering 12 square miles, 1,400 feet thick at Lompoc, Calif., and the sales from there run well up into the millions of dollars a year. The material is used for different kinds of filtering, especially in refining sugar, for insulating, for polishing, and for making fire brick.

At the exhibit one moved only a few steps away from the diatoms to learn that the temperature of Mars is from 50° to 70° F. at its equator and about 80° below at the poles, and to hear Doctor Anderson explain how he knows that. He has devised a very simple and delicate instrument sensitive to one-millionth of a degree for measuring the heat radiation from an object. The heat rays pass through a rock salt lens and are thrown on a thermocouple so arranged that the electric current passing through it changes with the slightest change in the amount of heat coming through the lens. Any change in the current shifts a small mirror, and the image of a V-shaped light reflected in the mirror is thrown on a scale several feet away. As the mirror shifts, the light moves along the scale, and one may read the change in temperature. With this mechanism Doctor Anderson measured the heat from Mars and determined its temperature. Visitors amused themselves testing it with the radiant heat from their hands.

More Data Expected on Earthquakes

Doctor Anderson has also worked out and the institution has patented in his name a portable inexpensive torsion seismograph that accurately records earthquake shocks light or heavy. It may easily be set up in the basement of any good high-school building that is not too near disturbing influences such as the jar of street cars or trains. Three instruments, one to measure the vertical waves and one each for the north-south and east-west lines of the longitudinal waves are a complete set, but either of the two machines that respond to the longitudinal waves can be made worth while in a high school. The number of seismograph stations can now be greatly increased at comparatively small cost, and we may have from many more places much more data about earthquakes.

Star Catalogue Requires Millions of Figures

Cataloguing 30,000 stars, about twelve times as many as are visible to the naked eye, and giving their positions and directions and rates of motion is one of the large pieces of work carried on by the institution through its department of meridian astrometry. The knowledge gained in this way will help to determine the sun's motion, the number of stars in certain volumes of space, and the proportion of stars having certain velocities and directions of movement. Investigations that have never been possible because of lack of data may be made after the catalogue is completed. The amount of labor involved in thus finding and labeling our star neighbors is enormous; the mere working out of the problems calls for hundreds of millions of figures, to say nothing of the actual observations that must be made.

Neither fractions of seconds nor æons of time seem to appall the modern scientist. Photographs from the Mount Wilson observatory show how the laboratory there is producing light and heat much like that of the hottest stars. A fine wire is exploded in one thirty-thousandth of a second by a strong electric current and the photograph made of the spectrum from the light of the explosion notes changes as brief as one-millionth of a second. By such means we learn something of what is happening on other planets.

Accurate Astronomy in Ancient Yucatan

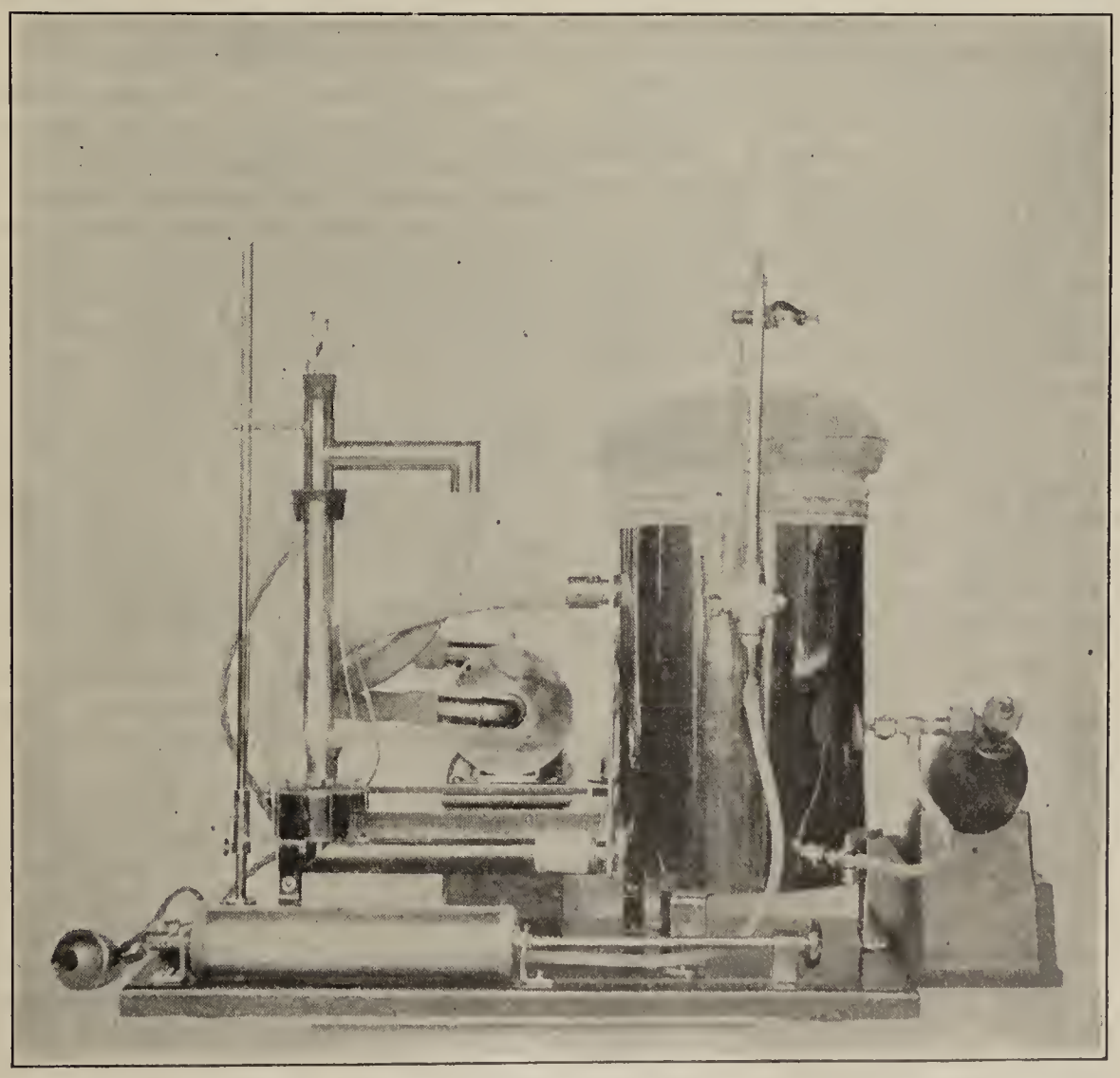
America was not without its astronomers in the century before the Christian era, and photographs and models of the cities founded and built by the Maya civilization in Yucatan and southern Mexico were a part of the exhibit. Here was a race, now almost extinct, with a system of writing and notation, an architecture dignified and beautiful, an accurate calendar, and ways of observing and recording astronomical phenomena. Mr. Morley, who has been studying the ruins for some 20 years, tells much of one of the principal Maya cities, Chichen Itza, in the January number of the National Geographic Magazine.

The geophysical laboratory presented a display of materials arranged to illustrate the structure and composition of the earth. Dr. H. S. Washington, in charge, told those who asked him that we know the interior of the earth is solid because our planet has been weighed and because if it were not solid it would not withstand the terrific pull of the sun and moon nor revolve in the way it does. It has been found, partly by noting the different rates at which earthquake shocks travel through and around the earth, that its central part, making up about one-sixth of its entire volume, is a solid metallic iron core extending out to within about 1,000 miles of the surface. A model representing a segment of the earth from center to circumference showed the central core and the gradual change from pure, or nearly pure, iron through iron more and more mixed with other materials until the crust of the earth, not more than 35 miles thick, is reached and the proportion of iron is comparatively small.

Other Planets Have Metals Like Ours

Specimens of meteorites, one of them containing small diamonds, illustrating the different gradations from the pure iron in large crystals formed under heavy pressure to the lighter kinds of geological formations, were arranged in order to indicate that something similar to our earth exists in other planets.

No less interesting was a cross section of a platinum crucible which with its contents had been raised to 1,420°, produc-



A new form of calorimeter

ing artificially conditions like those existing in molten lava and showing what happens when the mass cools. Parallel to it were specimens of the heavy rocks rich in magnesium and iron—two of the four elements that constitute 90 per cent of the earth—made up of the first formed crystals that settle out and collect at the bottom of the lava pool; of the lighter stones that gradually crystallize out as the liquid loses its more common elements; of pumice formed if the crust over the molten lava breaks, an explosion occurs, and the expanding gases blow the lava into a rock froth; and, if no explosion occurs, of the final deposit from the water of such minerals as gold, silver, and copper in veins or ores.

Delicate Instruments for Volcanic Material

For examining small amounts of volcanic material and finding out what is in them the institution had on display two unusually fine and delicate instruments. One of these is a microscope containing a tiny furnace that may be heated up to 800° C. The material is placed in the furnace and the electric current which heats it is turned on and off at the will of the operator. He may then see, magnified 250 diameters, what happens as the substance melts and cools. The other is a spectroscope fitted with a quartz lens which allows the ultra-violet rays of light to pass through and permits a much more careful analysis of substances that one wishes to determine the character of than has heretofore been possible.

Under the title of terrestrial magnetism were presented the results of some rather daring ventures in research that have already proven to be of great worth and promise much more for the future.

If Columbus could have called at a Carnegie institution before he made his voyage he would not have worried when his compass needle no longer pointed toward the north star nor would his men have been superstitious about it. The *Carnegie*, beautiful nonmagnetic brigantine, has made six cruises in 11 years and traveled 252,702 nautical miles, trying to find out about the earth's magnetic currents, their direction, and intensity, and the variation and dip of the needle.

Magnetic Currents Affect Telegraphy

Besides being of great value to mariners, the results of this work may be useful to telegraph and telephone companies. In fact it was the telegraph companies that first became interested in it, for operators found that during severe electrical storms when "there was an aurora on the wire" it was almost impossible to send messages.

Making weather forecasts and finding out the ages of ancient ruins by reading the rings that show the growth of trees year by year was illustrated with a cross section of a redwood tree 3,100 years old. Meteorology is a new science. We have not been keeping records of the weather for very many years, but if we are to know the longer cycles of climatic changes we must have some kind of careful accounts of what the weather has been, and the giant trees of California and some of the cedars of Lebanon furnish the records.

Rainfall Shown by Growth of Trees

By studying the pine trees of northern Arizona and comparing the yearly growth as shown by the rings with the known rainfall for some years back, Mr. A. E. Douglass found a very remarkable correspondence between the growth the tree made in any year and the rainfall for that year. A year that was unusually dry or unusually wet left its traces plainly in the trees. It is possible then by studying the rings in very old trees to determine the series of years in which there is average, heavy, or little rainfall, and to find out whether those periods follow each other in any regular order.

Not only can something of the climatic cycles for 3,000 years or more be found out in this way, but by studying the rings in the timbers of ancient ruins and comparing them with the rings on old trees it has been possible to tell when the tree was cut to make that timber. Nature told her story in the tree trunks. The Department of Climatology is reading and interpreting it.

"Half a doughnut will furnish the extra energy a person needs to climb to the top of the Washington Monument," Mr. Edward L. Fox, of the nutrition laboratory, said in explaining the use of a very simple calorimeter that is merely an addition to the respiration apparatus commonly used in hospitals and laboratories. Most foods are so complex that their heat value in calories can not be worked out mathematically.

Other things than those mentioned were to illustrate the experiments in plant physiology carried on in Arizona and California; the very careful studies in embryology made in connection with the Johns Hopkins Medical School; photographs of original materials used in the study of ancient languages and writing; apparatus showing how light and wind change the rate of water loss from plants; the results of work in determining the atomic weights of elements; charts showing growth curves of animals on special diets; and maps and copies of documents that have a direct bearing on American history and are found in the archives of foreign countries.

The institution began its work in 1902. In 22 short years it has accomplished some splendid things in science and laid the foundation for many more.

For the Practical Encouragement of Thrift

National Thrift Week furnishes teachers an excellent opportunity to give to their pupils the most practical sort of instruction. "For Success and Happiness" is the slogan this year and the aim is "to help our Americans think straight about money matters." To reach this goal 10 practical steps are urged and emphasized on different days of the week.

Thrift Week opens on January 17, Benjamin Franklin's birthday, the only national patriotic event of the month. This historical background is important because of Franklin's position as the great American apostle of thrift, and his memory will be appropriately celebrated. This date falls on Saturday and will be known as "Pay Bills Day."

Each of the succeeding days is marked by some specific thrifty enterprise. Sunday will be "Share With Others Day"; giving wisely will be emphasized. Monday, "Bank Day," and new accounts opened. Tuesday, "Life Insurance Day"; Wednesday, "Own Your Own Home Day"; Thursday, "Budget Day"; and Friday, "Safe Investment Day."

The movement is fostered by the Y. M. C. A. and indorsed by educators, realtors, churches, life insurance companies, women's organizations, and many other civic, industrial, educational, and religious organizations. Thrift messages will be sent "over the air" from every part of the country. Meetings will be held in factories, churches, and schools, with speakers chosen from the leading citizens.

In the schools the week will be observed by essay contests, thrift talks, visits to the banks, poster contests, special talks by pupils, bank book parades, and many other means to arouse enthusiasm among the school children and leave with them a lasting impression. A leaflet called "Seven Days with a Purpose," with 10 points listed under each day, has been prepared by the National Thrift Committee, and this with a package of school materials, including posters, budget books, topics for essay work, and a folder of suggestions for school programs may be procured from John A. Goodell, executive secretary, 347 Madison Avenue, New York City.

The Vocational Education Association of the Middle West will hold its eleventh annual convention at the Hotel Sherman, Chicago, February 12–14, 1925. Especial emphasis will be given to junior high schools. Lewis Gustafson, of St. Louis, is president of the association.

The annual meeting of the National Congress of Parents and Teachers will be held at Austin, Tex., May 11, 1925.

Plan of Consolidation for Cleveland's Higher Institutions

Survey Commission under Auspices of Cleveland Foundation Suggests New University Corporation Combining Western Reserve University and Case School of Applied Science. Extensive Enlargement in Educational Facilities is Proposed

By GEORGE F. ZOOK
Chief Division of Higher Education, Bureau of Education

WHETHER two institutions, Western Reserve University and the Case School of Applied Science, which have grown up beside one another but developed independently, can join in some form of permanent cooperation in order more nearly to supply the desired quantity and range of higher education in Cleveland, Ohio, is the central theme of a survey in that city which has been carried on during the past six months by a survey commission under the direction of George F. Zook. The other members of the survey commission were President W. A. Jessup, University of Iowa; Chancellor S. P. Capen, University of Buffalo; President R. L. Hughes, Miami University; Dean F. L. Bishop, University of Pittsburgh; Prof. C. J. Tilden, Yale University; Prof. L. V. Koos, University of Minnesota; Miss Emeline S. Whitcomb, United States Bureau of Education.

Existing Institutions to Retain Independence

To bring together these two institutions into some cooperative organization and yet to preserve the initiative that accompanies independence was a difficult problem. The survey commission attempted to solve the problem by recommending the formation of a new university corporation to be composed of representatives from Western Reserve University, the Case School of Applied Science, and such other institutions as may wish to enter the enlarged university organization, together with certain representatives at large, selected by the representatives of the constituent institutions. It was suggested that the new university corporation should have charge of certain general service activities, such as the care of buildings and grounds, heat and light, central library, gymnasium, and the treasurer's, comptroller's, and registrar's offices. It was also recommended that the responsibility of conducting certain educational work of common interest to the two institutions, as, for example, evening school work, summer school, the graduate school, research, and the new university college for work in liberal arts preliminary to law, medicine, engineering, and so forth, should be lodged with the enlarged university. Also, certain of the new divisions which were recommended, namely, a school of education and a school of civic and business education, it was thought would be more at home under the enlarged university organization than under either of the constituent institutions.

If the enlarged university organization is adopted it will be necessary to select a chancellor or president who may or may not be the president of one of the constituent institutions.

Under this plan of organization each of the constituent institutions will continue to have entire charge of all of its assets, the selection of its officers and faculty, including its president, and all entrance and graduation requirements, but each will join with other institutions in matters of common concern. In this way it is believed that certain educational and financial economies can be secured, while preserving the initiative and historical traditions of the constituent institutions.

One of the most troublesome questions confronting the commission was the matter of the location of the proposed enlarged university. The Case School and Western Reserve were built on the present sites at a time when there was only a small liberal arts college for men and a technological institution for what was at that time a city of 160,000 inhabitants. Since that time the liberal arts college (Adelbert College) has grown to more than 700 students, and a number of new divisions have been established in Western Reserve University, namely, a liberal arts college for women, a school of dentistry, a school of pharmacy, a library school, a school of applied social sciences, and a school of nursing. In the meantime, Cleveland has grown in population from 160,000 to approximately 1,000,000.

Devote Present Athletic Grounds to Building

It is apparent that it will be impossible to accommodate in the present buildings of the Case School and Western Reserve University the large number of students who will naturally be drawn into the enlarged university. Consequently, in order to accommodate these students, it would first be necessary to use the present athletic grounds for building. It also seems clear that a number of the existing buildings sooner or later will have to be replaced with larger and higher structures and, finally, that as much land as possible adjoining the present campus should be secured. Inasmuch as most of this land is expensive and not well suited to university purposes, the commission ultimately reached the conclusion that, if possible, a new site adequate in size for all future needs of the enlarged university should be secured. Only in this way does it seem possible to plan an enlarged university with adequate space for buildings and playgrounds.

Inadequate Facilities for Higher Education

The thing which impressed the survey commission most deeply was the fact that contrary to the situation in most other great cities of the country, Cleveland is very far from having adequate facilities for the residents of the city who wish to attend higher institutions. Two-thirds of the public and private high-school graduates in the city go elsewhere to college, yet the student constituency of the two institutions is becoming more localized all the time. These facts point clearly to the conclusion that Cleveland is not supplying adequate facilities in higher education for its residents, nor are students from outside of the city coming in such proportions as formerly. A comparison with other cities shows that approximately 16,000 students should attend college in Cleveland, whereas there are fewer than 4,000.

The lines of work which seem in greatest need of development are evening schools on a collegiate plane, business and civic administration, education, graduate work, and research. The Young Men's Christian Association has shown what can be done in evening school work in the city, but much remains to be done. The lack of a school of business is astonishing when one considers the important industries and business organizations of Cleveland. Teacher training for the elementary schools and the junior high schools has been cared for by the Cleveland School of Education, but the facilities in the city for training secondary school teachers are entirely inadequate. A school of education to train teachers for the secondary schools and to offer graduate work is urgently needed. As a means of rounding out the efforts of the proposed university the commission recommended the establishment of a graduate school and two separate research bureaus, for industrial research and for business research, respectively.

Coeducation of Sexes Now Opposed

Another problem which required extended consideration related to liberal arts education. There are two colleges, one for men and one for women, and the

idea of educating the sexes separately in undergraduate schools is strongly favored in Western Reserve University.

At the same time it is apparent that there is a distinct problem in caring for students who wish to follow a liberal arts curriculum through to graduation, as compared to the very large group of students who wish only one, two, and three years of liberal arts work in preparation for entrance to a professional school, such as law or medicine. The commission recommended that for the latter there should be established a university college and that the existing liberal arts colleges should be limited to approximately 500 students each. The efforts of the two existing colleges will be directed toward the education of the students who wish to pursue four-year curricula in liberal arts.

If this plan proves successful, additional units of approximately 500 students may be added as there is demand. On the other hand, the university college, which is to be coeducational and without limit in numbers, may prove to be the popular avenue for liberal arts education. It is recommended that all the science laboratories be centered in the university college.

Establishment of Great University Anticipated

Much has already been done to popularize the findings of the survey, which was conducted under the auspices of the Cleveland Foundation. During October a series of open luncheon conferences were addressed by members of the survey commission. The conferences were largely attended by many of the most prominent Cleveland citizens, and they received the commission's findings very cordially. Since that time the Cleveland newspapers have carried a series of special articles showing the progress in higher education which has been made by other large urban centers such as Chicago, Boston, Buffalo, Rochester, Philadelphia, Pittsburgh, and New York. At present representatives from a number of educational institutions in the city are holding a series of meetings under the leadership of President Vinson, of Western Reserve University, to consider the commission's plan or any other feasible plan for bringing the institutions together in some permanent form of cooperation. The situation bids fair to produce in Cleveland a great university which will be a climax to the city's excellent school system and to the many civic monuments in which Cleveland justly takes a great deal of pride.

Beginning in February, 1925, all students of New York schools who are under 17 years of age at the time of their discharge from school will be required to attend a continuation school until 17.

To Promote Cultural Relations Between Czechoslovakia and France

University Professors will be Exchanged and a Joint Commission Established to Further Other Means of Cooperation. Coordination of Degrees and of Studies Included in Duties of Commission

By C. S. WINANS
American Consul General, Prague

AN AGREEMENT, or treaty, designed to promote the educational, scientific, and cultural relations of Czechoslovakia and France has now been put into effect, with an exchange of university professors between the two countries and the organization of a commission for the study of scientific, educational, and cultural matters in the two countries.

This commission is really a joint commission, one section of which has its headquarters in Prague and the other in Paris. Each subcommission is composed of 11 members, 10 of whom are appointed for each country by the respective ministry of education, with the advice and consent of the ministry of foreign affairs, while the eleventh member must be a representative of the other country. A list of the French members must be presented to the Czechoslovak ministry of foreign affairs, and of the Czech members to the French ministry, for approval. At present, the activities of the subcommissions will be limited to effecting an exchange of professors, the establishing of scholarships, the conferring of degrees, and the granting of credits for studies pursued in the universities, or other educational institutions, of either country. The subcommission in Prague will also serve the Czechoslovak ministry of education in an advisory capacity.

One clause of the agreement provides for an exchange of scientists, even if they have no special function to perform in the official educational system of either country. They must, however, be members of scientific societies and experts in their particular lines of work or investigation.

The exchanged professors will lecture for one semester only, for an entire year, or, at the request of the commission, for a longer period. The work done by these professors will have due weight in their own countries, with respect to their terms of service, priority, and promotions. They will also be entitled to the same privileges enjoyed by the professors at the university or other educational institution to which they may be sent, excepting only those privileges connected with the administration of the institution. The salaries and allowances of the exchanged professors will be determined by the regulations in force in their respective countries, and they will also receive special post and transportation allowances from the respective ministries of education.

As a rule, studies pursued in France or Czechoslovakia will be credited in the home country, and university, college, and high school students will be able to receive their degrees and certificates from the other country, if they comply with all of the conditions governing the native students.

Official report to Secretary of State.

Chicago Playgrounds Encourage Winter Activities

Snow sculpture is a sport which has been developed to an unusual degree on the board of education's playgrounds in Chicago. All playgrounds competed in modeling snow figures, and the results were judged by the city's distinguished sculptor, Lorado Taft.

Water was mixed with the snow to form a heavy slush. The work of modeling was done with wooden paddles, the snow first being packed on a framework of sticks tied together. Pieces of tin and heavy pocket knives were used to carve away excess and secure the lines and contour desired.

Left to their own devices to select subjects, the children worked out a variety of figures. Included in the sculptural productions was an elephant holding his own against an attack by three wolves, various other animals, a set of overstuffed furniture with a fireplace, battleships, and castles.

Costs Englishmen Nothing to Become Dentists

Maintenance allowances, instruments, books, and fees are provided for qualified persons in the United Kingdom who wish to study dentistry and lack personal means of doing so. This statement was made recently at the seventh session of the dental board of the United Kingdom by F. D. Acland, the chairman.

There is, he said, probably no other profession in the country into which a student qualified to take advantage of professional training may obtain entry practically without cost to himself.

Pittsburgh's Cathedral of Learning to Be Truly a Higher Institution

Building 680 Feet High Will House 12,000 Students. Abundant Recreation Rooms for Faculty and for Students. Class Rooms Will Be Free from All Suggestion of Stiffness. Elevator Facilities Will Be Ample

By W. DON HARRISON
Professor of English, University of Pittsburgh

THE PLAN of the University of Pittsburgh to erect a 52-story cathedral of learning to house all of its schools except those of medicine and dentistry has in it, besides its architecture, some valuable ideas. The building, with supreme force, will express by its mass and proportion the meaning and the spirit of the educational work which is to be carried on in it.

The structure is to be a Gothic building of Kentucky limestone, rising from a base 360 feet long and 260 feet wide to a height of 680 feet. Its cost will be about $10,000,000. It will be erected in a 14-acre quadrangle situated in the civic center of Pittsburgh. In the building, 12,000 students will be provided with classrooms, laboratories, shops, libraries, and recreation centers.

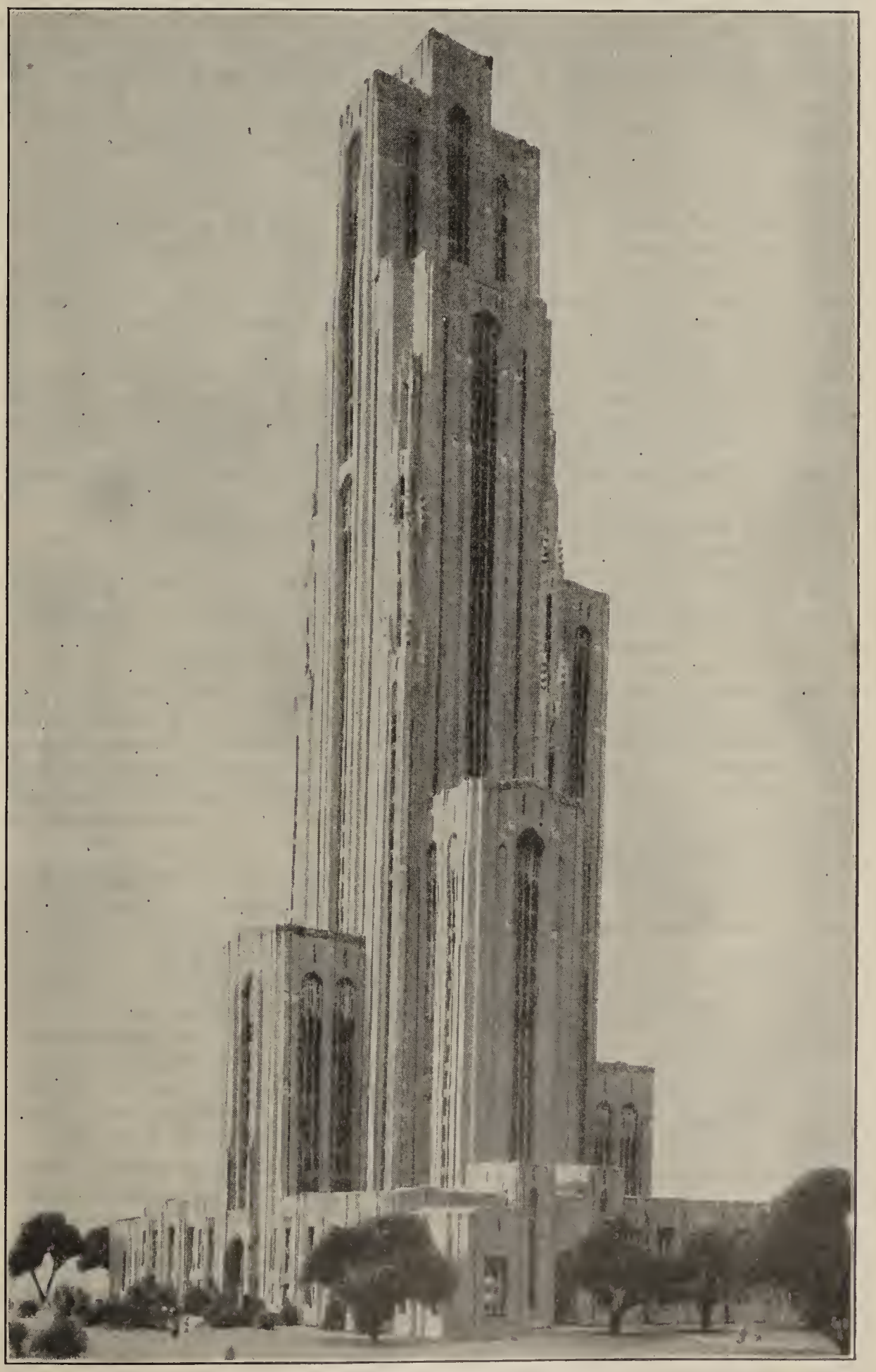
The fundamental purpose of the cathedral of learning, Chancellor John G. Bowman says, is, of course, to provide in a lasting and economical way space needed by the university. In addition, the building is to express to the students, the faculty, and the community the meaning of education. One vital purpose of a university is to form in boys and girls habits of clear, creative thought. The prize of it all is the spirit of achievement. To express this spirit, then, with such force that it lifts the idea to the level we know as sublime, is the reason for the height of the building. It will interpret beauty, wonder, spiritual fineness, and, above all, creative courage to 12,000 students, to the faculty, and to about 150,000 persons who will pass it each day. The building will say to them: "Life, beautiful, creative life, is yours to live and to give to others. Do it."

An Inspiration to All Classes in Community

Chancellor Bowman and the men associated with him in the plan believe that the building will make the community realize how precious a thing it is to rise to one's full mental and spiritual capacity, Fathers and mothers have, through the centuries, endeavored to create some plan by which their boys and girls might do this. They want those boys and girls to be creative, decent at heart, intelligent, sensitive to beauty, glad to serve their fellows. To inspire all classes of people in the community with this idea is the purpose of the building's architecture.

Educationally, the interior of the building is to be just as significant. To begin with, there is not to be a single barren, ugly, recitation room, with rows of cheap chairs. It is planned to make each room beautiful; to make it resemble a private study in a home. The chairs are not to be in rows, and they are not to be alike. The best chair in each room is to be for the master, who will occupy it, not by virtue of his position, but by virtue of his intelligence, his character, and the high motive of his life. On the walls are to hang pictures—good ones—appropriate to the subjects studied in the rooms.

"In such a setting," says Chancellor Bowman, "considering all the inside and the outside of the building, we can start initiative in the lives of students that will carry them with speed toward great accomplishment. Every student will be



The proposed "Cathedral of Learning" at Pittsburgh

a crusader for some purpose that has service in it. If students have half a chance, they are more interested in making their own lives beautiful and creative and useful than in dances and parties."

The centralization of the university in one building will make for greater educational unity. Concerning this unity Chancellor Bowman says:

"The accessibility of one department to another and the common meeting ground for faculty members in clubrooms will bring together men from various schools and departments. These men will become better acquainted with one another. They will grow in sympathy for one another's work. They will become more broadminded, more tolerant, more unified. And the same thing will happen to the students. For them, too, will be provided rooms for social meetings and for study. The result will be the creation of student spirit which has been found so difficult to develop in great urban universities.

"Out of the beauty of the building and the spirit of achievement expressed in it there will gradually rise, in the faculty and among the students, a profound desire to show only the decent and noble side of life to one another. That desire will become habit. It will crowd out all else. The building will be a temple in which no man could wear his hat if he wanted to."

That the building is feasible, practical, and economical from the engineering standpoint, Mr. Charles Z. Klauder, the architect, and the consulting engineers have pointed out. In the first place, they indicate that the sway of the building in the wind, a disadvantage in many high buildings of small base, will be practically negligible. The large base and the placing of columns will prevent any except a slight sway in the most violent wind.

The elevator problem is simpler than it is in a large office building. To maintain service that will not keep any student waiting more than 61 seconds will require eight moderate-sized elevators. One hundred and five recitation rooms will occupy the first four floors. Students attending classes in them will make but little use of the elevators. Above these lower floors will be laboratories for freshmen and sophomores. The usual two and three hour periods will cause a light elevator load. Next will come the professional schools. Once up at their schools, the students will use the stairs in going from floor to floor. On top floors, graduate students, fellows, and faculty members in advanced science and research laboratories come and go relatively little.

In spite of its material advantages, the men back of the plan insist that the building is in no sense an office skyscraper—an "efficiency factory." Rather, the cathedral of learning emphasizes those very things in "college spirit" of which universities are most proud.

Teachers of the World Will Convene

The World Federation of Education Associations will hold its next meeting in Edinburgh, Scotland, July 20–28, 1925. Dr. Augustus O. Thomas, president of the federation, has sent invitations to ministers of education in all countries. It is expected that from 800 to 1,000 people from the United States will sail on the specially chartered liner which will leave New York City July 10. Many people of world-wide note will appear on the program. The purpose of the federation is to bring the people of the earth together on the common ground of education to the end that justice and good will may prevail.

Another international educational conference, under official auspices, will be held in Santiago, Chile, in September. Details concerning it will appear in a later number of SCHOOL LIFE.

"Better men for the jobs, better jobs for the men," is the slogan of the working men of Buffalo, N. Y., from 4,000 to 5,000 of whom are registered in the technical and trade courses of that city.

Bureau of Education's Latest Publications

The following publications have been issued recently by the United States Bureau of Education. Orders for them should be sent to the Superintendent of Documents, Government Printing Office, Washington, D. C., accompanied by the price indicated:

Annual report of the Commissioner of Education to the Secretary of the Interior, for the fiscal year ended June 30, 1924. 32 p. 5 cents.
Report of the activities of the Bureau of Education

Bibliography of educational and psychological tests and measurements. Comp. by Margaret Doherty and Josephine MacLatchy, under the direction of B. R. Buckingham. 233 p. (Bulletin, 1923, no. 55) 25 cents.

Cooperative vocational guidance. Glen L. Swiggett. 12 p. (Commercial education leaflet no. 8.) 5 cents.
Report of a conference held at the Peirce School of Business Administration, Philadelphia, in cooperation with the U. S. Bureau of Education, April 21, 1923.

Coordination of business preparation and placement. Glen L. Swiggett. 16 p. (Commercial education leaflet no. 10.) 5 cents.
Report of the third commercial education conference, held under the auspices of the U. S. Bureau of Education and the Eastern Commercial Teachers' Association, New York, April 18, 1924.

How the kindergarten aids children's progress in the grades. Nina C. Vandewalker. 6 p. (Kindergarten circular no. 17.) 5 cents.

List of references on vocational education. 20 p. (Library leaflet no. 25.) 5 cents.

Milpitas—a rural school project in teacher training. Clara H. Smith and La Rae Olvey. 19 p. (Rural school leaflet no. 27.) 5 cents.

Orange township consolidated school, Black Hawk county, Iowa. Macy Campbell. 6 p. (Rural school leaflet no. 30.) 5 cents.

Organization and administration of the duplicate school in Philadelphia, Pa. Edwin Y. Montanye. 16 p. (Bulletin, 1924, no. 24.) 5 cents.

A platoon school in Kansas City, Missouri. G. W. Diemer. 25 p. (Bulletin, 1924, no. 25.) 5 cents.
Contains: I. The platoon school defined. II. Growth of platoon school movement. III. Reasons for platoon organization. IV. Organization and administration illustrated by the Henry C. Kumpf School, Kansas City, Mo. V. The platoon school program. VI. Advantages and disadvantages as expressed by teachers.

Record of current educational publications, comprising publications received by the Bureau of Education to June 1, 1924. 69 p. (Bulletin, 1924, no. 27.) 10 cents.

School health supervision. Report of a conference at Detroit, October, 1923. Harriet Wedgwood. 18 p. (School health studies no. 8.) 5 cents.
Contains: 1. The school child as a carrier of public health, by Frances S. Bradley. 2. The preschool age and school entrance, by Arnold Gesell. 3. Training teachers for health work in rural schools, by Elma Rood. 4. Health supervision of city school children, by William DeKleine.

Some practical uses of auditoriums in the rural schools of Montgomery county, Alabama. Lillian Allen and Cora Pearson. 10 p. (Rural school leaflet no. 34.) 5 cents.

Statistics of State universities and State colleges for the year ending June 30, 1923. 15 p. (Bulletin, 1924, no. 26.) 5 cents.

Take no risks. J. F. Abel. 5 p. (Rural school leaflet no. 31.) 5 cents.
Deals with the transportation of children to and from school. Urges that no risks be taken with children's lives and health.

Technique of procedure in collegiate registration. George T. Avery. 26 p. (Bulletin, 1924, no. 22.) 5 cents.
Contains: 1. Inefficient methods still used. 2. Points of agreement among registrars. 3. Methods most commonly used. 4. Analysis of typical plans. 5. Some helpful suggestions. 6. Recommended registration plan.

Let the Children Advance According to Individual Ability

Hard and Fast System of Grading Which Once Prevailed Has Practically Disappeared from American Schools. William T. Harris Leader in Movement for Freedom. Many "Plans" Have Left Their Influence

By WALTER S. DEFFENBAUGH
Chief City School Division, Bureau of Education

TOO MUCH listening and not enough doing characterizes many a school. If the listening were attentive and if everything said in class were worth hearing, a pupil might in time become educated—or at least informed. In most recitations he hears numerous questions asked and answered; he hears other pupils tell what they have read; he himself may be called upon to answer a question or two. The recitation period may be taken up by the teacher in telling what she has read or what her opinion is on certain questions. She may even become dogmatic in her teaching. Under all such instruction the children are mere passive recipients, not active doers as they should be.

In schools as usually organized there is but little time for a pupil to do any studying. He may have but one or two study periods a day, the remainder of the time being spent in recitations, where he becomes a listener. In a class of 30 pupils no one pupil can himself contribute much more than a minute's time to the discussion of the lesson. The question is what is he doing the remainder of the period. The supposition is that he is listening, but is he? And if he is, could he not be more profitably employed?

To Avoid Clinkers and Sluggards

These are some of the defects of the class method of instruction, but there are other defects. Pupils differing greatly in capacity are held to the same pace. Some fail and have to repeat a year or a half year's work. They become the "clinkers" in the school system. The slower children, nagged and threatened with failure, become discouraged, while the brighter children, not having enough to do to keep them busy, form bad habits of study and the habit of laziness. They get the notion that any task may be accomplished without work; that their brilliancy will carry them through. The poorer pupils of the class are strained to the utmost and are literally dragged through school. The child who ranks midway between the dullest and brightest, seeing pupils gaining promotions with a mere passing grade of 70 or 75, with work only three-fourths perfect, and other pupils getting through with little effort, is tempted to follow the example set by the brighter children.

All the faults of the class system have been dwelt upon from the time the graded school system was inaugurated. In 1868, Dr. Wm. T. Harris, in his report to the St. Louis Board of Education, called attention to the evils inherent in the system that holds pupils of all degrees of ability to the same requirements. Since the publication of Doctor Harris's report many attempts have been made to remedy the defects that have just been enumerated. He recommended that classes be organized with only five weeks' interval between them so that the brighter and more industrious pupils could be advanced without skipping a half year's work and so that pupils not able to sustain themselves with the classes to which they were assigned could drop back to the class below without losing a half year, or even a whole year in those schools having annual promotions.

All sorts of "plans" have been tried to break the "lock step." Among these may be mentioned the Cambridge, the Denver, and the Elizabeth plans. There was the Batavia coaching plan, and the Pueblo individual instruction plan. None of these was ever widely adopted. Traces of them may be found in some school systems to-day, but the originators of these plans would scarcely recognize them as their own.

Interest in Individual Instruction is Increasing

Even if the attempts to break the lock step and to remedy the defects of instruction en masse have not proved as successful as was hoped by the originators of the several plans, efforts have not ceased to reach the individual pupil and to have him progress through the schools at a pace suited to his ability. There is to-day more interest in individual instruction and in means of breaking up the lock step than ever before. The homogeneous grouping of pupils, supervised study, special classes for subnormal and supernormal children may be cited as examples of the efforts in this direction.

Several plans of individual instruction that have attracted wide attention may be mentioned. One of these plans originated at the State Teacher's College, San Francisco, and has been adopted in other places under city school conditions. Winnetka, Ill., has given the plan the most thorough trial.

"Dalton Plan" Widely Known in England

Another plan of individual instruction, known as the Dalton plan, originated at about the time Winnetka began its experiment. The Dalton plan has been more widely adopted in England and other European countries than it has in the United States. A large association of Dalton school teachers and principals has been formed in England, so popular and widespread has the movement become in that country. Among the schools in this country that have adopted the plan may be mentioned the South Philadelphia High School for Girls, Philadelphia Trade School, the Manhattan Trade School of New York City, and the Children's University School, New York City, under the direction of Miss Helen Parkhurst, the originator of the Dalton plan.

There is some difference between the Winnetka and the Dalton plans, but each has been so modified in some of the schools experimenting with individual instructors that it is not easy to say which plan is followed the more closely.

At Winnetka the general plan, according to a circular issued by the superintendent of the schools of that city, is:

First. A reconstruction of the curriculum in terms of definite and specific objectives. For example, instead of saying that children shall learn column addition in third grade, say specifically "a child who finishes third-grade arithmetic can (among other things) add columns of five digits high and three digits wide, containing all of the fundamental combinations, at the rate of three columns in three minutes, with 100 per cent accuracy.

Second. The construction of tests to cover each specific objective, the test being complete and diagnostic.

Third. The preparation of practice material leading up to these tests.

Social Activities Replace Class Recitations

Class recitations are abolished, but socialized activities are provided, such as discussions of real problems in civics, the dramatization of history and geography materials, auditorium assemblies, group projects. The program gives about half of each morning and half of each afternoon to individual work, the other half to group and creative activities.

The teachers keep track of each pupil by the use of a goal record book in which the specific objectives of each subject are listed, and the children's names. Each child has an individual goal book which

is taken home each month in place of report cards so that parents may keep track of their children's progress.

The Dalton plan provides for the assignment of jobs covering about four weeks' work. This plan may be used without any change of curriculum or specially adapted textbook. The job assignments may consist of so many pages in the text or of certain topics. Whenever a pupil has completed all his contracts he is given a new assignment. Class conferences are held once or twice a week at certain periods of the day. At other times the pupils are free to go to any classroom or subject laboratories as they are called. If a pupil wishes to study history, he goes to one of the history laboratories for consultation with the instructor, or to join a group working on some particular problem. Tests are given the pupils on these contracts. No new contracts are assigned until all the contracts for the month are completed. A pupil may arrange his own study program practically as he pleases. He may work several hours at a time on mathematics; he may finish one contract within a week or two and be an entire month on another contract. The plan no doubt works best when applied to the entire school, but individual teachers report successful use of the plan when it is not in operation in the entire school. A teacher of English may use it to the extent of assigning contracts. Of course there would not be the freedom under such an arrangement as in a school using the plan in every department.

Both Doubling and Skipping Are Evils

It is not the purpose of this article to evaluate either of these plans. They must speak for themselves, but there are several reasons why some individual instruction plan should be adopted by the schools of the country provided, of course, that sufficient socialized activities are provided. Under an individual instruction plan no pupil is required to repeat a grade. There is no doubling back; there is no skipping of a grade or a part of a grade. It is one step after another; no retreat; no forward jumps. By such a plan it is evident that the bright pupil can complete the course a year or two ahead of time or, if preferred, his course may be greatly enriched. He can complete the course without any abrupt jumps. The slower pupil may be delayed a year in completing the course, but he has been moving forward all the time.

Studies made by Dr. Frederic Burke and others of the results of individual instruction show that:

1. The slowest children are less slow than where they have to repeat grades.
2. The fastest children can do eight grades in five or six years.
3. The great bulk of children can either do eight grades in six or seven years, or if they take eight years they can have more than ordinary schools give for group and creative activities.
4. Children are more interested in their work, making discipline easier.
5. The work is done more efficiently.

Studies made in England of the Dalton plan confirm the studies made in this country of the results of individual instruction. The Dalton plan has however, been confined more generally to high schools. One of the results of the plan which was introduced this last September into the South Philadelphia High School for Girls has been that the library has been used five times as much as it was under the traditional plan. Further data on the results of the plan in that school will be given after it has been in operation one or two semesters.

That all of the experiments in individual instruction now going on in this and other countries promise much is evident from the studies thus far made of them. At least all such experimentation should be encouraged so that a way may be found of breaking the "lock step" in our schools.

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The Bureau of Education of the Department of the Interior has been invited to take part in the education court of the New Zealand and South Seas International Exhibition, to be held at Dunedin, 1925–26. The exhibition is international in scope and is under the official authority and patronage of the New Zealand Government.

♔

At the instance of the General Secretariate of the League of Nations, the Danish Ministry of Instruction has established a national commission which is to work for intellectual cooperation between Denmark and other countries. The members of the commission are appointed for five years.—*John Dyneley Prince, American minister, Copenhagen.*

System of Informal Education Developed in Oklahoma

"How to make available much-to-be-desired educational opportunities to the great unreached public," was one of the problems discussed at length at the second national conference on home education at the University of Minnesota last spring, according to the report of proceedings recently issued by the Department of the Interior, Bureau of Education.

This problem has been studied in State universities, schools, and libraries, and by other agencies from time to time. In Oklahoma, the problem has been studied by the State library commission. The result of this study has been the development of a system of informal education, usable in the home, in the shop, nights, holidays, and during spare minutes snatched from necessary daily work. Consideration was given to classified groups, such as women's study groups, union labor groups, agricultural groups, cotton grower's groups, and many other groups of varying interests. Provision for some of these groups was made by the adoption of the home reading courses of the Bureau of Education by the State library commission. The secretary of the commission was appointed by the Secretary of the Interior as a special collaborator of the Bureau of Education to conduct the reading courses in Oklahoma.

The Oklahoma Board of Education, at the same time, adopted four of these reading courses in lieu of a State reading course. The board offers school credits to readers who complete these courses under the guidance of a high-school teacher.

To meet the demand for the books, because of the scarcity of libraries, the library commission purchased all of the books in the courses, and for the most popular courses from 5 to 50 copies of each book were purchased. This made the books available to readers immediately upon application.—*Ellen C. Lombard.*

We can never fully estimate the debt of gratitude we owe to our ancestors for establishing our system of common schools. In consequence of their wisdom and foresight, we have all grown up in the midst of these institutions; and we have been conformed to them in all our habits and associations from our earliest childhood. . . . Can there be a man amongst us so recreant to duty, that he does not think it incumbent upon him to transmit that system, in an improved condition, to posterity, which his ancestors originated for him?—Horace Mann.

Teachers who attended the first institute on Virgin Islands

Auspicious Beginning of Virgin Islands Teachers' Association

Ninety-seven per cent of all the teachers in the Virgin Islands attended the first teachers' institute ever held on the islands. The institute was held at Frederiksted, St. Croix, November 6 and 7, and the convention of the Virgin Islands Education Association followed immediately afterward.

Great interest was shown in the occasion, not only by the teachers but by the public. Inspiring addresses were made by the governor, the chairman of the colonial council, and other public officers.

The director of education, Arthur E. Lindborg, writes enthusiastically of the success of the meetings and predicts "big things" for the future welfare of the profession in the islands.

This Is the Time to Consider Ventilation

Proper ventilation of school buildings during the winter is essential. In a study made among high-school juniors by the North Central Association of Colleges and Secondary Schools, 15 per cent stated that the school could help more to develop health habits by looking after ventilation better. Of those stating ways in which the school tends to produce ill health, 40 per cent mentioned "poor ventilation." Pupils require fresh air. Twenty-one per cent of the 15,075 answering included "fresh air" among the "three best health habits possessed." This recreation indulging group placed it second only to "plenty of exercise."

The small rural school plant can at small expense meet the requirements for good ventilation. Some rural schools have ventilating heaters. Others have satisfactory jacketed stoves with adequate fresh-air inlets and foul-air outlets. Still others have furnaces, gravity exhaust ducts, and window boards at the majority of the windows. The window boards are frequently panes of glass 1 foot high set as deflectors in the window sash. All of these may be so regulated as to serve ventilation needs admirably.

According to experiments made under the direction of the New York State Ventilation Commission, window-ventilated rooms with gravity exhausts seemed fresher and freer from odor and were more comfortable as to temperature than rooms equipped with expensive fan systems. Appetite for food is considerably decreased if stale air is breathed. The retarding defects of malnutrition are too well established to overlook this result of poor ventilation.

The temperature of the room affects the vigor of pupils. A reliable thermometer in plain view on the teacher's desk should register a room temperature of 68°. Subjects experimented with were inclined to do 63 per cent more typewriting and 15 per cent more physical work at 68° than at 73°. The lower stimulating temperature, together with an air change, without chilling drafts, sufficient to remove the accumulation of body odors, is most favorable for study. School boards should provide at least the minimum essentials for good ventilation. Teachers should learn how to regulate them to obtain the maximum of results for their pupils.—*William Mc Kinley Robinson.*

"Guidance conferences" for freshmen students at West Virginia University are proving to be of value and interest. Addresses adapted to the needs and problems of university men are given and the students invited to take an active part in discussions. "The choice of a life career," "Intelligence tests," and "How to study" are among the subjects presented by students for discussion.

High-school Students Classified According to Ability

Grouping of students into sections according to ability has been practiced in the high schools of Seattle, Wash., with very satisfactory results. It began as an experiment three years ago and it is now in general use. In one high school all of the academic subjects of the first two years are divided into sections in this way.

Under this plan of grouping, strong students are permitted to go on and the habit of mediocrity is discouraged. Sufficient drill may be given backward students without boring quicker minds with the monotony of continual review. Not so much stress is placed on covering the course of study and more is placed on the mastery of special problems.

Making the class more uniform in ability the teacher ean get better results with a large class than with a small class whose differences represent the wide range of capacity which usually exists among high-school students. The success of the plan justifies the expectation that it will be permanently adopted.

The Oriental Institute of the University of Chicago has recently established headquarters at Luxor, Egypt. A building just completed is equipped with complete apparatus for photographic work and scientific research connected with the making of a permanent record of thousands of ancient inscriptions on temple walls near the tomb of Tutenkhamon.

Dr. James Henry Breasted is director of the institute and Prof. Harold H. Nelson is in charge of the new building. The staff will consist of three or four Europeans and Americans and 15 workmen and servants.

New Books in Education

By JOHN D. WOLCOTT
Librarian Bureau of Education

ATHEARN, WALTER SCOTT. Character building in a democracy. The Washington Gladden lectures for the year 1924. New York, The Macmillan Company, 1924. 163 p. 12°.

The democratic state depends for its perpetuity on the intelligence and moral integrity of its citizens. The first of these objects is to be attained by the public schools. The democratic state is developing a system of free schools which will give to its citizens the common knowledge, skills, attitudes, and ideals necessary to guarantee the preservation of democratic institutions. It is the part of the churches to provide a comprehensive system of religious schools to parallel the public school system all the way from the kindergarten to the university. These schools should give the rising generation the necessary moral training based on religious faith. The church teachers who are to instruct an educated citizenship must themselves be educated if the citizens of the future are to be motivated by religious ideals. In view of this situation confronting Christian educators, Professor Athearn's book discusses "spiritual illiteracy" and its remedies, the evolution of the church school, the organization and supervision of religious education and the provision of qualified teachers, and the prospects for the church schools of to-morrow.

BALDWIN, BIRD T. *and* STECHER, LORLE I. The psychology of the preschool child. New York, London, D. Appleton and company, 1924. 305 p. illus., tables, diagrs. 12°.

In recent years, the results of experimental research have brought about a new vision of the mental and physical needs of the preschool child. This text presents the results so far obtained from a three years' series of observations and experiments on normal and superior children from two to six years of age in the preschool laboratories of the Iowa Child welfare research station of the State university of Iowa. The historical background of experimental studies is treated in a brief introductory review. The later chapters of the book describe in detail the preschool laboratories in which the studies were made, and the methods used in the last three years with the children who have been the subjects of training. The book bears directly also on the later development of the older child of school age.

BARBER, HARRY C. Teaching junior high school mathematics. Boston, New York [etc.] Houghton Mifflin company [1924] xi, 137 p. diagrs. 12°. (Riverside mathematical monographs, ed. by John Wesley Young.)

This monograph undertakes to tell just what is meant by the "new mathematics," what it is, why it is desirable, and how it may be successfully taught. It gives the results of the author's experience in putting the new program into effect in the public schools of Newton, Mass. The proposed reorganization applies particularly to the seventh, eighth, and ninth grades, constituting the junior high school, and was recommended by the National committee on mathematical requirements in its final report published in 1923.

FYNNE, ROBERT JOHN. Montessori and her inspirers. London, New York [etc.] Longmans, Green and company, 1924. viii, 347 p. plates. 12°.

Says that it was through the scientific study and education of idiots and other defective children that the principles of the Montessori method were originally realized and its practice suggested. The history of the method is accordingly the history of the work of Pereira, Itard, Séguin, and Montessori, which is given connectedly in this volume.

HART, JOSEPH K. The discovery of intelligence. New York and London, The Century company [1924] xvi, 431 p. front., illus. 8°.

This history outlines the intellectual progress of humanity from primitive times to the present. Men first lived by customs and habits, joined together in a complete system of living, which are called folkways. The author shows how the development of civilization has consisted in a constant struggle to surmount these folkways by intelligence.

HOSIC, JAMES F. *and* CHASE, SARA E. Brief guide to the project method. Yonkers, N. Y., World book company, 1924. vii, 243 p. illus. 12°.

This practical manual evaluates the project method, and shows what it should accomplish and what it actually has accomplished. It deals first with the theory of the project method, then describes a number of sample projects, and lastly gives hints and helps for project teachers, in geography, history, the "tool subjects", composition, and literature.

HOTCHKISS, E. A. The project method in classroom work. Boston, New York, [etc.] Ginn and company [1924] xiii, 258 p. front., illus. 12°.

Part one, comprising 30 pages, of this volume contains a brief discussion of the theories and fundamental principles underlying the method of teaching, as a background for Part two, the remainder of the volume, which gives a detailed description of projects that have been worked out in the classroom in connection with the work of training teachers. The book is the outgrowth of the author's experience as an instructor and supervisor in teachers' colleges.

LEARNED, WILLIAM S. The American public library and the diffusion of knowledge. New York, Harcourt, Brace and company [1924] vii, 89 p. maps, tables, diagr. 8°.

The progress of civilization depends upon the discovery, formulation, and diffusion of knowledge. The author mentions some of the difficulties encountered in diffusing knowledge, and the lack of provision for the adult compared with the instruction which is supplied for youth. Young graduates are commonly told that their education has only just begun, but no adequate provision is made for the continued training of adults. A community intelligence service is needed, with a personnel qualified to direct adult inquirers from printed sources of information. Other sources than print should also be utilized, such as lectures, museums motion pictures, and the fine arts. The tax-supported public library as an agency for the systematic diffusion of knowledge is next discussed in this book; also the American Library Association as an agency for the promotion of library service. The study closes with a forecast of the future development of public libraries and of the service rendered by them, in which the author recommends a library survey of the United States, experimental studies in the diffusion of library service, and adequate support of professional training and of the American Library Association.

ROBERTS, JOHN S. William T. Harris; a critical study of his educational and related philosophical views. Washington, D. C., National education association of the United States, 1924. xvi, 250 p. front. (port.) 12°.

Dr. Harris's published writings have been used as a source for this study, which was originally made as a thesis for the doctorate of philosophy in New York university.

STALEY, SEWARD CHARLE. Games, contests and relays. New York, A. S. Barnes and company, 1924. viii, 354 p. illus., diagrs. 8°.

The author has attempted to collect into this volume of mass physical recreational activities, all of the more important activities of this sort practiced by the peoples of Western civilization. It includes the pedagogy of games for the lower and upper grades, the junior and senior high school, and the college; also gives directions for relay races and combative contests.

WALLIN, J. E. WALLACE. The education of handicapped children. Boston, New York [etc.] Houghton, Mifflin company [1924] xiv, 394 p. front, plates, tables, diagrs., facsims. 12°. (Riverside textbooks in education, ed. by E. P. Cubberley.)

The results of long and extensive study by the author of all types of handicapped children are organized and presented in this book. After a brief historical survey of the development of care and training of handicapped children, the technical requirements are stated for the successful organization of special classes for children who are mentally retarded, delinquent, speech defective, crippled, deaf, blind, hard-of-hearing, or semi-sighted. A discussion follows of the theories, definition, and social consequence of mental deficiency, and the ultimate aims of constructive work in behalf of the mentally defective. The appendix contains a conspectus on the classification of mentally deficient children from various points of view.

WALTERS, RAYMOND. Educational jottings abroad. Lancaster and New York. The Science press, 1924. vii, 85p. 16°,

Various articles of special correspondence from England, Scotland, Holland, and France are reprinted from several journals of 1924 to form this volume.

Offer Prizes for Foreign-Language Study

To encourage the study of foreign languages by Londoners, money prizes for proficiency in certain languages are offered by banks and other organizations interested in foreign trade. Oral and written examinations are given by the London school authorities in Italian, Russian, Spanish, French, German, and Hebrew, in the advanced, the intermediate, and the elementary stage, and the persons standing first and second in these examinations are awarded the prizes. The largest prize is $50, offered for advanced Italian. To meet the demand for instruction in the various languages, the London County Council provides classes in more than 25 evening institutes.

WASHINGTON : GOVERNMENT PRINTING OFFICE : 1925

Another Annual Event in the American Calendar

AMERICAN EDUCATION WEEK is still growing in popularity. Reports have come by the hundreds from hamlets, villages, cities, and counties describing the enthusiasm with which parents, civic organizations, the press, and the pulpit assisted in making the observance of the program for the week of November 17–23 far surpass previous efforts.

The project lacked nothing of influential support, sponsored as it was by the Bureau of Education, the only agency of the United States Government which is devoted wholly to general education, by the American Legion, one of the great patriotic societies, and by the National Education Association, the greatest organization of teachers in the world. But above all, the observance of the week was stimulated by a proclamation of unusual strength from the President of the United States calling upon the people to turn their attention to the need of popular education in America. Nearly all the governors, as in previous years, issued proclamations in a tone of conviction that education should occupy first place in the thoughts of the people. State, county, and city school superintendents entered heartily into the work of preparing plans and issuing circulars of information and instruction and by appointing committees to have charge of the various features of the week, such as publicity and the preparation of programs.

The great success of the week may be attributed largely to the cooperation of the newspapers and the periodical press which contributed liberally of their space in publishing the proclamations and the local arrangements for carrying them out. Information sent out by the Bureau of Education was widely used. Organizations such as Parent-Teacher Associations, the General Federation of Women's Clubs, Rotary and Kiwanis Clubs cooperated most heartily and effectively with the schools in the observance of the week.

Many motion-picture theaters were placed at the disposal of the school people to make announcements regarding Education Week. The plan usually adopted was for the school officers to prepare brief statements about the schools which were placed upon slides and exhibited as part of the regular program.

Some of the radio stations were used to broadcast addresses of State and city school superintendents and others. The United States Commissioner of Education broadcast a talk each day of the week from the naval radio station at Washington.

The cooperation of business men is often mentioned in letters describing the observance of the week. In many instances school exhibits were placed in down-town store windows. American Education Week has become a permanent feature of the school year and better and better results may be expected. The idea of the importance of such a week is just beginning to get hold of the minds of the American people.

The following extracts from letters received recently are typical of hundreds of others. To print all the good things in these letters would be far beyond the limits of this journal:

BIRMINGHAM, ALA.—One school reports a housewarming on Thursday night of Education Week. Through the active cooperation of the School Improvement the occasion proved successful as shown by an attendance estimated at 700.

Another school reports that the Business Men's League and the Kiwanis Club held their luncheons in the school during the week. The dedication of the lunch on Friday evening was made a public occasion which brought together a large number of people.

A fathers' meeting was held one night at one school at which about 130 fathers were present. An educational address by a representative of the Legion was one feature.

ENTERPRISE, ALA.—Education Week was indirectly the cause of the city voting a 1 cent tax on gasoline for building and equipment purposes. Since that week the town is putting on and enforcing the compulsory attendance act. A fund for caring for the poor has been given for direct school purposes.

CONNECTICUT STATE BOARD OF EDUCATION.—The most fruitful type of meeting was that which attempted to demonstrate a single phase of work showing progress through the grades. Briefly such a meeting includes:

1. Talk by supervisor indicating the general aims, purposes, and goals.
2. Indication of and statement of the specific aims in lower, intermediate, and upper grades, together with claims for local group of pupils.
3. Demonstration by pupils proving to the people that aims are actually being accomplished.

NEW BRITAIN, CONN.—There was a community luncheon in observance of Education Week by the American Legion, Rotary Club, Lions Club, and Kiwanis Club, Tuesday noon, at Walnut Hill auditorium. Ten thousand bulletins distributed: "What are the schools trying to do?" Ten thousand bulletins distributed: "What kind of schools does New Britain need?"

NEW HAVEN, CONN.—I think that perhaps our two best ideas were (1) the requirement that every school should select some topic of Education Week and make it that school's business to celebrate the topic inviting the interest of the public; (2) the invitation of the public club to visit the Commercial High School for lunch, attend an auditorium program, and visit the various departments of the school.

TOCCOA, GA.—We classified the school library and added over 200 volumes to it.

DWIGHT, ILL.—We had contests in each room among A and B sections to try to see which section could get most parents out. Loosers treated winners.

This was the first time in the last ten years we have ever had any visitors in high-school classes. I think it was worth while in this one point only, if nothing else.

PEKIN, ILL.—During the noon hour at the county courthouse a junior high school was in session each school day for the benefit of the business men.

STERLING, ILL.—We issued tags for the children to wear, p[illegible]ed with the inscription, "My parents visited school this week"; add[illegible]nal visitors were represented on the tag by a star. The room having the highest per cent of visitors received a reward. This year the reward was the honor of using the new gymnasium for the first time. The school enrollment is 445, and 400 parents and friends visited the school during the week.

DANVILLE, IND.—The main feature of the week was a model school which we conducted in the display window of a down-town furniture store. The equipment used was our own except for the furniture, which was loaned by a near-by school supply company. The children used for the display were some from the second grade. The teacher was their regular teacher. We used only 15 children because of the small size of the window. The remaining pupils of the room from which these were taken were left at their regular building under the care of another teacher. School was conducted in the store window throughout the week. Regular class work was done.

Our display seemed to accomplish its purpose. The children were very enthusiastic about their sudden call to prominence, but they were quite orderly throughout and undisturbed by the traffic and spectators outside. The teacher, although reluctant to act as assigned, was quite gratified with the results and glad that she had been chosen. The local newspapers made favorable comments. The parents were impressed with the idea of better school furniture, for we received inquiries from some who wanted to buy a chair desk for their children as a Christmas present.

KENTLAND, IND.—Every home was reached, for we mailed, first class, a letter to each family.

LA PORTE, IND.—We dedicated our new high-school building.

CLARENCE, IOWA.—On Sunday evening of the week we succeeded in getting the whole community interested. We have a consolidated district with 700 population. We have one church which will seat 700. This building was used and the other churches had no services. The program was given over to citizens, school, and Legion. All topics discussed were educational in their nature. We have had these meetings for two years and they have been well attended and much interest is shown. The building is always full.

DES MOINES, IOWA.—A different high-school boy broadcast over WHO every afternoon during the week. This gave us quite a bit of space all over the State of Iowa. Incidentally, it gave the high school whose boy was broadcasting an opportunity to have an assembly at the time he broadcast, where they listened in.

Des Moines is in a $7,000,000 campaign. We are taking advantage of the public's interest and formally dedicating buildings and laying corner stones. During the week we laid corner stones of two of our new $600,000 junior high schools.

ODEBOLT, IOWA.—A model schoolhouse, with school ground, and surroundings was constructed by the normal training students and put on display in a show window of a business house with a big sign, "American Education Week."

OSAGE, IOWA.—The school is conducting a patriotic oratorical contest, a copy of the regulations concerning which are herewith submitted. Business and professional men of the city raised and deposited a fund of $135 to be used for prizes.

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Another Annual Event in the American Calendar

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SIOUX CITY, IOWA.—At one store there was a demonstration of kindergarten and first-grade work; the morning program started at 10 o'clock and ran to 11.45, the afternoon program from 2 o'clock until 3.45. This work was divided among the different schools.

At another store were demonstrations of second to sixth grades, Monday being given to the second grades, Tuesday to the third, Wednesday to the fourth, Thursday to the fifth, and Friday to the sixth. One store was given up more largely to junior high school and high school activities, work being done in domestic science, sewing, millinery, and allied subjects. Physical education, orchestra and band work were demonstrated at a fourth store by the orchestra and physical education departments of the junior highs and high school. In addition to the work of the second to sixth grade, inclusive, there was shown work in mechanical drawing, design and drawing, free-hand drawing, arts and crafts, also typewriting and commercial work. School nurses worked in connection with the children. Our dental hygienist and dentist demonstrated the work of the dental department.

WAYLAND, IOWA.—The different departments and classes placed exhibits in the store windows down town where the people would be forced to observe the work. This proved much more satisfactory than having Visitors' Week in which the exhibits are shown at school.

The local paper gave the school their front page to be used by the school. The departments and organizations were written up. We tried to explain the school work to the community.

The children from the first to the sixth grades, inclusive, gave an operetta at the end of the week.

GLASCO, KANS.—Advertisements by the local merchants in the paper carried the official slogans of the week in conspicuous positions. The motion-picture theater also ran slides carrying these slogans for two weeks.

Short talks were given in all of the Sunday schools and churches of the community on the Sunday preceding Education Week and on the final day of the week.

BOWLING GREEN, KY.—The Kiwanis Club of this city took up the matter and we arranged for a sort of county whirlwind. There were two groups organized who, with a speaker, singers, and other boosters, made a tour of the county, spending 30 minutes at each school and giving an educational program in connection with the program arranged by the teachers of the several schools. Many parents and other patrons of the schools were present and witnessed these programs.

WINCHESTER, KY.—We had a flag raising on that day. The exercises were planned and carried out under the auspices of the Federated Women's Clubs of Winchester. The program was not only good but it aroused a great deal of interest among these women in the school work of the community.

NEW ORLEANS, LA.—In order to encourage attendance, the New Orleans Post of the American Legion offered a loving cup for the largest percentage attendancc of parents to a school; the winner of this contest has not yet been determined.

BEVERLY, MASS.—The only unusual thing that we did was to get permission from the editor of our local paper to allow the school children to act as an editorial news gathering staff on Thursday of Education Week. This was carried through very successfully. Practically all the reading matter in the paper was written by students in the high school. This aroused considerable interest and was, I think, an effective method, for it was not without its benefits to the high school itself.

MARINE CITY, MICH.—Copies of a little booklet, "Why Graduate," by Dr. A. E. Winship, were given to each member of the high school.

PALMER, MASS.—The parades were organized so that the various school activities were typified. Manual-training boys paraded in overalls and jumper, carrying various tools; household arts girls represented cooks, etc.; physical education was represented by football team in uniform, girls representing various "gym" activities, etc.; Boy Scouts, Girl Scouts, and other organizations in the schools were represented. A large representation of a milk bottle gave emphasis to one side of health work. A float representing an office with typewriter, adding machine, etc., in operation portrayed the work of the commercial department. Placards with all kinds of slogans were carried.

MOORHEAD, MINN.—The exhibit was very much worth while and gave us splendid results. Special addresses were given before the junior and senior high school during the week.

In every way we consider the results of our effort for the observance of the week very well repaid.

THIEF RIVER FALLS, MINN.—This is the second year we have staged an all-school parade and we feel convinced that it is the best possible eye opener to our public. "I never realized how many children we had before," one board member remarked. "I had always thought in terms of my own child, forgetting the numerous other children in the city," one of our prominent business men told me following the parade. "It is self-evident that it takes money to take care of so many children," was another remark.

Again I repeat that an all-school parade has appealed to us as one of the most effective means of awakening the public to a realization of the magnitude and importance of the business of educating the boys and girls.

BRADY, NEBR.—The Friday before Education Week we held a school parade of 200 children. Banners bearing the slogans for each day were carried and school songs and yells were given.

GIBBON, NEBR.—Our local editor gave us the privilege of editing his paper as the Gibbon High School Issue.

McCOOK, NEBR.—Monday, a parade of the 1,500 school children headed by the high-school band and eight floats advertising the week. Appropriate banners were carried, designating the grade, ward, etc.; also suggestive banners containing national slogans and locally suggested slogans for the week were carried.

YORK, NEBR.—Several of the schools had red cards to present to everyone who visited school that week. I thought it a splendid idea.

Several rural schools carried out the programs suggested for Monday, Tuesday, Wednesday, Thursday, and Friday. Many posters on education, good health, patriotism, and loyalty were in evidence.

MILFORD, N. H.—The week was in charge of Parent-Teachers' Association. They elected five members, each taking one school day of the week and acting on that day as guide for visitors. Superintendent previously took these five ladies through every school, explaining the situation completely, so that they were ready to answer questions upon their respective days. These five ladies secured a list of all parents and gave each an invitation to visit on whatever day they chose.

TRENTON, N. J.—Our observance of American Education Week is confined to an attempt to bring to the attention of the adults of the community problems which confront public-school officials. We make no attempt to have the children observe the week. Newspaper articles appeared each day in accordance with the daily program as provided by the national department. In addition to this, pamphlets are printed and distributed to every home in the city having children in the public schools.

ALBUQUERQUE, N. MEX.—The big feature of the week was a pageant put on by the Washington Junior High School, which portrayed the work of the different departments of that school.

ALBANY, N. Y.—A special program was carried out by the chamber of commerce. All types of schools were represented at this meeting—public, private, parochial, collegiate, and professional. In connection with this meeting, as a consummation of the celebration, the chamber of commerce has published a booklet—"Education in Albany, an Opportunity and a Business."

HERKIMER, N. Y.—The unusual thing that we did in Herkimer this year in observance of American Education Week was the formal opening of two new school buildings. One is in a foreign section; the other in a more purely American section.

HOMER, N. Y.—The fifth-grade teacher, together with the music supervisor, staged a musical version of "The Pied Piper of Hamlin." This was advertised by means of posters and presented two days at the language period. It proved a great success and was largely attended by the parents and friends of the children. Work in drawing, English, arithmetic, and geography was attractively displayed on the walls of the various rooms.

ROCHESTER, N. Y.—The papers of the city each gave us a special reporter and the official photographer and plenty of space, so that every aspect of school work was brought to the attention of the reading public.

WINSTON-SALEM, N. C.—The Southern Music Supervisors' Conference, which was held in place of the usual celebration of American Education Week in so far as the city at large was concerned. The week opened with a community service on Sunday afternoon, November 16, and ran through Saturday morning of that week, when we had a community program for the schools of our county, under the leadership of Peter Dykema.

DICKINSON, N. DAK.—A feature of the week's work was "selling" the high school to the grade schools. About 30 high-school students gave talks on different phases of high-school work in all the sixth, seventh, and eighth grades of the school system.

CRAWFORD COUNTY, KANS.—With the help of the American Legion we were able to furnish transportation for all the speakers and there were 86 meetings held during the week. This includes cities of the first and second class and the rural and village schools also.

THE DALLES, OREG.—In this county we declared every day of American Education Week "school visiting day" and offered three standard framed pictures to the schoolrooms of the county reporting the highest number of school visits during the week. Approximately 1,200 visits were reported from 60 schools, outside of The Dalles, almost all one-room rural schools.

McKEESPORT, PA.—We had an art exhibition for three days and three nights during this week. More than 5,000 people visited this exhibit. Wednesday, November 19, was parents' day in the schools. Lodges, churches, and civic organizations, including the Kiwanis, Lions, Optomists, Rotary, and chamber of commerce, had special exercises. We also had a special art, sewing, and manual-training exhibition.

NEW CASTLE, PA.—We made the chief event of Education Week the dedication of a new elementary school building which had been recently completed and which marks a step in the building program which New Castle has been following since 1920.

WEST CHESTER, PA.—Two weeks previous to November 17, I requested the editor of the Daily Local News of our borough to send one of his staff to our schools to interview the heads of the various departments to obtain the material for an educational write up to be published each day of Education Week. I am pleased to state that I had the fullest cooperation of the editor.

The art department of our high school made many educational window cards, and these were displayed in the windows of the various business places of our borough during Education Week.

CRANSTON, R. I.—The part of the observance that seems to us most fruitful was that of Wednesday night when all schools of the city were opened from 7.30 to 9 and parents and friends were invited in to meet the teachers and inspect the work of the pupils. No pupils were in attendance at this time except as they came to introduce their parents. The Parent-Teacher Associations acted as hostesses on these occasions. There was a very general response on the part of parents, and the plan seemed very worth while to all concerned.

CHESTER, S. C.—We observed American Education Week by the dedication of our new high-school building.

BRISTOL, VA.—One of the larger churches observed Education Week by having an address on some phase of education each evening during the week, the pastor beginning the series himself on Sunday evening.

WHIPPLE, W. VA.—We came near making it a 100 per cent visit on the part of parents represented in our schools here. Our Polish fathers and mothers responded enthusiastically, and I notice a marked change in the attitude of our people toward educational matters since.

CALUMET COUNTY, WIS.—Previous to American Education Week articles were published in the county papers in order to familiarize the public with the purpose of American Education Week.

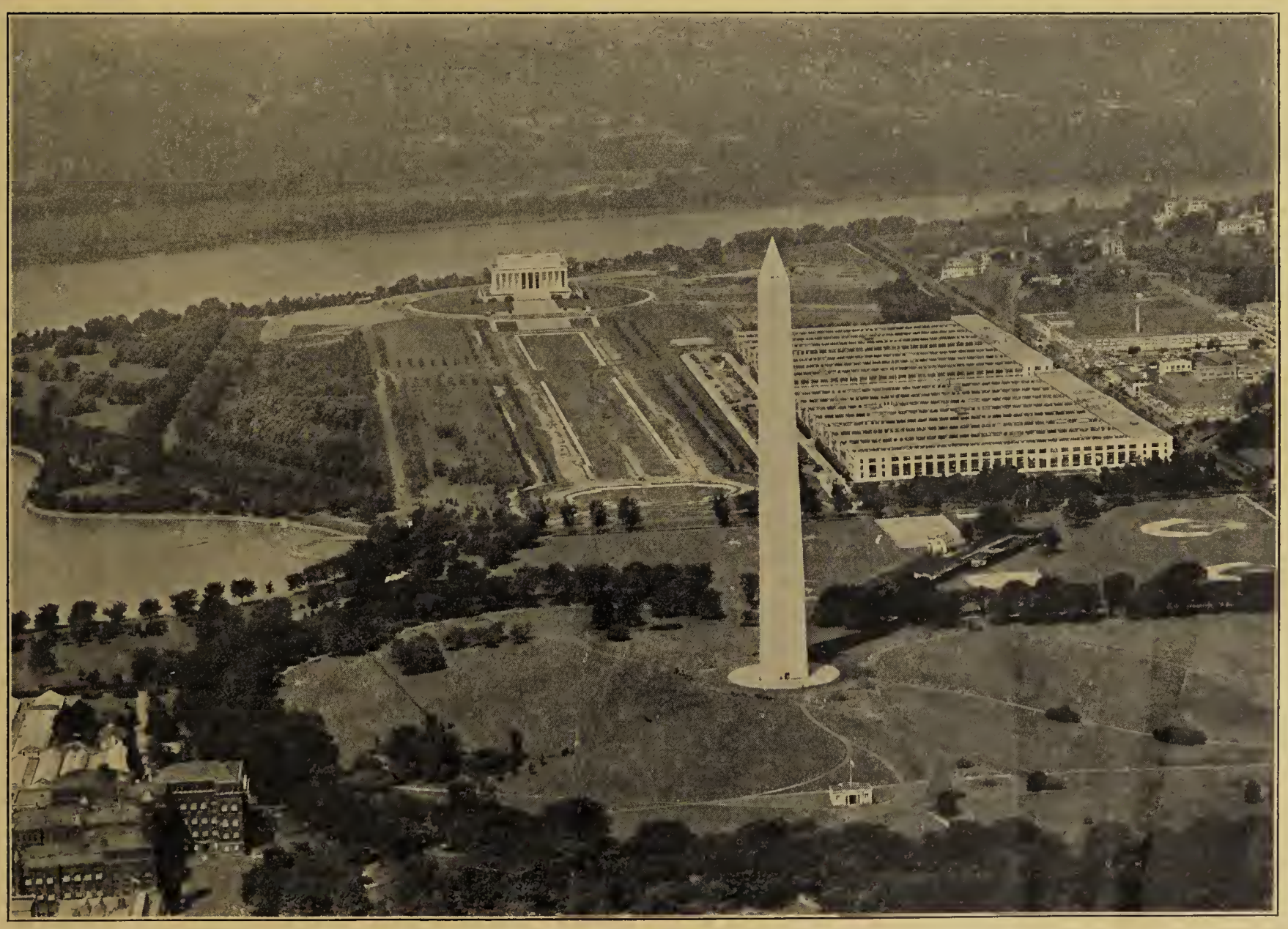
CLARKSBURG, W. VA.—Advertisers were asked to cooperate by placing a small advertisement for Education Week within their own. A publicity staff composed of senior English students wrote themes on different phases of education. These were typed by commercial students and appeared in local papers.

OCONTO FALLS, WIS.—This year, by use of slogans of all kinds in the interest of education, we plastered the city. Every business house in the city had one or more slogans. We found excellent results came of this method of advertising. In addition red arrows were pointed toward school, with the notes advising American Education Week and its aims.

SCHOOL LIFE

Volume X
Number 6

February
1925



THE NATION'S MEMORIALS TO WASHINGTON AND LINCOLN
THE CELEBRATION OF THEIR BIRTHDAYS IS A FEATURE OF SCHOOL EXERCISES IN FEBRUARY

Published Monthly [except July and August] by the Department of the Interior
Bureau of Education Washington, D. C.

GOVERNMENT PRINTING OFFICE

CONTENTS

SCHOOL LIFE is an official organ of the Department of the Interior, Bureau of Education. It is published monthly, except in July and August. The subscription price, 50 cents a year, covers only the actual cost of printing and distribution. Subscriptions should be sent to the Superintendent of Documents, Government Printing Office, Washington, D. C., and not to the Bureau of Education. Single numbers are sold at 5 cents each.

SCHOOL LIFE does not specialize in any portion of the educational field, and the articles are never technical. Every primary teacher and every high-school teacher should know what the higher institutions are doing, and every university professor should be in close touch with the work of the schools below. This is the idea which governs the policy of SCHOOL LIFE; it furnishes current information useful to everybody engaged in educational work of any grade.

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SCHOOL LIFE

Published Monthly, except July and August, by the Department of the Interior, Bureau of Education
Secretary of the Interior, HUBERT WORK - - - - - *Commissioner of Education,* JOHN JAMES TIGERT

VOL. X WASHINGTON, D. C., FEBRUARY, 1925 No. 6

Short Courses in Agriculture, Home Economics, and Mechanic Arts

Report of Committee of Land-grant College Association on Instruction in Agriculture, Home Economics, and Mechanic Arts. Great Disparity in Length and Character of "Short Courses" in Land-grant Colleges. Variation from One Day to Three Years. Some Institutions Offer Work of Purely High-school Grade. Committee Makes Definite Recommendations for Improvement

SOME of the land-grant institutions feel that short-course programs are in need of revision. Much of the old type of short-course work done formerly by the regular teaching staff and sometimes by research workers at these institutions is now performed by the extension workers. The short courses offered by the extension group are sometimes held at the institutions and other times at different centers in the States.

There appears to be a general feeling that the nature of extension work is such as to lessen the need of much of certain kinds of short-course work formerly offered at these institutions. The county agents or farm advisers, with the assistance of specialists in certain lines, are helping the farmers solve many of their problems and are, therefore, lessening the demand on the institutions for short courses of general character. On the other hand, the great spread of the extension work of the colleges has undoubtedly led to a greater demand for short-course work of a special character. Many persons who have been awakened by the benefits conferred on them through the extension work have desired in some way to get more instruction from the college along special lines.

Practical Instruction Most in Demand

Several of the institutions report that courses in general agriculture have been discontinued due to a wider diversity of agriculture and also to the fact that there have been little or no demands for such courses. Those short courses which pertain to special units of instruction in agriculture, home economics, and mechanic arts, such as butter making, millinery, or gas-engine operation, are most in demand and are the courses many of the institutions are now emphasizing.

In reviewing statements of catalogues and the replies to a questionnaire it was found that 45 of the institutions offer short courses in agriculture, 22 in home economics, and 24 in mechanic arts, varying in length from one day to three years. The questionnaire was sent to the three divisions in each of the land-grant institutions and 47 replies were received from agriculture, 41 from home economics, and 46 from mechanic arts. Of these numbers, 44 reported short courses in agriculture, 22 in home economics, and 31 in mechanic arts. It will be noted that the number of short courses as stated in the catalogues is not identical with that reported in the questionnaire, but this slight difference may be due to the difficulty in distinguishing between certain types of short courses, extension conferences, etc.

Generally Designated in Terms of Weeks

The catalogues show that 14 of these institutions offer short courses in agriculture of from 1 to 4 years. Only 4 of the institutions designate short courses in agriculture in terms of months, while 30 designate them in terms of weeks, the length of such courses extending from 1 week to 22 weeks. Only 6 of the institutions designate agricultural short courses in terms of days, the length varying from 1 to 10 days. A considerable number of the institutions refer to short courses as 5 months each for 2 years, of 2 weeks each for 2 years, or 6½ months each for 2 years, etc. Several of the institutions do not make this point clear.

In general the short-course work in agriculture has had a longer history and been more elaborately and frequently developed than the similar work in home economics or mechanic arts. These agricultural courses are either somewhat general or deal with some agricultural specialty. They are given sometimes to adults and sometimes to children of high-school age. In some cases definite entrance requirements are made, particularly to those courses of longer duration, but much more generally there are no such requirements. In some institutions the courses of 2 or 3 years of high-school grade are organized as schools of agriculture. In some cases where courses of from 1 to 3 years are offered at least a part of the work is carried on in connection with the regular four years' course. In the shorter courses, the work often consists of lectures, with perhaps some field or laboratory observations by the students; in other cases the students take an active part in field or laboratory operations.

The courses varying from 2 to 10 days are often essentially conferences, but not usually so designated, at which there may be discussions and observations on a variety of subjects, but very little, if any, systematic instruction. They are chiefly inspirational and informative and often seem to be intended primarily to acquaint the persons in attendance with the equipment and general character of the work of the institution and to inform them what aid the institutions can give them at their homes or if they attend the regular courses at the college.

Home Economics Parallel with Agriculture

Of the 22 land-grant institutions offering short courses in home economics only 4 report one-year and two-year courses. More than half report weeks' courses, varying in length from 1 to 13 weeks. Three institutions mention days' courses, varying in length from 1 to 10 days. A limited number of the institutions refer to Farm Week short courses where women attend home economics short courses while the men attend short courses in agriculture.

Home economics courses in some institutions give considerable attention to

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girls' club work. One of the institutions reports that one aim of short courses is to strengthen and standardize club work and to stimulate interest in this work by offering prizes and educational trips to winners in girls' club work. Much of this type of work is primarily of an inspirational nature and, according to statements from one institution, is designed to acquaint the young people of the State with the opportunities offered at the land-grant institutions to obtain educational advantages.

Specialized Courses Increase in Favor

The short courses likewise give farm women opportunity to spend some time in study and recreation at the institution. There is a tendency for short-course work in home economics, like agriculture, to depart from the early custom of general courses. The specialized type of short course, consisting of detailed instruction in certain units of work in which women are interested, seems to be receiving greater emphasis than any other kind. Some of the larger land-grant institutions do not offer short courses in home economics because of the increase in number of four-year college students and the lack of sufficient appropriation to permit the employment of additional teaching force for short-course work. However, one institution states that it is the plan to reinstate the short courses in home economics as soon as conditions will permit.

Mechanic arts short courses probably cover a broader list of subjects than either agriculture or home economics. Of the 31 institutions reporting short courses in mechanic arts, seven report courses of from 1 to 2 years in length. Approximately two-thirds of the institutions reporting state the length of short courses to be from 1 week to 15 weeks. Three report short courses of from 1 to 10 days in length.

More Attention to Agricultural Engineering

The returns show conclusively that many of the institutions are giving considerable attention to short courses in mechanic arts. Some of the reports are more or less general, but a large number are rather definite. A considerable amount of the short-course work, as would naturally be expected, relates to agricultural engineering and the special units such as tractor repair and operation, gas engines, blacksmithing, etc. However, considerable attention appears to be directed to short courses in engineering and its various units. Short courses in mechanic arts are sometimes given under the direction of the college of agriculture and sometimes under the direction of the college of engineering. While most of this type of work is carried on at the colleges, a considerable amount is conducted at different centers within the States in the form of extension courses. Here, again, the committee has found it difficult to distinguish between regular short courses offered at the institution and those in the form of extension courses conducted apart from the college. There is ample evidence to show that the short courses in mechanic arts, whether offered at the institution or otherwise, are conducted in the form of special units such as the meter-men course, plumbing, carpentry, auto mechanics, etc. This method of organizing short courses is commendable as it affords ample opportunity to those who desire to attend such courses for training in certain specific fields.

To Improve Practices of Active Workers

The aims of the short courses are variously defined in the college catalogues and in the replies to the committee's questionnaire, but essentially they seem to be comprised in one or more of the following statements: (1) To prepare persons not in school to engage in agricultural pursuits, home making, or industrial occupations. (2) To increase the knowledge and improve the practices of people now engaged in agriculture, home making, or mechanic arts. (3) To inform those who attend short courses at the land-grant colleges as to the personnel, equipment, and other facilities of the institutions for aiding them when they return to their homes and engage in their various occupations.

There are those in the land-grant institutions who feel that considerable inconvenience is put upon regular college teachers who have to assume duties connected with short courses in addition to their regular courses. Not only the individuals but the departments have felt these hardships where an extra teaching force has not been provided. One reporter doubts whether the benefit to the State of this extra work justifies the interference with the collegiate teaching work. One institution feels that the cost per capita of short-course work is very high as compared to the four-year work. If the work is done by special instructors it should be very satisfactory, but if done by the regular four-year instructors it is not likely to be as well adapted to the need of students.

Special Directors Do Effective Work

A considerable number of the land-grant institutions are employing special directors of short-course work. This is a good plan, since these men have more time and can use special efforts to make short-course life at the institutions more interesting and also more profitable. Short courses should be so well planned and so thoroughly organized in every detail that the students' time will be profitably spent. If these students are not properly disciplined and kept busy the institutions are at fault. Short-course students should not demoralize the discipline of the college. Short-course students have interests separate and distinct from the regular students when the length of the course will permit. Student activities, such as athletic teams, music, clubs, games, motion pictures, and other entertaining feats, judging contests, etc., should be promoted for the best interest of the group. When short courses are held they should result in giving good return for the time and effort spent, and should result in bringing the institution and the faculty in closer touch with a larger group of people of the State.

From a careful study of the content of short courses offered in agriculture, home economics, and mechanic arts, based on information obtainable, the committee is aware of the wide disparity in the time devoted to short-course work. The information at hand does not disclose the cause of this difference. Each of the land-grant institutions has its particular field of service, and is best qualified to determine local problems and to administer their solution. It is, therefore, the duty of each institution to determine for itself the extent to which it is rendering the service most in need by the people of its State.

Current Educational Movements Affect Courses

The character and variety of the short-course work are evidently affected by present-day educational movements of various kinds. There is, for example, a widespread feeling that the large investment of funds in the buildings, equipment, and faculties of the colleges is not justified unless the plant and personnel of these institutions are used to the fullest extent. Then there is the prevalent notion that mature persons engaged in particular pursuits are greatly benefited by even a short stay at the institutions where they may receive intensive instruction or information from experts. Thus we have what are called unit courses of various kinds for doctors, teachers, butter makers, poultrymen, fruit growers, automobile chauffeurs, meter men, plumbers, home makers, etc. * * *

Demands from various sources for temporary assistance through short courses come to the colleges from time to time, and compliance with them is sometimes unavoidable. For example, the enactment of State laws requiring the teaching of agriculture or home economics in the elementary schools has made it necessary for certain land-grant colleges to institute special summer courses for teachers. The work of these colleges in the rehabilitation of World War soldiers is another instance of this kind.

In a more general way the movement for vocational education has grown so rapidly in recent years that it has greatly outrun the establishment of special educational agencies for such education. Thus it has happened that though there are now many more secondary schools in which agriculture, home economics, and mechanic arts are taught, the demand for short courses in these subjects in the colleges has continued. It is questionable whether the colleges themselves have sufficiently taken into account the spread of these vocational secondary schools and have sufficiently limited or reorganized their short-course work to meet the new conditions in the secondary schools. Some believe that the vocational short course need in some States is met by the national vocational education or Smith-Hughes Act. This development is raising the question whether colleges which are maintaining so-called schools of agriculture should continue or whether their work can now be assigned to the high schools now teaching agriculture under the provisions of the vocational education act.

Assistance in Research and Graduate Work

Another set of problems which have relation to the short-course work of the colleges has to do with the development of research and graduate work. It is now generally realized that institutions for higher learning can not afford to restrict or hinder their development as agencies for the advancement of knowledge and the training of investigators and teachers. On the other hand, where results of practical value come out of their researches it is unfortunate if they are not in a position to give that instruction which will make these results speedily and satisfactorily available to those who can make good use of them.

It is evident that since the range of the legitimate demands on the land-grant institutions for research, resident teaching, and extension work is increasing with the years, the necessity for a careful study of these demands and an adjustment of the work of the individual institution with reference to them according to their relative importance and the available equipment, personnel, and means at the disposal of the institution was never greater than it is to-day.

Standard Undergraduate Work the Primary Duty

The committee is convinced that it is the primary and essential duty of the land-grant colleges to carry on undergraduate courses of standard grade leading to bachelor's degree. It has also been expected from the beginning, as is indicated in the land-grant act of 1862, that they would conduct investigations to advance knowledge and they ought therefore to conduct in the most efficient manner such experimental inquiries as they undertake. They have assumed definite obligations under Federal and State laws to conduct extension work in agriculture and home economics in a large way. They have a certain equipment, personnel,. and means for these lines of work, and nothing should interfere with their making the best use of their resources for these purposes.

Short Courses Render Valuable Service

If, in addition, their general or any special resources can be efficiently and profitably used for what are properly called short courses of resident instruction and these courses are well organized and administered they will render a valuable educational service. It is believed that the demand for short courses will continue to increase and that the present-day outlook in education favors the use of such courses. It is hoped therefore that the colleges will be able to make a satisfactory adjustment of personnel and means to conduct them in a reasonable way. But it will evidently require conscious and active effort to keep them in their right place as related to the other activities of the colleges.

To clarify what is now evidently a confused condition, the committee suggests that the colleges formulate and adopt a standard definition of short courses and as far as possible uniform designations regarding their duration and character. As an aid in this direction the committee makes the following propositions:

1. A short course is a course of systematic instruction in a given subject or group of subjects of shorter duration than a four-year college course and not leading to a degree. Obviously a course of systematic instruction can not be given in a few unrelated lectures within a period of a few days.

2. Extension meetings, farmers' weeks, and similar meetings for a few days, having a miscellaneous program and no really systematic instruction, should not be called short courses, but conferences or institutes.

3. Short courses may be classified according to their duration as years' courses, months' courses, or weeks' courses and should be designated by their duration rather than by the general term short course. For example, instead of announcing a short course in dairying, occupying six weeks, the college should announce a six weeks' course in dairying.

4. Full consideration should be given by the colleges to whatever informational or instructional work is done by their extension departments, by the special secondary schools, or by the ordinary high schools, and they should so limit and organize short courses as to give them a definite place in the college program without duplicating the work of other agencies.

Certain Courses May Well be Discontinued

5. The colleges should plan to give up short courses of regular secondary grade, whether organized as schools or not, when other agencies are prepared to do this work.

6. It is doubtful whether the colleges should continue to offer one to three year courses in general agriculture, home economics, or mechanic arts. As far as the committee has been able to ascertain these are usually not successful as separate enterprises in the college program, and the demand for such courses appears to be decreasing. It would be better to let properly qualified students enter the regular college classes as special students and leave them at certain periods whenever definite units of instruction have been completed. In such cases there can be little objection to the college giving a statement to the student of what he has accomplished during his residence at the institution.

7. Short courses should as a rule be confined to special subjects and should be organized for persons not less than 18 years of age, as far as practicable in units, each of which may be taken separately by the student according to his option.

8. Since short courses should be planned more particularly for persons engaged or

OF all the dispositions and habits which lead to political prosperity, religion and morality are indispensable supports. In vain would that man claim the tribute of patriotism, who should labor to subvert these great pillars of human happiness, these firmest props of the duties of men and citizens. The mere politician, equally with the pious man, ought to respect and to cherish them. A volume could not trace all their connections with private and public felicity. Let us with caution indulge the supposition, that morality can be maintained without religion. Whatever may be conceded to the influence of refined education on minds of peculiar structure, reason and experience both forbid us to expect that national morality can prevail in exclusion of religious principle.—*George Washington.*

who are expecting to engage in farming, home making, some vocation in mechanic art, or other definite pursuit, and the number of such courses to be offered by individual institutions must necessarily be limited, each college should carefully determine the conditions of agriculture and industries in its State in relation to their need of such courses and the ability of the college to supply that need, and make its schedule of short courses on that basis. Sometimes a college has encouraged certain industries by its short courses when a more careful study would have shown that such industries had little chance of success in the region of the college.

9. The special units or enterprises in agriculture, home economics, and mechanic arts should be clearly defined after studies and analyses have been made of each to determine what the jobs in each enterprise are and the fundamental knowledge and skill one should have who desires to follow a vocation in any of these fields.

10. The analyses should consist of making a detailed study of the job unit operations of enterprises such as poultry, swine, etc., for agriculture; millinery, meal planning, and preparation, for home economics; and gas metering, plumbing, or tractor operation, for mechanic arts.

11. In making the analyses close contact might be maintained to advantage with those engaged in the practical application of these jobs. For example, it is advisable to confer with the successful poultryman regarding the fundamantal jobs in conducting a poultry enterprise. Likewise the successful home maker, plumber, or carpenter might be interviewed for information regarding their particular enterprises.

Conference and Coordination Between Colleges

12. Colleges in regions having diversified industries conducted under similar conditions would do well to confer with one another with reference to arranging a common program for short courses in accordance with which each college will do what it can do best and encourage students to go where they will find what best meets their particular needs.

13. Short courses which can be most effectively conducted away from the college, either by the college or by other properly coordinated educational agencies, should be encouraged. They are less expensive for students, who can reside at home, and often enable the use of better facilities of a practical character than are available at the college.

14. Short courses should be distinctly vocational in their nature with the major emphasis placed upon the practical and the minor emphasis upon theory.

A. C. True, *Chairman.*

United States Supreme Court Will Decide Status of Oregon Law

Act Passed in 1922 Requiring Attendance Upon Public Schools Only was Declared Unconstitutional by District Court. Appeal Taken to Highest Court of the Land by State's Law Officers

By WILLIAM R. HOOD
Assistant Specialist in School Legislation, Bureau of Education

WHETHER the famous Oregon law which would have the effect of eliminating private and parochial schools shall ever become effective will be decided by the Supreme Court of the United States. The case will be heard before that tribunal on February 24, 1925. It is in fact two cases, in one of which The Society of Sisters of the Holy Names of Jesus and Mary, an educational corporation, was plaintiff in the lower Federal court, and Walter M. Pierce, Governor of Oregon, Isaac H. Van Winkle, attorney general of the State, and Stanley Myers, district attorney for Multnomah County, were defendants. The other case was Hill Military Academy, a corporation, *v.* Pierce et al.

On November 7, 1922, the people of Oregon, by a vote of 115,506 for and 103,685 against the measure, approved an initiated bill to amend section 5259 of the Oregon laws, relating to compulsory school attendance. The act as thus approved would in effect require children between the ages of 8 and 16 years to attend public schools only. Exemptions allowed in the act are (a) the mentally or physically unfit, (b) a child who has completed the eighth grade of school work, (c) a child between 8 and 10 years of age who lives more than 1½ miles from school, or one over 10 who lives more than 3 miles unless transportation is furnished, and (d) a child receiving instruction from a parent or private teacher with the written permission of the county superintendent of schools. The usual exemption in compulsory attendance laws which permits children to attend private or parochial schools is not found in this act which, however, by its own terms is not to take effect until September 1, 1926.

Prompt Action to Invalidate New Law

On December 22, 1923, attorneys for the plaintiffs filed in the United States District Court, District of Oregon, a bill in equity, praying the court to declare the act unconstitutional and to grant an interlocutory writ of injunction restraining the defendants from enforcing the act, or threatening or giving out their intention to enforce the same on its becoming operative, or publishing or declaring that the act is valid. In support of this petition plaintiffs averred that certain of their constitutional rights were infringed by the act and that already they had suffered injury by reason of the withdrawal of children from their schools.

The case was set for hearing on January 15, 1924, and the court on March 31, following, rendered its opinion in which it was ordered that an injunction be granted as prayed in plaintiff's bill. The act was thus declared unconstitutional and rendered inoperative.

The opinion of the lower Federal court covers nine printed pages. The court expressed disapproval of the act in several particulars. Those probably of most interest are in substance as follows:

Reasons for District Court's Action

1. The act in effect prohibits parochial and private schools from teaching grammar grades and thus infringes the right to engage in a useful legitimate business; it also infringes the right of parents to employ such schools to teach their children.

2. There appears no plausible or sound reason why these schools should be eliminated from taking part in the primary education of youth. It would seem that the act in question is neither necessary nor essential for the proper enforcement of the State's school policy.

3. The act in effect deprives of property without due process of law. Depriving the parochial or private school of the right to give instruction in the grammar grades cuts off patronage and thus results in loss or reduction of value of property used for school purposes.

On June 19, 1924, attorneys for defendants filed a petition for appeal in the Sisters Society case, and, the appeal being granted, defendants' prayer for reversal of the lower court's order and decree of injunction reached the Supreme Court of the United States on June 30, 1924. The case will be argued on February 24, 1925, and in due course will be decided finally by the court.

Canada is to join the United States in the observance of Music Week, May 3–9, 1925. Seven hundred and eighty-three communities participated in the event in 1924, and it is expected that the number will be considerably larger this year.

Practices and Laws Concerning Transportation of Pupils to School

Every State Either Requires or Authorizes Transportation. Foundation of Practice Lies in Principle that State Must Provide Means of Education for Every Resident Child. Minimum Distance of Transportation Varies from a Half Mile to Four Miles. Responsibility of Parents Most Often Limited to Area of 12½ Miles. Wide Variations in Actual and Relative Costs

By JAMES F. ABEL
Assistant Specialist in Rural Education, Bureau of Education

TRANSPORTING pupils to and from school at public expense has raised some common-sense questions that need to be answered. If those questions can not be answered finally and exactly much may be learned from experience, practice, and law in the field of pupil transportation. All the States and the District of Columbia are transporting some school children. Pupil transportation has been the subject of a generous amount of legislation. Only Utah and Florida have no mention of it in their laws but boards in both these States have power to do anything reasonable and necessary for the benefit of the schools and under that power furnish considerable transportation. Like most other kinds of school law; that dealing with transportation may be divided into two general classes, permissive and mandatory. In point of time and in natural development the former came first and is still by far the more common.

School busses at Oakley Consolidated School, Kansas

One may easily get the wrong impression that consolidated schools are the only kind to which there is much pupil transportation. The two are usually discussed together. Both permissive and mandatory transportation laws apply to (1) schools in general, (2) high schools, (3) consolidated schools, (4) small schools closed for any reason, and (5) children living in remote places or territory unorganized for school purposes. Transportation to consolidated schools is simply an intermediary step in the development of pupil transportation and leads up to its use, when necessary or advantageous, by all kinds of schools.

Back of all this legislation lies the fundamental principle that the State must provide means for an education to every resident child, either by causing a school to be placed within his reach or by transporting him to one. Thirteen States now give permission to discontinue small schools or the upper grades and if other schools are not within reasonable distance of the pupils, to furnish transportation. Under similar conditions transportation is mandatory in seven States. The most striking example of this is in Indiana where pupils of any school that has been abandoned in the 20 years prior to 1921 or is thereafter abandoned must be transported if they live more than 1½ miles from the school to which they are assigned. By 1923, 1,709 districts had been abandoned and the pupil transportation carried on in Indiana for that purpose alone was a high per cent of the State's total.

Where does the responsibility of the parent cease and that of the public begin? The question is asked about most school activities. Naturally the answer for pupil transportation is generally expressed or an attempt is made to express it in terms of distance from home to school and the range under present laws is from one-half mile to 4 miles.

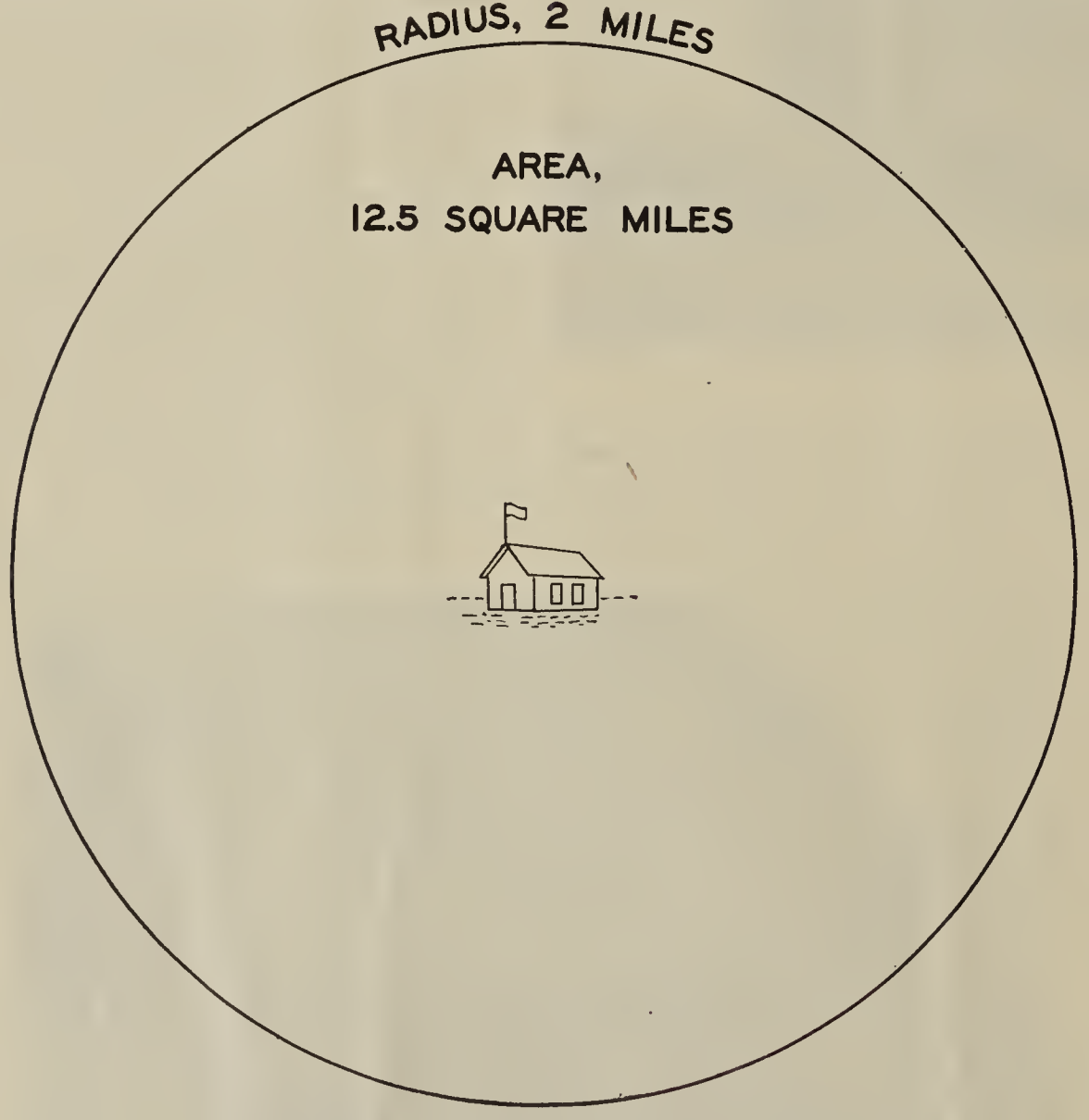
In the 25 States where transportation may be furnished when "best for the in-

A school bus of recent design

terests of the district," "it may be necessary," "it is practicable," or under some similar indeterminate condition which leaves the matter almost entirely optional, splendid transportation systems are in operation and many children are conveyed to and from school. But in general the largest relative amounts of pupil transportation are carried on and it is developed most highly in those States which have mandatory, definite laws fixing distances from 1½ to 2½ miles, allowing for appeals to higher school authorities, and permitting the locality to offer transportation for less than the mandatory distances.

Note the graph below. Assume that the circle represents one with a radius of two miles, the distance most frequently named, from the schoolhouse and that if a child's home is outside this area of about 12½ square miles, the public must provide all or part of the cost of his transportation to the school.

There is some degree of error in the graph because the distances are usually



Usual area of parental responsibility in transportation

measured by the nearest traveled road or in some way other than by straight line. But the error is not easily determined, and is always in favor of the parent. For purposes of illustration the circle is nearly enough correct.

This is practically the situation fixed by law for all elementary schools in Massachusetts, New Hampshire, Ohio, and Wisconsin; consolidated schools of Oklahoma; city or town consolidated schools of Indiana; and children of schools forced to close because of small attendance in Iowa and Kansas. Add one-fourth of a mile to the radius, making the area of parental responsibility 15.9 square miles, and one has the situation for those schools of North Dakota that are not consolidated.

Transportation at public expense is optional, not required, for pupils living at or beyond this 2-mile limit to all schools of Kansas and Louisiana, and consolidated schools of Mississippi.

Reduce the radius to 1½ miles and the graph represents the conditions under which transportation must be furnished by consolidated schools of North Dakota, discontinued schools of Indiana and to children of certain small closed schools of Pennsylvania; and although optional is very generally furnished by all schools of Vermont.

The 1-mile radius with an area of parental responsibility of only $3^1/_7$ square miles is optional with all schools of Idaho, Oregon, and Nevada, and consolidated schools of Colorado. It is required for consolidated schools of Wisconsin, pupils of consolidated schools of Iowa if living outside the corporate limits of a city or town, for rural agricultural schools of Michigan, and children between the ages of 6 and 12 of discontinued or consolidated schools of Indiana.

Minnesota and Missouri permit pupil transportation for all children residing more than half a mile from the schoolhouse.

Increase the radius to 2½ miles, the area of parental responsibility to 19½ square miles, and the graph indicates mandatory transportation or payment toward furnishing it in South Dakota for all pupils to consolidated schools and elementary pupils to all schools other than consolidated.

Three States Fix Limit at 3 Miles

Transportation for pupils living beyond a 3-mile limit is optional in New Mexico; it is required for all schools of Kansas and union free high schools of Wisconsin.

The 4-mile radius applies in Ohio where the law requires that high-school courses must be offered within that distance to every pupil prepared for secondary work or he must be transported to a high school.

If transportation is furnished busses usually go very near to the home. Most of the best features of pupil conveyance are lost if the children must walk any considerable distance to or wait along the roadside for busses. Routes in Ohio must be planned to reach within one-half mile of the child's home. In order to meet busses pupils in South Dakota may be required to go not over five-eighths of a mile; in New Hampshire, 1 mile; Mississippi, 1½ miles; and Iowa, 2 miles.

Merely a Difference of Source of Funds

Public transportation has directed attention to the cost of conveying children to and from school. But it must be remembered that those costs have existed as long as there have been schools and in connection with nearly all kinds of schools. They have been borne in one way or another by the parents or the pupils themselves. Transportation is not a new and additional item in the expense of education. It is handled in a different and better way and its cost is more carefully measured and recorded. Twenty-two States reported that 446,226 children were transported in 1921–22 at an expenditure of $14,526,368, or an average of $32.55 per pupil for the year. Costs ranged from $9.36 in Georgia, $14 in North Carolina, and $18.96 in Mississippi to $56.88 in Iowa, $58.44 in Vermont, and $82.18 in Montana. Delaware in 1924 transported 3,132 children at an average cost per child of $32.02 for the year, or 25.45 cents a day. Costs per elementary pupil in Maryland for 1922–23 were $29.80; per high-school pupil, $33.80. The former ranged in 20 counties from $19.74 to $75.37; the latter in 14 counties from $21.10 to $73.15. If a school furnishes safe, comfortable transportation to any considerable number of children, it

will probably need to expend from $30 to $40 per pupil per year. Costs will differ with conditions, of course, but that approximates the average.

Necessity causes wide variations in the part of the school budget which may properly be set apart for transportation. Forty-one States in 1921–22 used $2 for pupil transportation out of every $100 spent to pay the current school expenses of the year. The range was from 43 cents in Missouri, 62 cents in Pennsylvania, and 57 cents in Texas to $5.01 in Iowa, $6.34 in Vermont, and $6.03 in New Hampshire. Some individual schools report using from 30 cents to $51.70, with an average of $14.02, out of each $100 of current expenses. In any event the purpose of the school is to educate children, and public transportation, as well as private, can only be justified if the school to which the child is conveyed aids very measurably in his physical and mental development.

State Aid in 25 States

In general, the expense of pupil transportation is borne by the local school unit. Twenty-five States give some form of aid to it, usually for the purpose of promoting consolidation, encouraging the closing of small schools, or providing schools where the county or district has not jurisdiction. It is limited largely to consolidated schools in North Carolina, South Carolina, Rhode Island, New York, Virginia, Wyoming, Michigan, Minnesota, Texas, and Pennsylvania. Kansas, Pennsylvania, and Wisconsin aid in transporting to other schools the children of small schools that are compelled to close. Towns of Massachusetts and Connecticut that do not maintain high schools but transport the secondary pupils to other towns are reimbursed in part by the State. In Maine and New Hampshire State funds are used to provide schooling for children in unorganized territory, either by pupil transportation or by establishing schools. Little or no aid to meet the expense of transportation is given to either district or county from the State school funds of 23 States.

Many other questions arise, such as the number of miles children may properly be transported, the length of time they should be on the road, etc. The conditions of each case have much to do with the answer but so many rural educators are now meeting problems of transportation successfully that good standards for most situations will soon be forthcoming.

Classes for automechanics, sheet-metal workers, machinists, bricklayers, plumbers, and draftsmen in the Seattle night schools have been largely attended during the past three years. Only men actually employed in the trade with which the instruction is given are eligible to enroll in such classes.

Cincinnati Meeting of Department of Superintendence

Celebration of Washington's Birthday Beginning of Convention. Excellent Program Promises Scholarly Papers by Leaders in Public-School Education. Fourteen Other Departments Convene, Representing Every Phase of Supervisory Work

"NATIONAL IDEALS" appears to be the slogan chosen for the coming meeting of the Department of Superintendence, for those words, with quotations from the utterances of George Washington and of other of the Fathers of the Republic, are freely interspersed throughout the tentative program. The meetings will be held at Cincinnati, Ohio, beginning on the one hundred and ninety-third anniversary of the birth of Washington, and the appropriateness of the patriotic flavor is manifest.

Aside from this feature of the program, one is struck most forcibly by the very practical and professional aspect of the titles of the papers expected. And the speakers are representative of the best in American public-school work. Typical of the subjects and the character of those who will discuss them, the following may be mentioned:

What progress has superintendence made? Payson Smith, State commissioner of education for Massachusetts.

Equality of educational opportunity. John J. Tigert, United States Commissioner of Education.

Controversial subjects. A. B. Meredith, State commissioner of education for Connecticut.

Introducing educational research. F. W. Ballou, superintendent of schools, Washington, D. C.

Outcomes of our curriculum program. Jesse H. Newlon, superintendent of schools, Denver, Colo.

The curriculum a paramount issue today. Charles H. Judd, University of Chicago.

A cooperative plan for curriculum revision. Zenos E. Scott, superintendent of schools, Springfield, Mass.

Music a Prominent Feature

Like all the recent meetings of the Department of Superintendence, music will have an important place in the program, and the "convention climax" is expected to be a pageant, concert, and teachers' chorus, utilizing apparently the entire musical resources of the Cincinnati school system. This event is scheduled for Thursday evening, February 26.

Good reason appears for the statements that come from the offices of the National Education Association that an unusually fine meeting is expected, in point of numbers attending as well as in the character of the proceedings. It is stated that the requests for reservation of accommodations have been so many that it has already been necessary to place many of the applicants in private homes whose owners are willing thus to supplement the capacity of the hotels of the city.

The officers of the Department of Superintendence are: President, William McAndrew; vice presidents, Payson Smith and John J. Maddox; executive secretary, Sherwood D. Shanklin.

Officers of Cooperating Departments

Several other departments of the National Education Association whose work is concerned with supervision will be in convention in Cincinnati at the same time. They include: City Teacher Training School Section—president, L. A. Pechstein; secretary treasurer, Frank W. Smith. Council of Kindergarten Supervisors and Training Teachers—president, Ella Ruth Boyce; secretary, Allene Seton. Department of Deans of Women—president, Agnes E. Wells; secretary, Martha Doan. Department of Elementary School Principals—president, Mrs. Jessie M. Fink; secretary, Ide G. Sargeant. Department of Rural Education—president, Macy Campbell; secretary, Mabel Carney. Department of Vocational Education—president, John N. Greer; secretary, J. D. Blackwell. Educational Research Association—president, E. J. Ashbaugh; secretary, H. A. Greene. National Association of High School Inspectors and Supervisors—president, Thomas L. Jones; secretary and treasurer, Jesse B. Davis. National Association of Secondary School Principals—president, L. W. Brooks; secretary treasurer, H. V. Church. National Council of Education—president, J. M. Gwinn; secretary, Adelaide Steele Baylor. National Council of State Superintendents and Commissioners—president, Francis G. Blair; secretary, Minnie Jean Nielson. National Council of Primary Education—president, Ella Victoria Dobbs; executive secretary, Alta Adkins. National Society of College Teachers of Education—president, Edward F Buchner; secretary treasurer, Arthur J. Jones. National Society for the Study of Education—chairman, Charles H. Judd; secretary treasurer, Guy M. Whipple.

Definite Professional Training Planned for Dealers in Real Estate

National Association of Real Estate Boards Expects to Put into Practice an Educational Program for Realtors Comparable with that of Lawyers and Physicians. Thirty Institutions Already Offer Real Estate Courses

By ERNEST M. FISHER
Department of Education and Research, National Association of Real Estate Boards

A NEW DAY has dawned in the practice of real estate, a day which in its noontide will see no more of the casual real estate dealer who practices nearly every other vocation more than he practices real estate, and who practices real estate in a haphazard untrained manner. The real estate dealer of the new day will be trained in his vocation as the engineer, the dentist—even as the lawyer or the physician is trained in his. The real estate fraternity has already recognized the imminence of this change; it but remains for the public in general to awaken to it and to demand on its part the protection and service to which such a change entitles it.

This enthusiasm for educational training is not confused; its aims are clearly defined and its progress calculated. Its aims, first, at the development of a professional attitude and service on the part of present real estate dealers, and, second, at the building up of courses in real estate in universities and colleges where the young men and women who look forward to the vocation may secure adequate training in the fundamental principles upon which successful practice, is becoming day by day more necessarily founded.

Program of Vocational Study is Essential

To accomplish the first of these purposes, to give those who are now in the calling an opportunity to base their practices upon a level of constantly greater service, a program of vocational courses is necessary. Such a program is intended to serve salesmen and brokers now in the business and adults who are planning to go into it. This is the first group which educational opportunities should reach; they have been first to recognize their need and to demand the courses.

At first these courses were ill-defined in content and purpose; the whole field of knowledge and training was new, and there were no standards by which such courses could be judged and their merit measured. As a consequence, the National Association of Real Estate Boards, in conference with educators, both vocational and university, has attempted to lay out a sequence of courses which would give the real estate man, actively engaged in the business or the adult anticipating entering, a broad comprehension but at the same time a practical survey of approved and tested methods as well as something of the principles upon which those practices are based.

It is recognized that many who have been in the business have already received this training in methods and have discovered the principles through the process of trial and error. But not all have done so. Some seek better methods, others want a wider understanding of principles, and still others have blundered and erred because they knew neither methods nor principles. The course of study outlined by the national association is designed to meet the needs of both.

Basis for Determining Character of Courses

The first question that presented itself was this: What subjects should a real estate course contain that by their nature and content are peculiarly for the real estate man? What sort of information and training are inherently most valuable to the dealer in real estate? To answer this question, we must ask another and answer it, namely, what are the activities that characterize and differentiate the real estate dealer? An analysis of his activities will give a clearer basis for deciding what sort of knowledge the real estate dealer should seek to acquire.

Those activities are generally familiar. They center around three major groups: First, buying and selling real estate for others; second, rendering counsel regarding real estate investments; third, appraising the value of real estate.

In carrying on any and all of these activities, it is clear at once the types of knowledge which the real estate dealer should possess; the nature of his business makes it imperative that he study (1) property values, (2) legal aspects of real estate transfers, (3) the problems incidental to financing real estate transactions, and (4) approved standards in connection with the conduct of the real estate business. These are not all he should study, but they are the groups of knowledge, unfamiliarity with which not only handicaps the real estate dealer, but prejudices the interests of those with whom he deals.

A knowledge of real estate values is the very essence of the real estate dealer's service. He ought to be cognizant of the influences which enhance and those which impair values, so that he can anticipate both. Those who trust him depend upon his judgment in this matter more than in any other; he stands in a position to render service, or to work hardship in direct proportion to his ability or lack of ability to analyze values. It has been said that real estate values are inscrutable, that they rest upon the whim or fancy of a "seller who is willing but not compelled to sell," or a "buyer who is willing but not compelled to buy," and that the only basis of estimating them is "experience," "judgment"; it has even been said that there is no way of knowing what the value of any piece of property will be to-morrow, that it is at the mercy of chance, the football of a capricious and fickle fortune that can neither be anticipated nor measured.

Real Estate Values Have Substantial Basis

But experience proves that this is an error. Indeed, there are examples of capricious movements of real estate values just as there are of any other kind of values. When a monarch dies in Europe, mourning clothes and materials suddenly rise in value, and with the changing styles of every season thousands of dollars are written off in the falling values of women's clothing that are "out of date." But we do not say as a result that there is no basis for the value of clothing. Neither does the occasional trick of chance prove that there is no basis for the study of values in real estate. In fact, experience shows that real estate values follow economic laws that are as immutable as the law of gravitation. One of the functions of the real estate dealer is to acquaint himself with those laws. When an investment is made in real estate, the money involved frequently represents the savings of a lifetime, and it becomes subject to these laws. The real estate dealer who advises and deals in real estate without acquaintance with real estate values is little less culpable than the surgeon who would attempt to operate without a knowledge of anatomy.

Reasonable Knowledge of Law is Required

Of little less importance is a knowledge of the legal aspects of real estate transfers. Great injury can be worked by ignorance at this point. Titles can be clouded or real estate tied up almost indefinitely by the slightest oversight. Moreover, legal difficulties can be multiplied and expensive litigation made almost certain by the drawing of contracts that are impossible of interpretation, by ill-constructed deeds, and by such slight errors as the misspelling of names.

There is no intention of breeding a race of hybrid lawyer-real-estate-dealers; the purpose is rather so to classify the legal difficulties involved in the vocation that every real estate dealer will avoid costly mistakes by turning when he should turn to a reliable attorney. But certain functions that have tremendous legal significance have been assigned to the real estate dealer; in order to perform them well, he must be familiar with legal requirements.

Dealer Performs Service to Entire Community

Likewise, a knowledge of the common problems connected with the financing of real estate transactions is essential to the protection of both borrower and lender who negotiate through the real estate dealer. In the dealer's mind should constantly rest the realization of his responsibility to see that both parties are adequately protected. Moreover, as he broadens the sources from which he draws the funds for his transactions, the greater becomes his service to the community. The establishment of building and loan associations, the forming of insurance connections—these and other sources of finance for his projects he can utilize if he is acquainted with the particular problems which each type of institution presents and the requirements which it prescribes. Thus he not only serves his own business, but his community as well, by extending his familiarity to every possible source of credit for financing his transaction.

Finally, is the knowledge of the standards which have been approved in the conduct of real estate business. Here is included not only standard ethics but a standard for the transaction of business in general and standards for controlling professional relationships. The aims of professional real estate organizations and the progress which the vocation is making ought to be a part of the stock in trade of the real estate dealer. Professional progress can come only through close organization and a knowledge on the part of each one in the vocation of what the professional standards and purposes are. The man who enters a vocation ignorant of its ethics and of its professional practices exposes himself to ridicule and his vocation to injury.

Standards Represent High Ideals

The standards which have grown up in the real estate vocation have been evolved by those who represent the highest ideals in the vocation. They are designed not solely for the protection of members of the vocation and of the public in the conduct of the business, but also for constantly lifting the ideals of the vocation and enabling it to perform a greater service for the public.

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In order to cover the wide range of information which is peculiarly what the realtor needs, the committee on educational courses, in consultation with educators, representing the United Y. M. C. A. Schools, the American Association of Collegiate Schools of Business, and the Institute for Research in Land Economics and Public Utilities, has outlined a complete curriculum covering 12 real estate and allied subjects, namely: Introduction to real estate practice, outlines of economics, real estate law, real estate finance, real estate transfers and conveyances, real estate selling, building construction and design, principles of land economics, real estate office organization and management, property management, valuations and appraisals.

Preparation of Suitable Textbooks Contemplated

The national association has undertaken two projects, the first is to provide textbooks covering the subjects outlined, and the second is to furnish enough instructional and discussional material to enable any member board to conduct these courses with such leadership as they can find. On the first task considerable progress has been made. Of the series of 12 books outlined, three have already been published, namely, Principles of Real Estate Practice, Elements of Land Economics, and The Appraisal of Real Estate. Three others are promised for this fall, and three more will probably be completed before the end of the current school year.

Likewise considerable instructional aid is now available covering several of the courses outlined. A complete outline of discussional material, problems, and other helps for the leader are now ready and available free to member boards who contemplate an educational program, covering real estate fundamentals, land economics, real estate appraisals, transfers and conveyances, and real estate selling. Another manual covering real estate law is in preparation.

Extension Course in Real Estate Practice

Finally, for the benefit of those who are in such a position that they can not take advantage of such discussion groups as have been described, the national association is undertaking to make a thorough training available by the extension method of learning by mail. The American Real Estate Institute has been organized as a department of the national association for this purpose. Its first course, "Real estate practice," is now ready and available. It covers the major activities and requirements of the real estate dealer. Into it has been compacted a wealth of successful methods now employed by outstanding members of its 507 boards, clear statements of the ideals for which the national association stands in the various relationships that arise in the conduct of a real estate business, and sufficient knowledge of the commonest principles of real estate practice to give a clear comprehension of the whole. The method of instruction is such as to enable each student to receive individual, personal instruction.

Universities and Colleges Offer Courses

Of equal importance in the vocation of the new day are the young men and women who are preparing themselves in universities and colleges to take their places in a vocation not yet chosen but one which appeals to them because of its idealism. Constantly more and more of these young people are turning toward the real estate vocation as one which is predominated by idealism. Within the past two or three years a large group of universities and colleges have felt a demand on the part of their students for training which would enable them to choose this vocation and conduct it in accordance with the idealism which they cherish.

The national association, recommended that universities and colleges permit an undergraduate to choose training in real estate as his major. About 30 universities and colleges have either adopted a part of the course or are on the point of adopting it.

The impression has arisen in the minds of some realtors that the consummation of such a program may result in the production of a number of real estate dealers who would tend to overcrowd the vocation.

Higher Requirements Will Dignify Profession

Such has never been the result in other professions and vocations. Setting up a higher requirement for success in any vocation will dignify it and bring into it men of higher ability than could be attracted to it if it were not so dignified. But thousands, and probably tens of thousands, of salesmen are entering the real estate vocation each year; some fairly successful, others woefully unsuccessful.

It is probable that the higher type of service and higher ideals of those who come into the vocation with adequate preparation will cause the elimination of some who now make a livelihood in the vocation who are not equipped to render the service which it demands.

Such results will obviously be beneficial to all who are concerned—to the vocation because of a higher standing they will bring, to society because of the greater service they will make available, and to the individual realtors because of new life, ideals, and training which they will furnish to the salesmen entering the vocation.

· SCHOOL LIFE ·

Issued Monthly, except July and August By THE DEPARTMENT OF THE INTERIOR, BUREAU OF EDUCATION

Editor - - - - - - James C. Boykin

Terms: Subscription, 50 cents per year, in advance. Foreign (not including Canada, Mexico, Cuba), 75 cents. *Remittance* should be made to the Superintendent of Documents, Government Printing Office, Washington, D. C., and should be by cash or money order.

FEBRUARY, 1925

Some Truths of the Constitutional Convention

"IT IS well known that the Convention which framed the Constitution made little progress until the philosophical Franklin suggested that divine guidance be invoked."

This sentence in an editorial in School Life for December, 1924, has been questioned. Newspaper articles have appeared in which it is mentioned as a "pretty little untruth" and as a "little fiction." In consequence, earnest letters have come to us asking for "the historical basis of a widely accepted tradition."

We can not engage to keep our friends of the press in the right path in all their asseverations, even though they may occasionally refer to this bureau in a critical spirit. This opportunity, however, for presenting some of the facts of the history of the Constitution can not be overlooked, and we rejoice in it.

The sentence at the head of this article is wholly true in letter and in spirit. It is a fact of history, and not a matter of tradition nor of fiction. Doctor Franklin's speech on that occasion is printed in full on another page.

The suggestion of daily prayer was not adopted, principally because of the apprehension expressed by Alexander Hamilton that "however proper such a resolution might have been at the beginning of the convention, it might at this late day bring forth disagreeable animadversions, and that it might lead the public to believe that the embarrassments and dissensions within the convention had suggested the measure." After some debate the convention adjourned for the day without a vote upon the motion, and Doctor Franklin did not revert to it afterward.

Prayer—even the suggestion of prayer—is subjective as well as objective, and its answer is often in the heart of him who utters it. The proposal of Doctor Franklin in the convention was not lost, though in its terms it came to naught. Its purpose was to imbue the minds of the delegates with the spirit of accommodation and with a realization of the serious consequences of continued discussion without agreement.

The convention had been at work since May 25, 1787, and on June 28, when Doctor Franklin's motion was made, the situation had "become not only distressing but seriously alarming" because of the zeal and pertinacity shown by the opposing parties in discussing the representation of the several States in the two Houses of the Congress.

Benjamin Franklin was second only to George Washington in the esteem of the delegates in the Convention. The effect of that speech and of his harmonizing influence in general are clearly traceable. Within the next few days several of the delegates, including Doctor Johnson, of Connecticut, Mr. Gerry, of Massachusetts, and Doctor Williamson, of North Carolina, urged that "endless controversies were becoming dangerous," that "speedy accommodation was absolutely necessary to avoid war and confusion," that "if we do not concede on both sides our business must soon be at an end," and the like. The prevalence of such sentiments increased suddenly and noticeably; few, if any, utterances in that spirit are to be found in the records before June 28.

Four days after Franklin's motion—that is, on July 2, 1787—General Pinckney, of South Carolina, proposed that a committee consisting of one member from each State be appointed to devise and report some compromise. The proposal was adopted. Mr. Gerry was made chairman of the committee and Benjamin Franklin was a member of it.

Although other plans of compromise had been suggested without success by Doctor Franklin upon the floor of the Convention, it was he who proposed the plan of representation which found favor in the committee and formed the basis of its report, and finally, in principle though not in detail, it was incorporated in the Constitution.

That report of the "grand committee" was presented to the Convention on July 5—a week after Franklin's proposal for prayer. At the close of that day Robert Yates, chief justice of the Supreme Court of New York, and his close associate, John Lansing, jr., delegates from New York, left the Convention feeling that the principles of the Constitution had been determined. Mr. Yates had kept careful minutes of the proceedings up to that time, and the last entry in it, apparently added afterward, was that "the remainder of the session was employed to complete the Constitution on the principles already adopted." He was a member of the grand committee and, as time proved, he appraised the situation more accurately than those who remained, for letters of Washington, Madison, and others, written several days later gave evidence of continued deep discouragement.

The rest is soon told. The necessary compromises which had seemed impossible were reached, and after another month had passed, that is, on August 6, a draft of the full document was ready for detailed reexamination and revision. On September 17 the work was completed, the Constitution was signed, and the Convention adjourned.

If any conclusion in history is justified by logical deduction it is that no Constitution would have come from that Convention but for the steadying influence of George Washington, the presiding officer, combined with the skill of Benjamin Franklin in composing differences. And the successful exercise of that skill began with the speech of June 28 in which the motion was made to implore the assistance of Heaven in the deliberations of the Assembly. That was truly the turning point which brought a unified Nation out of the fast-gathering chaos of the Confederation.

Defects of School Children

THE LAYMAN, who ponders the matter, must often be puzzled, if not dumfounded, by the large percentages of physically defective children reported by medical inspectors of schools, and he is apt to consider these findings as greatly exaggerated. The layman has his right to an opinion on the subject, for he has eyes and ears, but he is likely to be biased in his opinion toward the side of an unsafe conservatism or even nonchalance by that innate optimism regarding the high and mightiness of the human race which characterizes too many of us.

The statement that 75 per cent of school children have physical defects may startle him a little in his smug content with the idea that we are made in the image of God, but he is too prone to remark without further investigation that the figures are false. In fact, if it were not for the inertia begot of this age-long habit of mind, he would be more active in getting something done about these defects. If he will with his own untrained sense organs examine the eyes, ears, and mouths of a hundred children, he will come near agreeing with the examiner, and he may be shaken out of his lethargy on the subject by what he discovers in his own child.

There are defects and defects—trifling ones and serious ones. It is often difficult for the examiner to know just where to draw the line, and some may include in their findings those of slight moment. As a matter of economy of time and effort only such defects should be recorded as need to be corrected, helped, or kept from growing worse. Using this standard, the

average examiner, whether medical man or layman, will find, when he looks into the mouths of most school children (unless dental work has already been pushed in the schools) that some 75 per cent of them are defective. A carious tooth (often there are half a dozen in one mouth) is a defect from the point of view that it can and ought to be remedied, but it is a true defect also in that it is not an inheritance from our remote ancestors. One will have to search far and wide among wild animals, whether in their native haunts or in captivity, before he will find a single carious tooth, though among domestic animals that have fallen into man's manner of feeding they are not rare. Of course, a dentist, using mirror and instrument, will find an even larger per cent of children with defective teeth, up to 95 per cent in some schools.

When it comes to malnutrition, various standards have been used. Taking the one test of relative weight for height (which is not always infallible and by no means reveals all the cases of this condition) some examiners consider 7 per cent below normal weight a good standard, while others go to the conservative extreme of using 15 per cent as their guide. Evidently, by these two rules, the percentage of the undernourished will differ widely. There are, however, in one large city, 7 per cent of all children 15 per cent under the average weight for height and age. Probably some antiquarian of a century to come, in studying the examination figures for our children, will say that at least 75 per cent of them were badly nourished at some time in their career (prenatal, preschool, or later) and his opinion will be based on the figures for the condition of the teeth. Bricks can not be made without straw, nor can good ones be made from too much mud and too little straw, and from recent studies it is fairly apparent that the cause of caries lies largely in the materials out of which we try to make teeth.

When considering posture there is nothing definite to go by, and in a large city 1 of 70 physicians, careless or uninterested in this feature, found only 1 case in 100, while with more ambition for a seemly presence, or too zealous not to miss anything, another examiner found that 19 out of each 100 had round shoulders. A long-experienced examiner of the same school system thinks 10 per cent the usual frequency of this condition.

Every human eye is defective as an optical instrument, though, as someone has said, it could not be improved upon as an eye. Merely as an eye it varies greatly, however, in perfection, though it is a miracle how such a mere bag of lenses, films, and living wires (compared with which for complexity and utility our linotypes, automobiles, dirigibles, radios, and what not pale into insignificance) can develop from practically nothing without greater outcome of imperfections. Children with defective vision will be numbered according to the standard of the examiner and sometimes the percentage is said to be as high as 25. Certainly, in any large group, at least 10 per cent will be found in need of correcting glasses. So far as our bad eyes are concerned, the human being is probably not to blame, since he is using them for purposes for which they were never originally intended and, if we could examine the eyes of the wild creatures, we would probably find that they do as poorly, or worse, in tests of near vision.

It will be evident to anyone that it is difficult to draw the line as to who are, or who are not, hard of hearing, and this is the case with still other defects.

When all is considered, it must be admitted that the highest percentages of physical defects found in school children are hardly exaggerated, while the number, as estimated by the most conservative standards, are startling enough and should be considered with a concern that will lead the school authority and the parent to see that everything possible is done to remedy the defects.

While the examination should be as thorough as possible, the object of the examination, as already suggested, should not be merely to find defects (for every child will be found wanting from an ideal point of view) but to note those defects for which something can and ought to be done. When such defects have been reported the efforts at relief, on the part of school authorities, can not be too earnest and persistent. After all, it is not the defects discovered that count, but the defects which are corrected.

"Home and school in education" will be discussed at the annual convention of the National Congress of Parents and Teachers at Austin, Tex., April 27 to May 2, inclusive. The program contains among other subjects round-table discussions on high-school parent-teacher associations, country life, mental hygiene, recreation, spiritual training, home efficiency, social hygiene, and motion pictures.

Two hundred and thirty playgrounds and recreation centers, about one twenty-eighth of the total number of 6,601 such centers throughout the entire country, are maintained for the exclusive use of negroes, according to the Southern Workman.

Good Type of Organization for Rural Schools

County Unit in Some Form in 21 States. Tends to Equalize Opportunities and Simplify Administration

By KATHERINE M. COOK,
Chief Rural Education Division, Bureau of Education

SOME FORM of the county unit for school administration is now found in 21 States. However, there is little uniformity in the form used among them. There are almost as many kinds of county units as there are States with this form of organization. No effort to formulate a definition applicable to all States in which the different forms exist seems feasible. In general, the county unit is a term used to designate the type of organization for school administration in which the county rather than the district, township, or town (as in New England) is the unit for taxation and support, and for other general administrative purposes such as the arrangement of school district boundaries and the location of schools, the expenditure of school funds, the employment of teachers, and the appointment of the county superintendent and his supervisory assistants.

In some States it is the unit for all, in others for one or more, of the purposes enumerated. In most cases cities and towns with more than a certain designated population are independent in school management and partially so for taxation. The plan of organization enables rural districts, usually small and poor when operating as separate units, to unite and pool their resources with other like districts of the county to secure more economical expenditure of school funds, better administrative school practice, and better educational advantages for the children.

In the most centralized of county-unit States all the rural schools of the county are under the management of one board usually called the county board of education. Experience with the county unit plan of organization form shows that country schools can be just as efficient as city schools.

Education week was fully observed November 17–23 on the American plan in the Division of Nueva Ecija, Philippine Islands. A circular letter distributed to all supervising teachers and principals by Luther Parker, acting division superintendent, contained instructions and suggestions which followed closely the practices recommended by the United States Bureau of Education.

Turning Point in the Constitutional Convention of 1787

Speech of Benjamin Franklin, Delivered June 28, 1787; Thus Characterized in his Lectures by John M. Harlan, Late Justice of the Supreme Court of the United States, and Generally so Considered

MR. PRESIDENT: The small progress we have made after four or five weeks' close attendance and continual reasonings with each other—our different sentiments on almost every question, several of the last producing as many noes as ayes—is, methinks, a melancholy proof of the imperfection of the human misunderstanding. We indeed seem to feel our own want of political wisdom, since we have been running about in search of it. We have gone back to ancient history for models of government, and examined the different forms of those republics which, having been formed with the seeds of their own dissolution, now no longer exist. And we have viewed modern states all round Europe, but find none of their constitutions suitable to our circumstances.

In this situation of this Assembly, groping as it were in the dark to find political truth, and scarce able to distinguish it when presented to us, how has it happened, sir, that we have not hitherto once thought of humbly applying to the Father of Lights to illuminate our understandings? In the beginning of the contest with Great Britain, when we were sensible of danger, we had daily prayer in this room for the Divine protection. Our prayers, sir, were heard, and they were graciously answered. All of us who were engaged in the struggle must have observed frequent instances of a superintending Providence in our favor. To that kind Providence we owe this happy opportunity of consulting in peace on the means of establishing our future national felicity. And have we now forgotten that Powerful Friend? Or do we imagine that we no longer need His assistance? I have lived, sir, a long time, and the longer I live, the more convincing proofs I see of this truth—that God governs in the affairs of men. And if a sparrow can not fall to the ground without His notice, is it probable that an empire can rise without His aid? We have been assured, sir, in the sacred writings, that "except the Lord build the house they labor in vain that build it." I firmly believe this; and I also believe that without His concurring aid we shall succeed in this political building no better than the builders of Babel. We shall be divided by our little partial local interests; our projects will be confounded; and we ourselves shall become a reproach and byword down to future ages. And what is worse, mankind may hereafter, from this unfortunate instance, despair of establishing governments by human wisdom, and leave it to chance, war, and conquest.

I therefore beg leave to move that henceforth prayers imploring the assistance of Heaven, and its blessings on our deliberations, be held in this Assembly every morning before we proceed to business, and that one or more of the clergy of this city be requested to officiate in that service.

This speech appears in The Madison Papers, vol. 2, page 984, and also in The Works of Benjamin Franklin (Sparks), vol. 5, page 153—Editor.

Bureau of Education's Latest Publications

The following publications have been issued recently by the United States Bureau of Education. Orders for them should be sent to the Superintendent of Documents, Government Printing Office, Washington, D. C., accompanied by the price indicated:

Commercial occupations. Report of the fourth commercial education conference held under the joint auspices of the United States Bureau of Education and the Vocational Education Association of the Middle West, St. Louis, January 16, 1924. Glen L. Swiggett. 9 p. (Commercial education leaflet, no. 9.) 5 cents.

Helps for the rural-school nurse. Harriet Wedgwood and Hazel Wedgwood. 54 p. illus. (Health education no. 17.) 10 cents.

CONTENTS.—Introduction. For the nurse who asks: (1) How shall I begin? (2) What shall I include in the year's program? (3) How can I help the teacher? (4) How can the teacher best help the nurse? (5) Where can I get "Talking points?" (6) Where can I get special preparation for school nursing? (7) Where can I get helpful material?

Introduction of algebra into American schools in the eighteenth century. Lao Genevra Simons. 80 p. (Bulletin, 1924, no. 18.) 15 cents.

List of references on higher education. 31 p. (Library leaflet, no. 28.) 5 cents.

List of references on play and playgrounds. 13 p. (Library leaflet, no. 29.) 5 cents.

List of references on the junior high school. 11 p. (Library leaflet, no. 27.) 5 cents.

Preparation of rural teachers in high schools. A summary of present practice. Mabel Carney. 27 p. (Rural school leaflet, no. 33.) 5 cents.

CONTENTS.—I. Origin and early history of the movement. II. The present status of teacher training in high schools. III. Classification and types of teacher-training departments in high schools. IV. Characteristic features and contributions of individual State systems. V. General summary.

The Rhodes scholarships. Memorandum, 1925. 3 p. (Higher education circular, no. 29.) 5 cents.

Jewish philosophy and history, the Bible, later biblical literature, the Talmud, Jewish jurisprudence, and Hebrew philology will be studied at the proposed University of Jerusalem, which will be the center of intellectual life for the Jews.

Cleveland's newest school structure, the Henry W. Longfellow School, is operating under the platoon system, according to School Topics.

Eleven Years Enough for Elementary and Secondary Work

Eight Years Given to Elementary Education Not, As a Rule, Effectively Utilized. Graduates From 7–4 Courses Succeed in College Nearly as Well as Those From 8–4 Courses. Difference is Negligible

By JOSEPH S. STEWART
Professor of Secondary Education, University of Georgia

THE EIGHTH grade of the grammar school is largely a year of lost motion. It is unknown outside of America. The eight-grade grammar school was conceived or grew as the school for the masses and not as a definite part of a system of public education, including elementary, secondary, and higher.

Thorough Investigation of Secondary Education

The Commission on the Reorganization of Secondary Education made a rather thorough investigation of secondary education in this country and in Europe. It had under consideration the nine-grade elementary system in parts of New England, the more common eight-grade system of the North and West, the seven grades of the South and in parts of the West, the few intermediate or junior schools then being tried out, the cycle system in France, the secondary schools of England and Germany and, finally, the needs of American youth and twentieth century society.

The commission finally reached this concludion:

"The eight years heretofore given to elementary education have not, as a rule, been effectively utilized. The last two or three years in particular have not been well adapted to the needs of the adolescent. Many pupils lose interest, and either drop out of school altogether or form habits of dawdling, to the serious injury of subsequent work. We believe that much of the difficulty will be removed by a new type of secondary education beginning about 12 or 13."

* * * *

United States Commissioner J. J. Tigert in a recent letter to the editor says:

Data Favorable to 7–4 Plan

"The tendcney in educational practice is toward a six-year elementary course with various modifications after that, such as the 6–6, the 6–3–3, and the 6–5 plan. We have not enough data to prove that the 7–4 plan should be abandoned. Mr. Ives in a study found that pupils in the States maintaining a 7–4 plan do as well as those who have had eight years in the elementary grades and four in the high schools."

Portions of an editorial in The High School Quarterly for January, 1925. Reprinted by permission.

Superintendent I. I. Cammack, of Kansas City, writes the editor:

"The 7–4 plan has been in existence in Kansas City for the past 40 years. Instead of giving this plan up, we are more satisfied with the results that we are getting. During the past 10 years we have made a rather careful study of the work which we are doing in comparison with results obtained elsewhere with the 8–4 plan and are thoroughly satisfied that we are giving our pupils practically as good an education as that given elsewhere, and are saving one year of time. This is financially a great saving, but it is a greater saving in the life of our young people."

* * * *

For four years the secretary of the Southern Commission on Secondary Schools has been making a comparative study, by order of the commission, of the records in college of the graduates from 8–4 and 7–4 schools, for the 600 schools on the southern list. The schools are about equally divided between the two plans. This embraces the schools in the 13 southern States. This study includes over 10,000 graduates a year and the reports from scores of colleges in all parts of the United States attended by them. The records show less than 2 per cent more failures for 7–4 pupils than for 8–4 pupils.

No Discrimination Against 7–4 Plan

So well established is the fact of the success of such graduates that neither in the north central association nor in the southern association is there any discrimination made in schools established on the 8–4 or 7–4 plans. Kansas City is approved in the north central as readily as New Orleans is in the southern.

The 9–4 system is the least defendable from a scientific or pedagogical standpoint, however much its administrators may pride themselves on it. The 8–4 system is also in the discard with educational experts, though many of its followers consider it as well established and beyond criticism as the Ten Commandments. The eighth grade has little to justify it but tradition. How satisfying, how snug and tight one feels in the arms of tradition!

There are, however, many modifications being worked out in different parts of the country. The leaven of criticism is beginning to tell. Among these changes will be found the 6–3–3 plan, the 6–6, the 6–2–4, the 6–5, 7–4, 6–2–3, 5–2–4.

Begin the High School Period Earlier

One of the main purposes of the commission on secondary education was to move back to "about 12 or 13 years of age" the high-school period, with corresponding reorganization in curriculum, and "under ordinary circumstances" "each period would be three years." The working out of many details was intentionally left to States and systems.

The junior-senior high school is being established successfully in many places and the process will go on with various modifications until the 8–4 and 9–4 plans will be no more. In the process of change the Quarterly hopes and believes that many 8–4 systems, when they study the facts, will drop a year and reorganize on the 11-year basis. The 9–4 systems are already dropping one of their extra years. This dropping of a year will also compensate for the extra cost of the junior high school.

We believe that few 7–4 systems will change to the 12-year basis, with the facts before them, though there may be a moving back of the high school a year, so as to take in the seventh grade on some of the plans mentioned above.

Let no one get the idea that the Quarterly is opposed to the junior high school idea. The editor has been a member of the reviewing committee of the commission on reorganization of secondary education from the beginning of its investigations and voted and argued for the earlier high-school period and the junior-senior plans. The Quarterly most strongly advocates that the high school begin "about 12 or 13" but believes that in the reorganization in many cases a year can be saved by organization on the 11-year basis.

Seven grammar-school and two high-school swimming pools, with an additional high-school pool under construction, are reported by the department of public instruction of Buffalo, N. Y. The attendance in the day swimming classes for the year ending 1924 was approximately 90,000 and that of the night classes 30,000. Thirteen teachers are employed for the day classes and 29 for the night classes.

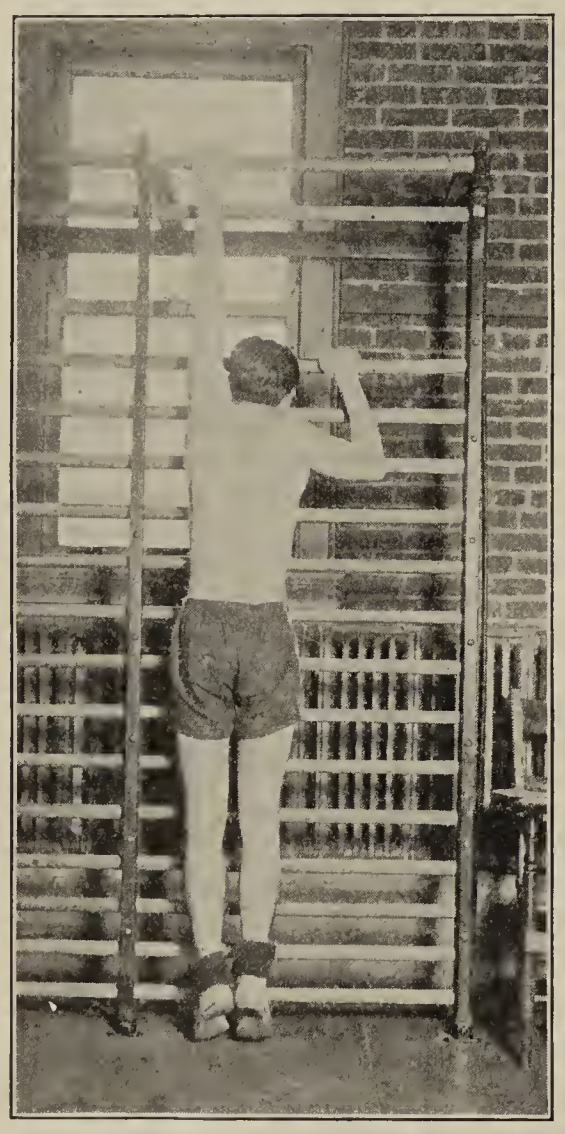
All students at the University of Oregon who fail to pass an entrance examination in English are required to take a course in English usage, without credit, until excused by the instructor.

First Problem in Education to Prevent or Correct Physical Defects

Unreasonable to Expect Full Results from Instructing Handicapped Children. Corrective Gymnastics at University of Illinois. Careful Medical Examination Required to Discover Defectives. Present Trend Toward Preschool Examinations

By GEORGE T. STAFFORD, M. D.
Assistant Professor of Orthopedics and Physical Diagnosis, University of Illinois

A STUDENT'S capacity for success in life is determined to a great extent by his physical health and his physiological efficiency. You are all aware that simply pouring information into a student does not insure success in his life, even to one who is physically sound. You can fill a leaky bucket, but it is best to plug the leaks first.



Corrective movements for structural scoliosis

We have a number of leaks. Dr. T. D. Wood, of Columbia University, tells us that 75 per cent of the school children in the United States are defective and therefore underprivileged. These figures are divided as follows: 1 per cent, or 200,000, are mentally defective; more than 1 per cent, or 250,000, have heart disease; 5 per cent, or 1,000,000, have, or have had, tuberculosis; 5 per cent, or 1,000,000, have defective hearing (these are often termed dull and inattentive in school work; 25 per cent, or 5,000,000, have defective vision; 15 to 25 per cent, or 3,000,000 to 5,000,000, are undernourished (about the same number have diseased tonsils and adenoid growth; 10 to 20 per cent, or 2,000,000 to 4,000,000, have orthopedic defects; 50 to 75 per cent, or 11,000,000 to 16,000,000, have defective teeth.

How can we expect to force education into individuals who are spending at least 50% of their energy, which is needed for their studies, in fighting their handicaps? More shame on us when we consider that at least three-fourths of the number of defectives are preventable. The first problem is to prevent or correct these defects, if education is successfully to be given to this group of underprivileged individuals, in the grades and high schools of the country.

Our college work shows the same type of defectives, and naturally so with little corrective work done through the grade and high school years. Out of 1,940 University of Illinois men examined in 1923: 1,193 had either poor or fair body development; 95 had defective hearts; 109 had albuminuria; 65 had hernia; 62 admitted that they were constipated; 541 had round shoulders; 347 had hollow backs; 342 had lateral curvature of the spine; 350 had flat feet.

Examples of Corrective Work at University

I could give you many results of cases of proper health teaching right here in the university. I have in mind one lad who flunked miserably on a 14-hour schedule. He came to me in the second semester and told me his story. He was severely troubled with constipation; his posture was very poor, and his mental outlook was very morose. He took two hours a week of corrective work, and liked it. He finally arranged his schedule so that at the end of the semester he was taking 22 hours academic work and 5 hours of corrective, and he passed his semester's work with high grades. We have many other similar cases.

Times have changed. With this change has come a lessening of physical activity and an increase in the use of our mental forces. Where is the physiological balance? A definite lack of balance is shown in the health status of our children and adults. We are soft. We think that education is simply a sensory process for the children. Courses are pounded into the student; lessons are taken home to be finished there; the summer vacation is spent in removing conditions in mathematics or English, or the child is forced to stay indoors and learn to play the piano. How much time is spent on the more vital subject of health?

In 1915 Illinois passed the physical education law. What has it amounted to up to date? In the large cities a reasonable program of physical education is pursued. In some of the small cities a man is hired to produce a winning football team and teach a few academic subjects. In many cities nothing is done. As for real corrective work for the 75 per cent, about all that is done is to gather more statistics. Illinois has yet no law demanding medical examinations for its school children. It is one of the 13 States which have failed to make provision for medical examinations. With the great number of defectives it becomes necessary to find out, by medical examination, the real condition of the individual who is to be given physical education. Therefore, the medical examination should be the starting point of real health education in our schools.

Education embraces the physical, spiritual, and mental instruction of a child from infancy to manhood. Any system is imperfect which does not embrace these

Learning coordination, after amputation

Portions of an address before the High School Conference and Conference of Superintendents, Urbana, Ill., November 20, 1924.

three. When we educate a student, we are preparing him for his activities after school days are over. More than 500 out of every 1,000 boys and girls who enter high school leave school before the fourth year. High school is the last chance to prepare them for after-school activities.

If it is true that education is one of the practical activities of society to attain a specific purpose, then that purpose, having to do with activities after school should provide for the development of the body as well as the intellect. What will it avail a child if he gain the whole curriculum and lose his health? What use is he in modern business with a summa cum laude brain and a 20 per cent body? Modern business is no child's play. It needs men—100 per cent men. Education can provide this need, but first it must turn its attention to the present 75 per cent who are physically or mentally defective.

Corrective exercises in gymnasium of University of Illinois

About 90 per cent of the people of the United States walk incorrectly. I have mentioned the large number of college students with poor posture. The same conditions exist in high schools and in the grades. Classes must be formed for these abnormals if the followup work is to be efficient. It is not enough to tell a boy to walk with his feet parallel, or to hold his chest up; practice must be had in these new positions and the supporting muscles developed to hold these unusual positions.

It is better to have the physical director or coach teach children how to walk properly than have them teach a few boys how to jump 5 feet 6 inches. Each physical director should be trained to take care of the majority of the individuals rather than the few super-normals. Your physical education law demands at least one hour of physical education per week. The athlete gets this and more; but those who need it most get a chance to watch the athletes perform. Give the underprivileged ones a chance; have your coach teach the various sports and handle the normal individuals; make Paddocks out of all of them; but have a physical director who will devote all of his time to making normals out of the present 75 per cent of the school population who are now defective.

The present trend is toward "preschool examinations." The reason for stress on this point is the lack of care usually given the child from 2 to 6 years of age. The average baby is carefully watched up to 2 years of age. From then on it is supposed to grow without a great deal of care on the part of the parents—surely without the care that is given it during the first 2 years of its life. If the child is taken sick at 3, 4, or 5 years of age, the doctor is called to administer to its specific ailment. Outside of this "repair attention" the child is not likely to visit the doctor.

During the time from 2 to 6 years of age, many things are liable to happen to the child. The teeth, adenoids and tonsils, hearing, sight, etc., may need attention, but, unless severe pains are evident, nothing is done in the way of medical attention. However, the so-called growing pains, which may be the forerunner of inflammatory rheumatism, are often evident at this time. Many parents still think that there is such a thing as "growing pains." You even hear parents of to-day speaking of the necessity of their children having "the common childhood diseases." Surely the preschool examination would save many of these children from entering school with one or more of the various handicaps which are now common among school children. The preschool examinations are generally given in May or June and the parents then have until September to provide the necessary medical attention. Where this plan is in operation a surprisingly large number of defects are found in the preschool children, and these preschool defects are of the same nature and percentage as are found in the children of the grades.

We need closer cooperation between the school and the home in matters of health. The parents must be made to see the value of health to their children. The economic gain and the necessity for healthy motherhood, must be stressed.

Finally there must be better examples of health in the teaching profession. Teaching health by example and not by precept. This applies to the superintendent and down to the lowest ranking teacher on the faculty—yes, even, down to the janitor. With the teachers won over to health, it means better work by them and real health teaching for the children.

Financial Advice Offered Gratuitously to Teachers

Competent advice on personal financial problems is offered gratuitously to the teachers and other employees of the schools of Highland Park, Mich. On the authority of the board of education the superintendent of city schools has appointed for this purpose a standing committee consisting principally of successful business men, most of whom are members of the board of education. One of the school principals is chairman of the committee and the director of the survey department is secretary.

Teachers and other employees may feel free to bring to the committee any financial perplexities in which experienced business men may be presumed to be able to advise. The service will not necessarily be confined to investment problems. The committee will also pass upon applications for permission to distribute circulars and other printed matter through the schools.—*H. C. Daley.*

English schools employ about 36,000 "uncertificated" teachers, and about 13,000 "supplementary" teachers. These teachers do not receive as high a salary as teachers who hold certificates. They may do any work expected of a regularly certificated teacher, but they can not become principals.

Only textbooks written and published in Czechoslovakia may be used in the schools of the Republic.

Reports of Scientific Examination of Educational Problems

Papers Read Before Recent Meeting of Section Q, American Association for the Advancement of Science. Small Proportion of Research Studies Devoted to Psychology of School Subjects. Unanswered Questions Relating to School Administration. Nursery Schools in England Differ from Preschool Education in America. Child Welfare Research Emphasized by University of Iowa

By JAMES F. ABEL
Assistant Specialist in Rural Education, Bureau of Education

EDUCATION can and must be made an exact science. Though it is one of the most difficult sciences in which to be exact because experimenting with human beings is much harder than experimenting with plants or lower animals or inanimate things and because it seems impossible to separate the many factors involved in the simplest school work, we are nevertheless well on our way toward learning how to be scientific in education, are breaking up school processes into parts that may be measured, and are gathering a great body of facts on which later will be founded true principles of human training.

These were the dominant thoughts expressed in the sessions of the educational section at the meeting of the American Association for the Advancement of Science held in Washington, December 29 to January 3. This seventy-ninth meeting of the association brought together some 4,500 men of science and of these about 200 were educators interested in replacing guess, opinion, and conjecture in education with definite knowledge and determined fact.

Papers in General Truly Scientific

The forty or more papers were grouped around such large topics as special applications of the scientific method to education, school administration, scientific research with the preschool child, character education, and experimental education. They were hopeful in tone, truly scientific for the most part in character, recorded much of value that has been accomplished recently, and outlined much that needs to be done.

Most of our educational research work is on the delusive level, according to Dr. S. A. Courtis. He finds four levels of investigation: The primitive which consists in trying new devices or old devices under new conditions and merely observing what happens; the delusive which is a systematic attempt to measure by objective methods but is pseudo-scientific because the variables are not controlled; the suggestive, an objective measurement of two or more groups only partially comparable; and the conclusive which aims at parallel trials with two groups that are alike. By this last method the groups of students are matched for such factors as sex, age, intelligence quotients, and achievement; all the conditions save one are kept as nearly constant as possible and the kind and rate of change in the single variable is noted and measured.

Few Studies Deal with Psychology

Out of 217 research studies in education recently made or in progress, only 5 deal directly with the psychology of the school subjects and try to analyze the way a person learns to read, write, spell, or calculate, declared Dr. Frank N. Freeman. Such analyses, not studies of teaching method nor of individual differences, but attempts to solve experimentally in the laboratory the problems set by test scores are, he feels, deserving of much more effort than is given to them at present.

Doctor Trabue in applying this alternation of deductive and inductive reasoning to the educational measurements that record the amounts of knowledge and skill shown by the school pupils insists that the measuring scales be so improved as to measure smaller and smaller units, that the results obtained and the methods used in new tests be available to all investigators, and that all published tests be safe instruments for ordinary teachers.

School Officers Should Realize Value of Research

A long series of unanswered questions relating to school administration was presented by J. Cayce Morrison, of the University of Ohio. Among them were such problems as the best type of local school organization, the relative responsibilities of the State and the locality, the relationship that should exist between the city superintendent and his governing board, scientific distribution of State funds, and legitimate economies in spending school moneys. Doctor Morrison believes that these will be solved only when school officials realize more fully the value of research, are willing to gather data for it, and to put their findings into actual practice.

Doctor George Strayer presented the methods of determining and predicting school costs used by the Educational Finance Inquiry Commission. The work which the commission undertook is, he stated, nearly completed, and 15 or 20 similar investigations by other agencies are now in progress. A system of school accounting worked out in conjunction with the State association of city superintendents and later adopted by the 87 city school systems of Wisconsin was outlined by Dr. John Guy Fowlkes.

Growth of Nursery School Movement

Doctor Gesell, of the Yale Psycho-Clinic, told his group that exactly 100 years ago Robert Owen visited Washington and discussed the nursery school before an audience including both houses of Congress, the justices of the Supreme Court, and the President and members of his Cabinet. A year later—1826—such a school was established in the cooperative community of New Harmony, Ind., and conducted by Madame Neef. The nursery school movement has grown along different lines in England. During the World War the sociological conditions in England revived the interest in this type of education for young children. In this country there has not been the same need for caring for small children, so the interest in the nursery school movement has developed with a more scientific aspect.

The Yale Psycho-Clinic established in 1911 for the mental examination of children sent to it by schools and social agencies, carries on with this service considerable research work in the mental development of infants. Doctor Gesell points out that in the nursery school the quest to determine what causes individual differences can be pushed back to babyhood, aspects of stimulation and fatigue may be studied, norms of child behavior may be established, changes in personality traits can be investigated better here than with older children, and parents may be taught methods of child guidance.

Intelligence tests have been used only to a limited extent with preschool children.

Dr. Helen Woolley reported the results of a program of testing carried on with these very young people in the Merrill-Palmer School at Detroit. Retests of 43 children showed a higher intelligence quotient for 33, lower for 9, and no change for 1. These findings agreed with those of Doctor Baldwin of the University of Iowa. Mrs. Woolley also said that this change is greater for the children who attend the Merrill-Palmer School than for those on the waiting list or for those at the University of Iowa Clinic who do not go to school all day. She is of the opinion that much of this added growth, both physical and mental, is due to "giving children superior chances to use their environment" and to changes in their emotional responses from negative to positive ones.

Careful Investigation of Young Children

The child welfare research station of the University of Iowa now has in daily attendance for from 1½ to 3 hours, 165 children between the ages of 2 and 6 years. Dr. Bird T. Baldwin in charge described the work done there. Physical measurements are made monthly of each child and there are now available some 32,000 individual measures. New intelligence tests especially suited for younger children are devised, learning experiments are carried on, and careful observations are made of motor development and coordination, of speech defects and of emotional traits.

The things that rouse fear in little children and how those fears may be overcome were discussed by Mrs. Mary Jones of Columbia University. She has given some time to studying the emotions of a group of 70 children. Ignoring the child's fears, trying to talk him out of them, or turning his attention to something else, Mrs. Jones thinks to be of little help to him. Placing the child with others of his own age who do not have the same kind of timidity will often change his attitude. The method Mrs. Jones has found most successful is that of association. By this method it is possible so to arrange the situation that the cause of the fear will be presented at regular times with some pleasurable stimulus which is strong enough to prevent the child from reacting to the fear stimulus. Gradually, as the child becomes accustomed to associating the fear stimulus with the pleasurable experience, he outgrows the emotional response he first had. It is evident that in fears as in the other moral habits, the important thing is to help the child realize that "the power to overcome fear is within himself rather than in his mother."

Psychologists Working on Character Education

One hundred fifty or more psychologists are now working on problems of character education and Dr. E. S. Starbuck described the 10 types of technique employed. They include direct observation of individual cases, rating scales, temperament tests, psychophysical tests, genetic studies of individuals for a series of years, and careful investigation of such character types as the habitual liar and the kleptomaniac.

Standardized Tests for Character Traits

Dr. Mark May gave an evaluation of the standardized tests, 20 of which are now available for use in investigating character traits. In judging the tests he took into account what they are intended to measure, the technique employed, the scoring devices, the few norms established, the reliability, and the validity. But such tests attempt to do in a few minutes what is ordinarily the work of a lifetime and their real value is by no means yet assured. The results of an investigation into the amount of moral information had by 2,000 public school and 2,500 private school children and made for the purpose of standardizing a series of moral information tests were summarized by Sister Mary McGrath of St. Mary's College.

The sessions on experimental education were given over to reports on experiments ranging from those performed in a few weeks and dealing with but a score or more of pupils to those involving years, requiring great changes in method and administration, and affecting thousands of children. Among the more important of the latter class is a progressive plan of grouping children by intelligence ratings that has been carried on in Detroit since 1920. The lowest 20 per cent of the children are placed in the Z group, the middle 60 per cent in the Y group, and the upper 20 per cent in the X group. This classification now extends to the ninth grade and a central committee is working out basic courses of study and standards of promotion for each group, and special teaching methods for the X and Z groups. Thus far the scheme has worked well in that the schools are more nearly meeting the needs of all the pupils, promotion is practically uniform and Z children are discovered and better taught.

Continuous Program of Curriculum Construction

A plan presented for a continuous program of curriculum construction will be, if carried out, another of the kind of long-time educational experiments that must eventually be made. The work as outlined by Henry Harap of the Cleveland School of Education involves the appointment of experts in sociology, psychology, and administration. These select and arrange the school activities and interpret their plan to the school principals who in turn interpret it to the teachers. A bureau of curriculum research is maintained to keep the teachers informed of new discoveries and the curriculum constantly being revised is republished at regular intervals.

Working on the theory that children tend to repeat mistakes once made and thus fall into faulty mental and physical habits, Doctor Meyers and Flora L. Scott have each carried out short experiments to determine the amount of repetition of pupils' errors; the former in arithmetic and spelling, and the latter in algebra. They conclude that a wrong answer is far worse than no answer, that an error once made is likely to be repeated indefinitely, that children should be graded on the basis of right minus wrong, and that errors should be prevented if possible rather than corrected.

Relation Between Intelligence and Parents' Occupations

Considerable data of an unusual kind came from the psychological laboratory of the Cincinnati public schools. Intelligence tests were given to 4,133 sixth-grade children and the results compared with the parents' occupations and the occupational choices of the children. The choices made by the pupils seemed to rest on a serious basis and in general those with the higher intelligence ratings desired to enter the more professionalized occupations.

Other experiments reported dealt with factors affecting physical ability, mental development and school progress in a group of crippled children, the transfer effects of formal gymnastics as contrasted with those of free play, and a comparative study of Moro and Anglo-Saxon boys.

Many of the members of the education group joined with those of the American psychological association in an evening meeting held in memorial to G. Stanley Hall. The sessions closed with an unusual program of three addresses by Dr. S. A. Courtis of the University of Michigan, Dr. E. L. Thorndike, of Columbia University, and Dr. Charles H. Judd of the University of Chicago.

Doctor Dillard Urges Savings by Negro School Children

School savings are urged upon the attention of "Jeanes teachers" by Dr. J. H. Dillard, president of the Jeanes Fund, which is instrumental in the employment of 269 supervising teachers for the schools for negroes in 255 counties in 14 States of the South. Doctor Dillard suggests that as a beginning one county in each State make experiments in methods in order that a simple and effective plan available to all schools may be devised. He is of the opinion that the idea is fruitful, not only for its thrift value but for its general influence.

Saxon Schools Emphasize Vocational Guidance

Motion-Picture Films and Inspection of Industries Extensively Utilized. Care Exercised to Avoid Idealizing Any Trade

By LOUIS G. DREYFUS, JR.
American Consul at Dresden

AS A RESULT of the present uncertain economic conditions in Saxony, more attention than ever is now paid to the importance of advising school children and others regarding the desirability or nondesirability of adopting certain vocations.

The newest method adopted to acquaint school children with the various vocations, is the display of films depicting the work performed in different trades. Although the educational film is considered very useful in giving a fairly good insight into the requirements of the various trades, all efforts are made to avoid idealizing the trades to such an extent that they attract too many candidates with the result that they may be overcrowded. Film productions of this nature are therefore considered more advisable and valuable in connection with "Parents' Eves," when there is less fear of undue influence in favor of one or another vocation.

Experiments made in this direction by the bureau for vocational consultations at Harburg have demonstrated that children can be acquainted best with the manifold duties and requirements in connection with the work in various trades by escorting them through the work shops or factories of various branches of industry, and simultaneously lecturing on the respective vocations. Six hundred and sixty graduates of public schools were escorted through 20 workshops, with the result that many boys, who had chosen the vocation of machinists, declared this vocation too noisy and decided upon a less noisy occupation. On the other hand numerous boys found the noisy work of a boilermaker most attractive. Young men who had chosen the vocation of a butcher, probably because of the good appearance of a butcher shop, decided after being conducted about the abattoir that there is more disagreeable work connected with the trade than they had imagined.

Most of the proprietors of plants in Saxony, who have been approached in this connection, have gladly consented to having classes of graduates conducted through their institutions.

Official report to the Secretary of State.

There is within every man a divine ideal, the type after which he was created, the germs of a perfect person, and it is the office of education to favor and direct these germs.—*Kant.*

Schools Cooperate with Churches in Teaching Religion

Religious instruction given under stated conditions to the children of Anna, Ill., is considered a part of their public-school work and is regularly included in the monthly reports made by teachers to parents.

The public schools are dismissed every Wednesday at 2.45 and the children go under supervision to the churches chosen by their respective parents. There they are instructed for 45 minutes by religious workers. All the churches of the city are cooperating, namely, Presbyterian, Baptist, Methodist, Lutheran, Christian, Evangelical, Catholic, and International Bible students.

At present each church has its own course of study, but the board of education and the superintendent wish to prepare a course in religion which could be given with substantial uniformity in all the schools.—*C. W. Conrad, Superintendent.*

An industrial school for wayward and delinquent girls is to be established in the State of Wyoming. The girls are now sent to Colorado institutions, but that arrangement is cumbersome and unsatisfactory. It was decided at the recent election to locate the school at a site to be selected in Sheridan County. The affairs of the institution will be under the control of the board of charities and reform.

Aiming to test the general knowledge of the students, a psychological test is given every year to the freshman class at Pennsylvania State College. This year they were required to answer 230 questions in 40 minutes. Men students made an average score of 83.9 and women students 77.7. More than 1,000 freshmen took the test.

A course in "school orchestra" is given by the Extension Department of Detroit Teachers' College. This course is intended for teachers who wish to direct orchestras and broaden their musical knowledge.

Selection of County and Other Local Superintendents

Election by Popular Vote Abandoned in Cities but Retained in Counties of 25 States. In Others, Boards Select

By KATHERINE M. COOK
Chief, Rural Education Division, Bureau of Education

TWO METHODS of selecting superintendents for rural school systems are in practice in the several States, one by popular election, the other selection by some type of board of education, State, county, district, town, or township. Early in our educational history both methods were used in the cities. However, city people began years ago to understand that the selection of a school superintendent is a responsibility discharged best by a board of education selected primarily to have charge of schools. The members of such a board should, and experience proves that they do, give the time and thought necessary to seek out and investigate the qualifications of candidates who have proved, by successful experience, their ability to manage schools. Election by popular vote has been abandoned by all cities.

In 25 States superintendents of rural schools, usually called county superintendents, are still selected by popular vote. Their selection, as a rule, takes place at the regular political elections when party considerations and those concerned with the general management of civil affairs, rather than schools, are uppermost in the minds of the voters. However, country people are beginning to realize the necessity of selecting their school superintendents for professional fitness for the job of managing schools rather than their ability to get votes.

As a consequence more and more consideration is given to the urgent necessity of the adoption in all States of a system of administrative organization which will place rural schools on an efficient basis by putting their administration in the hands of superintendents, supervisors, and teachers with professional training and demonstrated success.

I VIEW EDUCATION as the most important subject which we as a people can be engaged in. That every man may receive at least a moderate education and thereby be enabled to read the histories of his own and other countries, by which he may duly appreciate the value of our free institutions, appears to be an object of vital importance, even on this account alone, to say nothing of the advantages and satisfaction to be derived from being able to read the Scriptures and other works, both of a religious and moral nature, for themselves. For my part, I desire to see the time when education—and by its means morality, sobriety, enterprise, and industry—shall become much more general than at present.—*Abraham Lincoln.*

Community orchestra at Highland Park, Va.

Community Orchestra Promotes Community Spirit

"Developing real community spirit" through its orchestra is the claim made by the Highland Park Community Center, near Richmond, Va. The orchestra is a voluntary service and no salaries are paid to its members excepting the leader. The school auditorium is used as a meeting place for rehearsals and for its special programs.

Organized in May, the orchestra began its work in July by giving a concert for the Highland Park Citizens' Association. It has taken a prominent part in a number of functions since that time. Leaders of the Highland Park Community Center are highly gratified with the promotion of community spirit, the pleasure it has afforded its citizens, and the prospects for a greater development of the social life of the community.

Private Secondary Schools Organize Joint Examining Board

Leading secondary schools and preparatory schools of the United States are organizing effectively for cooperative work of mutual benefit. Conferences have recently been held by representatives of such schools as Andover, Arden, Bancroft, Buckley, Chestnut Hill, Exeter, Baldwin, Groton, The Hill, Hotchkiss, Lawrenceville, Loomis, Milton, Pomfret, Rivers, St. George's, St. Paul's, and Tome; and definite action has been taken toward uniformity in instruction, examinations, entrance requirements, and the like.

A board has been created to prepare papers and supervise examinations for entrance to secondary schools six, five, and four years from college. Examiners will be designated in English, mathematics, Latin, and French. It is hoped that such cooperation will be brought about that examinations under the direction of this board may be held at central points to obviate the necessity of attendance by representatives of the several schools.

The prospects for the establishment of standard requirements and for an efficient examining board are said to be excellent.

Will Issue Dictionary of American English

A comprehensive study of the English language in America, the result to be the first "Dictionary of American English," will be undertaken by the University of Chicago. The proposed undertaking will include a study of American dialects and their sources and the effect of immigration upon the language. The dictionary, which involves vast research by a large staff, will require at least 10 years for completion.

Official Patronage for International Geographic Congress

Under the auspices of the King of Egypt and the patronage of the International Geographic Union, an International Geographic Congress will be held in Cairo during the coming year. Through the Department of State the Bureau of Education has been asked to extend invitations to institutions of higher learning to send representatives. Many similar congresses have been held; the tenth was in Rome in 1913.

Interest in Mathematics Seems to be Waning

Replies "scarcely less than sensational and disquieting" were made to a questionnaire recently distributed to professors of mathematics in colleges, universities, and technical schools and to certain school superintendents, by Prof. Henry Lloyd, of Transylvania College, Lexington, Ky.

The purpose of Professor Lloyd's inquiry was to learn, (1) whether preparatory training in mathematics is as thorough as it used to be, (2) whether college freshmen show decreased ability or decreased disposition to do exacting work in mathematics, and (3) whether it is increasingly difficult to maintain former standards of excellence in mathematics.

Lessened interest in mathematics is reported in about two-thirds of Professor Lloyd's correspondents. The reasons given are in great variety, but principal among them are (1) decreased average ability of students because of greater numbers, (2) overcrowded and diffuse curricula, (3) changed valuation as to disciplinary value of mathematics, (4) "Soft pedagogy" and lack of thoroughness, (5) too many extra-curriculum interests, (6) desire for present pleasure and lack of industry on the part of students, and (7) appraising the selective and inhibitive powers of youth for more than they are worth.

Classes at the Western Pennsylvania Penitentiary are held each Monday and Thursday night under the direction of the engineering extension department of the Pennsylvania State College.

New Books in Education

By JOHN D. WOLCOTT
Librarian Bureau of Education

An activity program for the kindergarten and the primary grades, by members of the staff of the training school of the southern branch of the University of California, Los Angeles. San Francisco, Calif., Harr Wagner publishing co. [1924] xi, 142 p. front., diagrs. 12°.

This curriculum is the result of the cooperative efforts of teachers and supervisors of the kindergarten-primary department of the training school of the Southern branch of the University of California. Its design is "to make over the primary school into the likeness of the kindergarten, so that each year of the young child's life will offer challenging opportunities for self-chosen, meaningful activity which will make him a sharer in the real life of folks."

Bell, J. Carleton, *ed.* Contributions to education. Volume one. Yonkers-on-Hudson, N. Y., World book company, 1924. ix, 364 p. tables, diagrs. 8°.

At head of title: New York society for the experimental study of education.

The New York society for the experimental study of education was founded to promote among teachers the discussion of educational aims, and to advance the scientific measurement of results in the classroom. The series of Contributions to education, of which this is the first volume, is to be issued from time to time in conformity with the purposes of the society. Volume one contains 32 papers, of which the following are specimens: Some needed investigations in the field of English, by James F. Hosie; Measurement of ability in composition, by Paul Klapper; Vocabularies of school pupils, by E. L. Thorndike; The future study of civic education, by David Snedden; Experimental curriculum-making in the social studies, by J. M. Gambrill; Problems in the modern language field and attempted solutions, by L. A. Wilkins.

Berry, James B. Teaching agriculture; an analysis of the teaching activity in its relation to the learning process. Yonkers-on-Hudson, N. Y., World book company, 1924. xiv, 230 p. front., illus. 12°. (New-world agriculture series, ed. by W. J. Spillman.)

In dealing with the analysis of the teaching activity in its relations to the learning process, the author holds that the acquiring of facts should be subordinated to the intelligent use of facts in the solution of life problems. These principles of pedagogy are here applied to the teaching of agriculture.

Case, Adelaide T. Liberal Christianity and religious education; a study of objectives in religious education. New York, The Macmillan company, 1924. ix, 194 p. 12°.

At the present time when religious thought is undergoing examination and reconstruction, an important question to be decided is whether current religious education fits the people at large for the tasks of religious adjustment that already are upon them. This question presses for decision upon liberal and conservative alike. Religious living as well as theological thinking is involved in the problem. This book presents a careful diagnosis of the situation, and finds the present state of religious education unsatisfactory from the liberal point of view. Constructive suggestions are offered for bringing organized religious education into line with the objectives of Christian liberalism. Prof. George A. Coe contributes an introduction to the volume.

Coe, George A. What ails our youth? New York, Charles Scribner's sons, 1924. x. 97 p. 12°.

The question of the relation of the habits and attitudes of modern young people to general social conditions, to new knowledge, and to the present state of education, is taken up in this monograph. Certain characteristic faults are found in modern youth, due to their particular environment and to the present state of civilization. Education and religion are not doing all they should for the improvement of youth. However, the outlook is hopeful, and forces of progress are at work.

Dogherty, Marian A. Literature in the schools; how to present poetry and make book lovers. Boston, Little, Brown, and company, 1925. xi, 172 p. 12°.

The writer protests against the overemphasis which she often sees given in the teaching of English to the mere mechanics of language. Her book is an exposition of how English literature may be taught so as to become a permanent force in the lives of the pupils.

Gilliland, A. R. *and* Jordan, R. H. Educational measurements and the classroom teacher. New York and London, The Century Co., 1924. xi, 269 p. tables, forms, diagrs. 8°. (The Century education series, ed, by C. E. Chadsey.)

This book is designed to meet two purposes, first, a manual which may be used as a guide for teachers in service, and second, a classroom text adapted to the use of prospective classroom teachers. It undertakes to show that achievement tests are valuable instruments for the teacher to understand and use, independently of, or in cooperation with, the supervisor. After an exposition of the basis and general principles of educational measurement, the leading tests in the various elementary and high-school subjects are briefly described, closing with chapters on intelligence tests and on statistical and graphic methods.

Klapper, Paul. Teaching English in elementary and junior high schools; a manual of method. New York, D. Appleton and company [1925] xiv, 355 p. 12°.

The 1915 book of Dr. Klapper on the teaching of English has been brought down to date and developed to form the present work. Part I deals with the expressional aspect of composition, giving particular emphasis to the dependence of self-expression upon clear thinking. A new chapter describing and evaluating the methods of measuring progress in composition, is included in this section. Part II, on the formal aspect of composition, gives directions for teaching procedure based on sound psychological and educational principles. One feature of this part is a summary of the educational tests thus far devised for measuring pupil progress in spelling, in formal English, and in grammatical uses.

Ruch, G. M. The improvement of the written examination. Chicago [etc.]. Scott, Foresman and company [1924]. x, 193 p. tables, diagrs. 12°.

The topic here developed is a new type of test program which emphasizes the technique of testing rather than the test itself. While useful for many purposes, standardized tests are found to have various limitations, of which the most important is the difficulty of adapting them to the measurement of accomplishment of specific objectives, particularly those which are to be accomplished in a relatively brief unit of time. The new methods of testing described in this volume are designed to meet those needs which are beyond the capacity of standardized tests. The appendix contains a number of examples of the new objective examinations, which supplant, not the standardized tests, which do not apply in this connection, but rather the traditional essay test.

Stormzand, Martin J. Progressive methods of teaching. Boston, New York [etc.] Houghton Mifflin company [1924] xiii, 375 p. 12°. (Riverside textbooks in education, ed. by E. P. Cubberley.)

The past decade has witnessed the most rapid changes in instructional methods in all our educational history, according to the editor's introduction to this volume. The technique best suited to each classroom teacher must be ascertained by conscious experimentation with both old and new methods. As an aid in experimentation and choice, this volume undertakes to give practical descriptions of all important general methods of instruction, with an evaluation of each. It is, accordingly, a manual of teaching technique. Chapters are included on textbook teaching, the inductive development technique, supervised study, the project and problem methods, the laboratory method, the socialized recitation, etc. The book concludes with a presentation of the trend toward individual instruction in the public schools.

Vaughan, Samuel J., *and* Mays, Arthur B. Content and methods of the industrial arts. New York and London, The Century co., 1924. 397 p. forms, diagrs. 8°. (The Century education series, ed. by C. E. Chadsey.)

The purpose of this book is to aid all teachers who in any way come in contact with the industrial education field to see more clearly the purposes of shop courses in the schools, to understand more completely the means and methods by which such purposes can be carried out, and to appreciate more fully the relation of industrial work to the general scheme of education. The history, technique, and administration of industrial arts education are here presented by the authors on the basis of their extensive practical experience in the work.

Williams, J. Harold. Graphic methods in education. Boston, New York [etc.] Houghton Mifflin company [1924] xvii, 319 p. illus., maps, diagrs. 8°. (Riverside textbooks in education, ed. by E. P. Cubberley.)

Experience has demonstrated the importance of good graphic displays for a principal or superintendent of schools when trying to gain popular support for a progressive school policy. To be most effective these displays should not only be well made and lettered, but they should also conform to standard procedure in construction. The author of this manual organizes charting procedure by reducing all graphic presentations to 15 main types, and he gives the rules for preparing and judging charts and adapting them for various purposes. The volume is an outgrowth of a course in graphic methods given to students of education at Stanford University. The directions here given are serviceable for workers in the different fields of social service, as well as in education.

Two *February* Birthdays

By ANNIE REYNOLDS
Assistant Specialist in Rural Education, Bureau of Education

By the exercise of diligence and with the cooperation of pupils every teacher may hope that the recurring celebrations of February 12 and February 22 may bring joy and profit to her pupils. That this may be the outcome, it is imperative that she discard much of the ephemeral matter printed for use on these two days. A good collection of material on both Washington and Lincoln has been compiled by Robert H. Schauffler in the series of anthologies, "Our American Holidays." Two of these volumes, "Washington's Birthday" and "Lincoln's Birthday," are especially valuable for use during February.

WASHINGTON

POETRY.—If ever a hero deserved that time be spent only on the poems which have the note of distinction that person is "the noble, great, immortal Washington." Nor need this deter us from finding poems that little children may understand. Margaret Sangster's well loved "Washington's Birthday" illustrates this fundamental quality of distinction:

'Tis splendid to live so grandly
That a Nation stops on its way
And once a year, with banner and drum
Keeps its thought of your natal day.

BIOGRAPHIES AND PICTURES.—Every pupil should have an opportunity to read the life of Washington before he finishes the eighth grade, and be incited to do it. These four biographies are good:

On the Trail of Washington. F. T. Hill. Appleton & Co. 1910.
True Story of George Washington. E. S. Brooks. Lothrop. 1895.
George Washington. H. E. Scudder. Houghton. 1890.
Washington the Young Leader. G. W. Gerwig. Scribners. 1923.

Few schools that have any wall pictures are without a framed picture of the first President. A good copy large enough to be impressive and hung low enough to be easily seen deserves an honored place in every schoolroom, for truly did the poet write

Calmly his face shall look down through the ages
Charged with the wisdom of saints and of sages.

The "Rules of Civility" copied by the Virginian lad at the age of 14 from an old translation of a French book of 1595 are worthy of perusal by pupils with a view of listing the rules, (1) most often forgotten; (2) most important for boys to-day; (3) which need revision to adapt them for modern use; or (4) those which fall into any group deemed worthy of a special class by teacher or pupils. The rules quoted are those which one pupil thought would help him the most:

"It is not uncommon in prosperous gales to forget that adverse winds blow."

"Every man who is in the vigor of life ought to serve his country in whatever line it requires and he is fit for."

"Idleness is disreputable under any circumstances, productive of no good, even when unaccompanied by vicious habits."

GENERAL SUGGESTIONS FOR A PROGRAM.—A teacher should discover which of the minimum essentials of early American history her pupils know and which they have missed or have forgotten. There is no excuse for boring pupils by asking them to listen to detailed accounts already familiar. Instead, every pupil may find an anecdote, a story, a poem, a play, or a fact new to him and interesting, in his opinion, to others.

Any teacher who will read at least one book new to her each year which has for its setting some portion of the period between 1700 and 1800 can not fail to so extend her horizon that she will want to help pupils to comprehend more fully the services of Washington.

It is well to strike while the iron is hot. The daily papers in February, 1925, are devoting much space to the approaching inaugural of Calvin Coolidge. The descendant of the Puritans pleads for simplicity. Why not contrast this ceremony with the inaugural of George Washington? As the pupils read the picturesque details of "the simple ceremonies at which a sensitive democracy took exception" they will understand better how far we have traveled in reaching the time when "a great nation considers no honors too profuse for the ceremonies which attend the inauguration of its chief magistrate."

LINCOLN

THE INESTIMABLE ADVANTAGE OF AN EARLY APPRECIATION OF LINCOLN'S GREATNESS.—If teachers in their childhood felt the heroism of Lincoln's life, they are to-day enkindling their pupils with his high ideals. Equally true is it that the nature of the February program this year will make a difference to the children of a decade hence when many of the pupils of 1925 will have become teachers.

Below are two illustrations of teachers who because of their youthful enthusiasm for Lincoln are ready to give of their best efforts in arranging Lincoln day programs in their own schools.

The first teacher recalls a room in a house situated on the western shore of Lake Michigan where she listened with delight to the waves which to an island child were associated in some mysterious way with the picture hanging above her bed, of the historic train decked with somber trappings which bore back to Illinois that State's greatest son. Both waves and picture seemed to beckon to the wide world where great deeds were done. She often found herself repeating the words of Beecher which she had found in a book of selections at school: "Four years ago, O Illinois, we took from your midst an untried man and from among the people. We return him to you a mighty conqueror. Not thine any more, but the Nation's. Not yours, but the world's." This memory makes it impossible for that teacher to use any material but the best for Lincoln's Birthday.

The second teacher spent her school days in the South. One of those who taught her, read to her from Maurice Thompson:

May one who fought in honor for the South
Uncovered stand and sing by Lincoln's grave?
He was the North, the South, the East, and West,
The thrall, the master, all of us in one.

She thus early became one of Lincoln's many admirers who were born south of the Mason and Dixon line.

WHERE TO GET MATERIAL.—One may be eager to extend the influence of Lincoln's greatness and not know where to look for information. So much has been written—more than 1,000 books on him are in the Library of Congress—and yet so little is available in many places where teachers and children live. It is to be hoped that every teacher may have an opportunity at least to dip into Nicolay and Hay's "Life of Lincoln" in ten volumes, if she has not already done so. This first-hand contact with one of the great pieces of biographical writing is invaluable; partly because it strengthens a teacher's determination to see that her pupils have placed within their reach Helen Nicolay's "Boys' Life of Lincoln" published by the Century Co. in 1906. The daughter of the man who with Hay brought out the authoritative life to which scholars in every country turn is the writer of one of the best biographies of Lincoln for young people.

The seven final pages in which Miss Nicolay sums up the contents of her delightful volume deserve a place in any canon of literature for young people. Is it too much to hope that at least a few pupils may memorize a portion of this chapter?

"Let us see, if we can, what it was that made Abraham Lincoln the man that he became—A child born to an inheritance of want, a boy growing into a narrow world of ignorance. It was the great law of moral growth that accepts the good and rejects the bad, which Nature gave this obscure child, that carried him to the service of mankind and the admiration of the centuries as certainly as the acorn grows to be the oak. Self-reliance was his. The sense of equality was his also. In the forest he learned neighborliness.

"His advancement was neither sudden nor accidental, not easy and, because his success was slow, it never outgrew either his judgment or his powers. We who have never seen him yet feel daily the influence of his kindly life and cherish among our most precious possessions the heritage of his example."

Another excellent life of Lincoln is that by Ida Tarbell, published by the Macmillan Co. in 1911.

ILLUSTRATIONS OF RECENT MAGAZINE MATERIAL ON LINCOLN.—To the teacher looking through the February magazines to see what the Lincoln offerings are, there is always the hope that again she may find something as good as Colliers printed during February, 1923. The editorial "The Friend Who Knew and Cared" reminds us:

"Lincoln knew our human lot in every shift of poverty, hardship, toil, risk, and power. He knew the past and valued it; felt the future coming on and the need of readiness to meet its demands. No one who ever met Lincoln felt any inferiority of race or ignorance or poverty. Faith and love are the more possible to us because this greatness was made so human in Abraham Lincoln."

During the same month Colliers published an article by Ida Tarbell which substituted for the traditional picture of his drab youth an inspiring picture of the prophecy his boyhood held.

"The real boy Lincoln was not he who slept in the loft of a log cabin through whose chinks the snow may sometimes have sifted; it was the boy who came home after a long day's work with glowing eyes hugging to his heart a book—A BOOK; who did his chores almost unconsciously, his mind on the joy that awaited him. Through the book he saw southwestern Indiana and its people as a scene in a great and noble drama. The book helped him to understand human beings. Æsop, Bunyan, Burns, Shakespeare—all of them helped him understand the men of Spencer County, Indiana. What mattered it to him that he must gather chips and shavings to keep the logs flaming, if he could have a light to read by? He loved and sought the book because of the light and understanding it gave to life; and so he carried it to bed that at the break of day it might be within his reach."

Eliminate the *Procrustean Bed* from the *Graded School*

Let Classes Progress in Accord with Achievement, Not by Any Hard and Fast Artificial System. Early Expressions of an Apostle of Freedom in School Organization

By WILLIAM T. HARRIS, Former Superintendent City Schools, St. Louis, Mo.
United States Commissioner of Education, 1889-1906

CLASSIFICATION in a school is never absolute. No two pupils are of exactly the same degree of progress. The entire number in the school may be ranked from the highest to the lowest, and there will be found no wide gaps indicating a natural separation into classes, but the best of the next class below would stand very near the poorest of the class above, no matter where a division were to be made. In dividing into classes, therefore, the proper number in the class is first to be considered, and next the qualifications. But it will not do, even for the sake of having a class of proper size, to combine pupils of widely differing attainments.

—Annual Report as Superintendent of St. Louis City Schools, 1872-73.

IN ST. LOUIS there is no attempt to bring all classes with the same grade to one standard of advancement, so that, e. g., in January, all pupils within a given grade shall have arrived at just the same point in a study. At all times there are new classes just beginning the work of a grade, or year's work, in some one of our schools. The classes are not separated by intervals of 1 year in their work, but by irregular intervals varying from 6 weeks to 20. It is considered desirable to have these intervals small, so that reclassification may be more easily managed. Pupils who fall behind their class for any reason (such as absence, lack of physical strength, or of mental ability) may be reclassified with the next lower class without falling back a year or a half year and thereby becoming discouraged. Pupils who are unusually bright or mature may be promoted to the class above, or form new classes with the slower pupils of the class above who need to review their work.

—Annual Report, St. Louis, 1874-75.

PUPILS should be classified into classes of 30 or less each. These classes in all large schools would be separated by intervals of about five weeks' work. As often as these classes, any of them, become too small by the withdrawal of pupils or too large by the assignment to them of newcomers, there should be a new formation of classes. The best pupils of one class are to be sent up to the next, the best from the next below are to be promoted and joined with the pupils remaining. Those not promoted are now united with the best of the class that is five weeks' work behind them. The degradation is scarcely felt. It is rather called, in both cases, a promotion of the best ones, not a degrading of the poorest. It is a process of cutting up the school into classes anew, and as a matter of fact, the pupils need not have changed rooms to any very great extent.

—Annual Report, St. Louis, 1871-72.

SCHOOL LIFE

Volume X
Number 7

March
1925

MAGDALEN COLLEGE, OXFORD UNIVERSITY, ENGLAND

Two "Scholars" from Each State of the United States of America Attend Oxford University as Beneficiaries of the Rhodes Trust

Published Monthly [except July and August] by the Department of the Interior
Bureau of Education . . . . . Washington, D. C.

GOVERNMENT PRINTING OFFICE

CONTENTS

SCHOOL LIFE is an official organ of the Department of the Interior, Bureau of Education. It is published monthly except in July and August. The subscription price, 50 cents a year, covers only the actual cost of printing and distribution. Subscriptions should be sent to the Superintendent of Documents, Government Printing Office, Washington, D. C., and not to the Bureau of Education. Single numbers are sold at 5 cents each. For postage to countries which do not recognize the mailing frank of the United States, add 25 cents a year.

Specimen copies will be sent free upon application to the Commissioner of Education, Washington, D. C.

SCHOOL LIFE

Published Monthly, except July and August, by the Department of the Interior, Bureau of Education
Secretary of the Interior, HUBERT WORK - - - - - *Commissioner of Education*, JOHN JAMES TIGERT

VOL. X WASHINGTON, D. C., MARCH, 1925 No. 7

Training for Navy is Training for Occupations of Civil Life

In Equipment and Variety of Instruction Given, the United States Navy is Greatest Industrial Training Institution in the World. Twenty-five Thousand Men Prepared Annually for Efficient Service. Recruits, Usually Ignorant of Work They Must Perform, are Developed into Skilled Seamen or Artisans. "Deck Divisions" Comprise 58 per cent of a Battleship's Complement. Ninety-six "Ratings" on a Single Ship

By CURTIS D. WILBUR, *Secretary of the Navy*

THAT the Navy is constantly taking thousands of untrained men and boys from civil life and making them a part of its working personnel is so well known that it is accepted by the average person as a matter of fact. He is apt to give little thought to the tremendous problem which is involved. During the past year, about 25,000 recruits were taken into the naval service. Few of these men had any previous training in the work they must perform; most of them had never been aboard a ship.

Those concerned with education will know that somewhere and somehow a tremendous problem of education and training is involved, in making these thousands of untrained men fit to serve as intelligent and effective units of the Navy's personnel. To understand fully the magnitude and complexity of the task involved, one must first have a clear conception of the modern Navy itself and of what it demands of those who make up its personnel.

Intricate Machinery in Modern Vessels

The Navy to-day is essentially an oil-burning Navy. All the battleships, when present approved alterations are completed, the scout cruisers, destroyers, submarines, the tenders, the plane carriers, and the planes themselves burn oil in some form or other. High speed and intricate turbines, motors, and Diesel engines have replaced the old slow-moving reciprocating engines as propelling units. Destroyer turbines develop as much as 30,000 horsepower to drive their 1,500-ton hulls at 35 knots.

It is hardly possible to think of any activity on board ship which is not more or less dependent upon electricity, with the possible exception of the actual training and elevating of small guns. Potatoes are peeled by electrically driven machines. The ice cream which the sailor enjoys so much, and which is no longer considered a luxury even after the ship has been at sea for 10 days, is frozen in the same way. All installations for controlling gunfire, for training turrets, elevating big guns, supplying ammunition, and for firing the guns are electrical. Staterooms and crew's quarters are ventilated by large electric blowers. The larger ships are even steered electrically.

Shops Occupy Much of Space Below Decks

All of the large ships are equipped with complete machine shops, carpenter shops, foundries, refrigerating plants, evaporating and distilling units. There are facilities for coppersmithing and blacksmithing. There are print shops and paint shops and machines for repairing the large amount of canvas still used in the Navy. There is a fully equipped hospital or "sick bay," where the most delicate operation can be performed, even at sea. Torpedoes, mines, machine guns, rifles, and ammunition for all calibers of guns aboard are included in the equipment of all combatant ships.

All of these numerous shops, together with the boiler rooms and engine rooms, take up much of the below-deck spaces of the ship. But in addition to these, even a larger amount of this space is required for the stores normally carried. Everything that may be needed to effect repairs and to make minor alterations is carried in stock—from the smallest bolt or nut to the largest spare bearings. Tons of paint, canvas, wood, steel, fire brick, leather, lead, cement, etc., are carried in bulk, as well as thousands of all kinds and sizes of screws, bolts, nuts, rivets, etc. Storerooms have capacity enough to carry a six-months' supply of these general stores.

But the 1,200 men on a modern dreadnaught must be clothed and fed. At least a 30-day supply of fresh provisions can be carried. Imagine the cold storage on a ship large enough to carry the beef, veal, pork, chicken, eggs, liver, sausage, etc., to feed 1,200 hungry sailor men for 30 days. Think how many large store rooms are required to carry flour, milk, coffee, tea, sugar, tinned and dried fruit for that same period. Even a destroyer with a hundred men aboard can carry a 30-day supply of dry provisions, together with fresh meat, eggs, etc., to feed the crew for 10 days. Submarines can cruise from New London to Panama without replenishing their supply of provisions.

Every Ship a Self-supporting Unit

One must be intimately associated with the development of the Navy to appreciate how complex each type of fighting ship really is, to appreciate how essential it is to the Navy itself and the Nation as a whole, to have these separate fighting units assembled into a well-trained, well-organized, well-balanced fleet.

The idea with which every ship is built, equipped, and organized is that it shall be "self-supporting." So far as the material is concerned, they are practically so in installations, equipments, and organizations.

But the best material in the world is useless unless there is a skilled and trained personnel to handle it and to take proper care of it. The commissioned and en-

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listed personnel of the Navy are responsible for the condition of the ships. The training division of the Bureau of Navigation in Washington is especially entrusted with the proper training and instruction of this personnel, to the end that the ships may be properly taken care of.

One has only to be told that there are 137 different ratings among the enlisted men of the Navy to realize the enormous task this training division has before it. Each rating is a distinct class representing different kinds and degrees of training. Each man in any particular rating must be an expert in the work which his rate requires him to perform.

Unless the handling of stores is properly supervised, unless the food is well cooked, the bread well baked, unless the boilers are kept clean, tight, and efficient, unless the auxiliaries and main engines are always ready for their maximum speed at their lowest economy, unless the guns are properly trained, elevated, and loaded, and their fire accurately directed, the ship is unreliable, unfit for service, and useless for the important work it has to perform.

A CLASS IN A TYPICAL NAVAL SCHOOL

Six per cent of the personnel of a modern naval vessel must be trained electricians

While the various naval installations are standardized to a large degree, no man can be considered as thoroughly qualified in his rating who knows only the equipment of his own ship. All men must be able to perform the duties required by their ratings on any type of naval vessel. In addition, they must have a thorough knowledge of naval customs and procedure. Whether a man is a machinist or a quatermaster, a radioman or boatswain mate, he must know his job thoroughly and must be so thoroughly indoctrinated in naval customs that he is equal to any emergency. The valuable equipment on every ship is entrusted to the care of the officers and men on board. The Navy can not afford to have this material carelessly handled. The personnel in charge must be experts. The safety of the ship in cruising, its preparedness for the great emergency in war time, and its value as a fighting unit in the whole naval organization depends upon the degree of perfection reached in the training of commissioned and enlisted personnel.

One can hardly think of any of the technical trades and professions in civil life which is not required and used in the Navy. But the Navy at sea can not draw upon these mechanical and professional experts of civil life to do its work. The Navy must train its own experts, and the training must be continuous. There is not that permanency of personnel in the Navy which makes so much for efficiency in shore plants. Through expiration of enlistments, death, inaptitude, and physical disabilities the Navy loses 24 per cent of its personnel yearly. These are replaced by men who in most respects must be considered as untrained. These men must be assimilated into the organization and trained and instructed in the work they must perform.

It can be safely said that no institution or organization in the world is called upon to do such intensive and varied training as the American Navy, and it is also

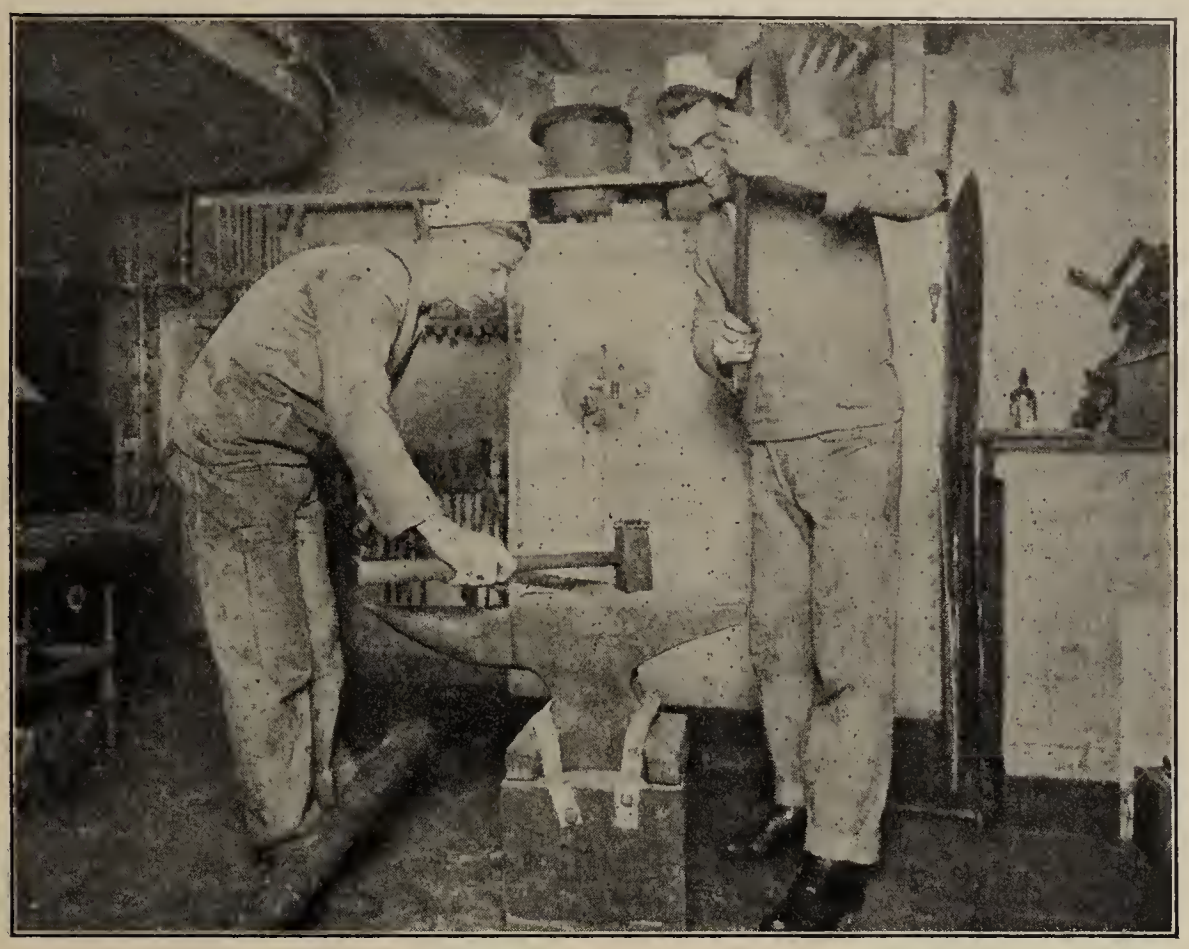
U. S. S. "WEST VIRGINIA"

Her complement of 1,200 includes men trained in nearly every trade of civil life. Nearly all of them received their training after entering the Navy

true that no trade school or training institution is in a position to offer its men under instruction such complete equipment and facilities. The 25,000 men recruited annually come from all the States in the Union and from all walks of life. Some are students, some farmers, some laborers, and some, a very small percentage, have no trade in civil life. These are the men who later become the Navy's expert coppersmiths, blacksmiths, boilermakers, machinists, yeomen, painters, carpenters, plumbers, storekeepers, electricians, radiomen, cooks, bakers, musicians, hospital corpsmen, and experts in many other technical trades.

It is true, and naturally so, that not every one of these 25,000 recruits reaches one of the enumerated ratings. But even if he is only a seaman or a fireman, he is a trained man for a particular job. He may be a gun pointer, a gun sight setter, a member of a gun's or turret's crew; he may simply watch the boiler burn the oil pumped to it as an oil-burning fireman. But, whatever his rating, he is an individual in a well-trained, well-organized fighting unit, and as such, he must reach the highest degree of proficiency possible, if that unit is to operate at its maximum effectiveness.

Considering the modern dreadnaught *West Virginia*, with an allowed complement of about 1,200 men, approximately 58 per cent of them are organized into deck divisions, which include men trained as quartermasters, signalmen, torpedo men, gunners' mates, boatswains' mates, and turret captains. This percentage includes the trained seamen who make up the guns' crews. Another 20 per cent of the ship's complement is organized into the engineer and repair forces and includes boilermakers, molders, coppersmiths, water tenders, machinists, blacksmiths, and firemen.

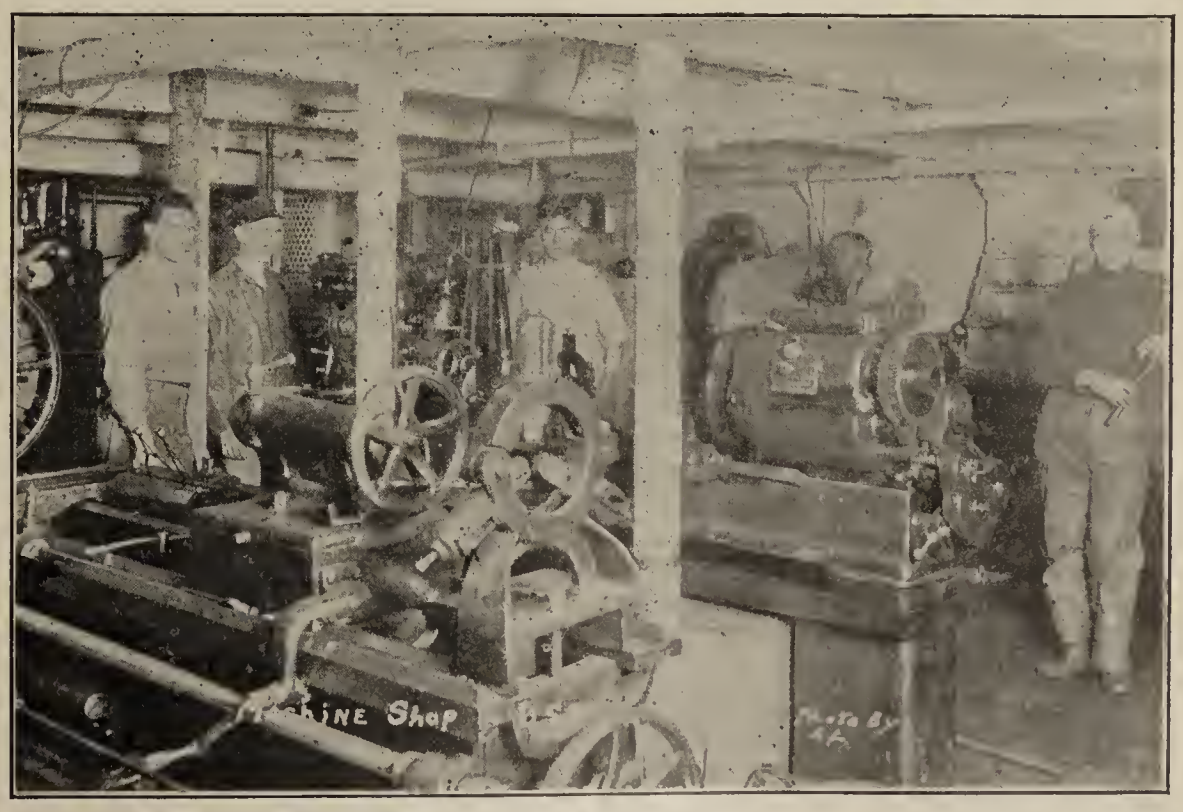


Students of the Naval Blacksmiths' School at Hampton Roads, Va.

Radiomen, electricians, painters, shipfitters, carpenters, and other ship artificers comprise an additional 10 per cent of the complement. Cooks, bakers, and men of the messman rating make up 5 per cent of the crew. Yeomen (the clerical force), storekeepers, musicians, hospital-corpsmen comprise fully 7 per cent of the crew. On a ship like the *West Virginia*, 6 per cent of the entire ship complement is made up of men qualified as electricians, and probably another 3 per cent of the crew from among the seamen guns' crews are working with them to learn this trade. There are actually 96 different ratings aboard this particular ship.

How does the Navy get its skilled experts? It makes them. At sea and ashore the Navy is keeping its personnel under continuous instruction. It is possible to do this by reason of the fact that the Navy uses its own trained personnel as instructors. The commissioned officers who are given four years of intensive training and education at the Naval Academy and the chief petty officers who have become experts in their particular ratings during their 16 or 20 years of service are especially fitted to do this type of instruction.

At all training stations and at certain other places, such as the naval torpedo station at Newport, R. I., the naval radio laboratory at Washington, the Sperry Gyro Compass Works at Brooklyn, N. Y., the Naval Gun Factory in the Washington Navy Yard, the Navy maintains men under special trade instruction. At present there is an average of 2,000 men under such instruction in the 26 trade schools now in active operation. Two hundred and sixty petty officers with special qualifications are detailed as instructors. The courses vary in length from 4 to 38 weeks. As soon as one class finishes its course of instruction, another follows. Men are selected for these various classes of trade instruction from the particularly apt and desirable recruits who have previously been given a special aptitude and educational test and from the men of the fleet who are recommended for this instruction by their commanding officers as being particularly desirable men for a particular trade. The Navy receives annually an average



MACHINE SHOP ON THE U. S. S. "PENNSYLVANIA"

Nearly all the men were trained in the service

of 4,000 trained men from these trade schools. Upon completion of a course the graduate goes to sea and performs the work for which he has been specially trained.

But these trade schools ashore can not take care of the demand for trained men at sea. The graduates from the trade schools must have their instruction continued at sea to make them better qualified in their ratings and to prepare them for advancement, so that, in addition to these 26 trade schools ashore, every ship in the Navy maintains trade schools for instructing men it needs in special trades. The courses for these schools are furnished by the training division of the Bureau of Navigation. Seventy-four different courses of instruction grouped under the following general headings are furnished by that division for use of enlisted men: Seamanship, communications, engineering, deck artificers, special branches, and general academic subjects. These courses with the textbooks are available for all enlisted men ashore and afloat and are furnished free to them. Courses are of three kinds: (1) "Rating courses," that is a course of instruction containing the specific information a man must know before he is considered to be qualified for advancement in his particular rating, as, for example, a man advancing from radioman third class to radioman second class; (2) "general technical courses to increase naval skill," as, for example, a course of instruction in detail on a particular naval installation, such as a distilling plant or Curtis turbines; (3) "academic courses to further the general education of the individual," as, for example, arithmetic, chemistry, English, United States history, Spanish.

Instruction by Ship's Officers

Correction of papers and necessary supervision of work is done by the ship's officers. Thirty-seven thousand of these courses were distributed for use among the enlisted personnel of the Navy during the fiscal year 1924. The courses are furnished to all types of ships on all stations. The officers are interested instructors, and the enlisted men are ardent students.

It is in this way that the Navy is attempting to meet the demands placed upon it by the constant turnover in its personnel. The replacement of trained men who go out into civil life at the expiration of their enlistments and the advancement of others who remain in the service requires that this training and instruction be carried on continuously.

That the system of training is successful is evidenced by the increased efficiency in gunnery and engineering in the fleets and by the fact that trained men who leave the Navy for civil life are better citizens and artisans because of their training in the Navy.

Crippled Czech Girls Weave Pictorial Carpet

A remarkable pictorial carpet has just been completed in Prague, the capital of Czechoslovakia. It is the work of 10 girls from the Jedlicka Institution for Crippled Children in that city. The carpet is 472 feet long by 314 feet wide, and the pile is 1 inch thick. More than 5,000,000 knots and 300 pounds of wool were required in weaving the carpet. The 10 girls labored on it from July 24 to December 16, 1924.

This piece of work is really a historical map of Czechoslovakia, and was made on the order of the ministry of education at a cost of $17,221. Woven in the carpet are pictures of 40 Bohemian cities, with Prague in the center. On the background are shown trees, shrubs, flowers, and animals of the country, its river system, and Czech vocational pictures, arranged in geographical order.

Schools from many places made excursions to Prague to see this great work of art and industry, which will be sent as an educational exhibit to Paris before it is finally placed in the great hall of the Prague tower Hradcany, now the residence of the president of the republic.—*Emanuel V. Lippert, Comenius Institute, Prague.*

Developing Historical Background for Latin Study

The study of ancient languages, especially Latin, is preceded in many schools by a study of the historical background. This preliminary preparation may take the form of readings in history, some acquaintance with the religion, literature, art, and architecture of the time; and, to make the study even more vivid, the clay-modeling ability of members of the class is sometimes invoked and models made of the Roman senate room or forum, or of other objects and places that give a living reality to the acquisition of the language of a vanished people.

"Latin notes" for December, 1924, presents an excellent outline which was prepared for the use of classes in Cicero in the East High School, Rochester, N. Y

Parent-teacher associations have been organized in Delaware during the past year in 327 out of the 388 school districts in the State. With the cooperation of the Delaware school auxiliary association, each of these associations has been provided with a definite program for the conduct of meetings, and a pamphlet illustrating the program, showing what has been accomplished along educational lines in Delaware and other States.

Bureau of Education's Latest Publications

The following publications have been issued recently by the United States Bureau of Education. Orders for them should be sent to the Superintendent of Documents, Government Printing Office, Washington, D. C., accompanied by the price indicated.

COOPERATION IN ADULT EDUCATION. Ellen C. Lombard. (Home education circular, no. 6.) 5 cents.

Report of second National conference on home education, called by the U. S. Commissioner of Education, at Minneapolis, May 7, 1924.

EDUCATIONAL DIRECTORY, 1925. (Bulletin, 1925, no. 1.) 25 cents.

FISCAL SUPPORT OF STATE UNIVERSITIES AND STATE COLLEGES. Clarence H. Thurber. (Bulletin, 1924, no. 28.) 20 cents.

IMPROVEMENT IN TEACHING READING IN RURAL SCHOOLS. Maud C. Newbury. (Rural school leaflet, no. 35.) 5 cents.

LEGISLATION ON THE JUNIOR HIGH SCHOOL. Paul W. Terry and William J. Marquis. (Bulletin, 1924, no. 29.) 10 cents.

Contains: 1. Legislation on the high school.—2. Analysis of junior-high-school legislation.—3. The organization of junior high schools in States having no legislation relating explicitly thereto.—4. Reports of State departments of education concerning additional junior-high-school legislation.—5. The problem of legislative stimulation of the junior high school.

A MANUAL OF EDUCATIONAL LEGISLATION FOR THE GUIDANCE OF COMMITTEES ON EDUCATION IN THE STATE LEGISLATURES. (Bulletin, 1924, no. 36.) 10 cents.

Contents: I. Purpose and scope.—II. General analysis of school organization and administration.—III. School costs and school support.—IV. School attendance and compulsory attendance laws.—V. Physical education.—VI. School grounds and buildings.—VII. The teaching staff.—VIII. Certification of teachers.—IX. School textbooks.

RECOGNITION OF HEALTH AS AN OBJECTIVE. Report of a conference at Boston, October, 1923. Harriet Wedgwood. (School health studies, no. 7.) 5 cents.

Contains: 1. Physical education and school health, by John Sundwall.—2. Certain adolescents in industry, by Hugh G. Rowell.

SAMPLES OF TEACHER SELF-RATING CARDS. Comp. by Bertha Y. Hebb. (City school leaflet, no. 18, February, 1925.) 5 cents.

A STUDY OF 260 SCHOOL CONSOLIDATIONS. J. F. Abel. (Bulletin, 1924, no. 32.) 10 cents.

Contents: Introduction.—Ch. I. The typical school consolidation, comparative standards, and variations from the type.—Ch. II. Transportation of pupils, equipment for special courses, community activities.—Statistical tables.

WHAT EVERY TEACHER SHOULD KNOW ABOUT THE PHYSICAL CONDITION OF HER PUPILS. James F. Rogers. (Health education no. 18.) 5 cents.

Offers suggestions for the teacher in order that she may do effective work in estimating the physical condition and capacity of her pupils.

Problems of New Zealand Offer Lessons for America

Junior High Schools in High Favor. Fierce Opposition to Consolidation of Small Schools Giving Way Before Plain Benefits. Correspondence Courses for "Back-Block" Children. Teachers Appointed, Transferred, and Promoted by Dominion Authorities. Must Serve Two Years Before Transfer

By MARK COHEN

Member House of Representatives of New Zealand

JUNIOR high schools and the consolidation of primary schools are two matters that are very dear to the heart of the present minister of education. The first of the junior high schools was established at Kowhai, a suburb of Auckland, where it has been in operation for a little more than two years, and the minister feels warranted in expressing its success in these terms: "From every quarter enthusiastic indorsements of the new system have been expressed. The parents of the children concerned are enthusiastic in their praise, and would view with positive dismay any suggestion to revert to the older system. Scholars, teachers, inspectors, and other officers of the department, as well as visiting educationists, have expressed warm appreciation of the results under the new arrangement of curriculum." A second school is to be established at Whangerei, in the far north of Auckland, and a third has been inaugurated in connection with the Waitaki Boys' High School, which is one of the most efficient secondary establishments in the Dominion.

Four Distinct Types Required

The need of four types of junior high schools has developed:

(1) The junior high school at Kowhai is a separate institution under its own principal, and it contains about 900 pupils, meeting the needs of three adjacent schools. In the four largest cities several junior high schools of this type would need to be established. It would not be desirable to attach a junior high-school course to existing secondary or technical schools in those cities.

(2) In towns of from 5,000 to about 15,000 inhabitants the junior high school must necessarily be attached to existing secondary schools, for it would not be possible to maintain separate junior and senior high schools with adequate staffs owing to the small numbers of pupils.

(3) Arrangements are well in hand for the establishment of junior high schools in small towns in which there are mixed secondary schools. Thus, not only will the pupils of the junior high school be benefited, but the high school, or technical high school, as the case may be, will be made more efficient right up to the sixth-form stage.

(4) It is hoped to establish junior high schools in districts where at present there are district high schools with one or two teachers and a small number of scholars. In such cases the junior high school course will be attached to existing primary schools and attended by pupils from neighboring schools. This plan would strengthen a number of secondary departments of district high schools where at present the number of pupils and teachers is too small for effective staffing and organization.

As opportunity and the circumstances of finance make it possible these four types of junior high-school courses will be developed in all parts of New Zealand, the minister states, so that the time will come when throughout the Dominion the primary school course will branch off into the junior secondary school course at about the present fourth standard and when the pupils are about 12 years of age.

Of recent years considerable attention has been paid to the desirability of consolidating our small country schools in charge of one teacher, of which there are admittedly far too many. The need for giving a better education to the children of the "back-block" settler has been universally acknowledged, but the lion in the path has been the fierce determination of the aforesaid pioneer settler not to part with the advantages to his own bairns which the one-teacher school is supposed to give.

Successful Result of Consolidation is Anticipated

By persistent propaganda the superiority of the consolidated school, with its full teaching equipment, has been made manifest; and at last the department of education feels itself justified in initiating a plan for the consolidation of such schools. Such a school has been started at Otorohanga (Auckland), to which is attached a secondary department, and the pupils are conveyed to it by motor bus from their homes. "Everything points to a successful result," says the minister, "and it seems certain that before long the department will be pressed in all directions to convey children to the more fully equipped centrally situated school."

Such another school will be opened early this year in the Taranaki education district, and a similar movement has been started in various parts of the South Island. "Thus," remarks the minister, "instead of the previous objections and opposition, the department is beginning to find that the people themselves are now convinced of the benefits of the policy, and are urging its adoption."

Correspondence Instruction for Isolated Children

By way of giving the children of the "back-block" settler better educational opportunities the department has inaugurated correspondence classes for their special benefit, and the experiment has proved a decided success. Established in 1922, these classes have become very popular, and the number of pupils is increasing very rapidly. With a few exceptions—certainly less than 2 per cent of the whole—the children now taught through correspondence are those who could not attend an ungraded school, even of three to eight pupils under an uncertificated, untrained teacher.

These correspondence classes are conducted by six certificated teachers attached to the head office in the capital; and they send out a weekly or quarterly quota of work through the medium of the post office, with instructions for the guidance of the parents or those who may assist the children in their tasks. It is now reported that "the progress made by the children of these correspondence classes during the past two years has been remarkable. The children take the keenest interest in their work, and it is not too much to say that this venture * * * deals effectively with a difficulty of the greatest national importance."

At last there is a movement toward the reduction of the size of classes in the primary schools. It is more than 17 years since the writer of these notes, then a member of the education board of Otago, along with the then inspector general of schools (the late Mr. George Hogben), attended a Pan-British education congress that met in London, and we, on behalf of New Zealand, gave our whole-hearted support to a proposal to limit the size of classes in the common schools of the British Empire to a maximum of 46 pupils.

Little Reduction in Size of Classes

So far as this writer's knowledge goes, the only place within the British Empire that acted on that resolution was South Africa, which reduced its classes to 36. Be that as it may, however, the fact remains that New Zealand has done practically nothing in the interval; indeed, in some education districts the evil has been magnified rather than decreased.

The time was when half the staff of our large city schools consisted mainly of pupil teachers, each of whom had on

the average the oversight of about 40 pupils. I have in my mind's eye several classes in large city schools that contained 120 pupils, in charge of an assistant and three pupil teachers. Of late years the proportion of pupil teachers has been sensibly reduced and assistants have superseded them. But the training colleges in the four centers have not succeeded in turning out a sufficiency of qualified teachers to meet the demand for assistants, and in consequence the unwieldy classes are still the order of the day—more's the pity of it. Now we are told officially that there are more than 1,200 trainees in the colleges, and the scandal (for such it is) of overcrowded classes will soon be at end. Last year (1923–24) approval was given by the minister to the appointment of about 200 additional assistants to replace pupil teachers, and we are promised that there shall be a subdivision of the large classes.

Teachers are Graded Uniformly

The Dominion scheme of grading and appointment of primary-school teachers has been subjected to a further test of a practical character. The seven inspectors exchanged districts for a period of three months, during which they made a strict investigation respecting the uniformity or otherwise of the standard of grading of our primary school teachers. This work was thoroughly done, and at its conclusion the inspectors assembled in Wellington and reported unanimously that they found the standard to be uniform on the whole, affording a complete vindication of the system of grading of salaries.

The appointment of teachers based on efficiency has met with the almost universal indorsement of teachers. The objection appears to be confined to school committees, who resent the withdrawal of their right to be "consulted" when appointments are made. But the Minister is warranted in asserting as the outcome of his own practical experience as a committeeman and as chairman of an education board that it ought to be recognized that if there is to be a Dominion system of appointment and promotion of teachers on merit alone and without any barriers of district or locality there must be a Dominion system of grading.

Two Years' Service Before Changing Places

In this relation Parliament at its late session made an important alteration in the education law that gave umbrage to a section of the teaching profession, but gave profound satisfaction to all engaged in the administration of our primary-school system. Before the Dominion scheme of grading was promulgated the various education boards (Otago leading, Auckland following that lead, and the others falling into line) provided their own schemes of grading positions and fixing salaries. Then no teacher could move into a fresh position till after two years' service in his original position. Under pressure from the New Zealand Education Institute, the official teachers' organization, the department reduced that period to one year.

The working of this regulation disorganized the school staffs by reason of the frequency of changes of teachers and greatly prejudiced the progress of bright pupils, especially those who were competing for scholarships, and there arose from education boards, school committees, and others interested a universal demand that the old two years' rule should be reverted to. The two branches of the legislature were divided on this issue, and several conferences were held before an agreement was reached. In the end common sense prevailed, and the two years' rule was restored. And since the act was passed it has come to the knowledge of the Minister that a similar evil has crept into the secondary schools, wherefore remedial legislation will be proposed this year.

Entire Dominion Open for Transfer

Another outcome of the dissatisfaction caused by the frequency of the changes in school staffing was the revision of the scale as far as positions and salaries of assistants were concerned. Instead of seven salary grades there are only three now, and salaries have been raised by £25 per annum. The Minister's latest report calls attention to the fact that "for the first time the whole of New Zealand was thrown open for the promotion of teachers on their merits; consequently many teachers who under the more parochial system that had largely existed previously were unable to secure promotion outside of their own district, are now able to do so. After this first general transfer it is fairly clear that the number of changes will be smaller, and the reduction of salary grades to three will further lead to a greater stability of staffs."

The total cost of education in New Zealand has risen to £3,350,000, compared with £3,268,000 the previous year, with £1,500,000 before the great war. Per contra, the attendance at the primary schools has risen from 158,134 in 1914 to 214,778 last year; the secondary schools had a roll number of 11,620 against 6,056; the technical schools 5,054 against 1,839; and the university colleges 4,202 against 2,257. Thus the aggregate roll attendance was increased by 40 per cent, while the figures for the post-primary grades showed an increase of more than 100 per cent. Of course, the factors that account for this largely increased cost are only too apparent—increase in population and greatly enhanced cost of living. The total cost of education per head of population was £2 10s. 5d. in 1923–24.

All private primary schools are now subject to Government inspection, and their standard-6 pupils are examined for proficiency and leaving certificates, just the same as the pupils in State schools. The number of children attending these schools last year was 26,010. Of those in standard 6, 71.5 per cent gained proficiency certificates and 13.1 per cent gained competency certificates.

House Allowances for Head Teachers

The primary State schools employ 5,656 teachers, of whom 1,865 are males and 3,791 females. The head teachers are 881 and 146, respectively; the assistants 529 and 2,669, respectively. The salary bill totals £1,588,582, all but £162,030 being divided among the adult teachers. Head teachers are paid from £180 to £520; assistants from £100 to £430. In addition from £20 to £60 is paid according to the individual's position on the graded list, and married assistants at an additional £40 a year. Head teachers, when not provided with a glebe or free house, receive a house allowance ranging from £30 to £60 a year. Like the rest of the civil service, when the roar of retrenchment went through the land in 1921–22 salaries were reduced by £15 to £20, but this is being gradually restored.

For the first time the Terman group test of mental ability was applied to all first-year pupils in the post-primary schools. The number tested was 8,657, and we are told that "on the whole the results correlated to a remarkable degree with the more elaborate entrance examinations."

The technical high schools were attended by 5,054 pupils, an increase of 852 over the previous year. The other technical colleges held 18,117 pupils, compared with 16,664 in 1922–23. Of the 18,000 odd, 9,653 gained admission through the "free-place" system. Grave complaint is made that the pupils do not stay longer than one year, and the Minister expresses his belief that the evil "will probably persist as long as employment is open to children under 16 years of age." Here, again, pointed reference is made to the increasing tendency of our adolescents to go in for the learned and genteel professions. The slogan of "back to the land" has no attraction for them.

Many Chinese schools have failed to open this year and others have been greatly hampered in their work by the disturbances in the country and lack of funds. The educational department of Peking University, however, has continued its work, with an attendance of 600 students, and steady progress has been made on the new buildings and teachers' residences under construction.

Relation of College Curricula to Educational and Vocational Guidance

About One-Third of Each College Class Victims of Educational Administration. Recent Experimental and Statistical Studies. Is Success in College Prophetic of Success in Professional School? Use of Intelligence Tests for Admission to College. Individuals Must be Studied, as Well as Taught. Determination of College Entrance Should Begin in First High-School Years

By BEN D. WOOD
Assistant Professor of Educational Research, Columbia University

THE CONTINUING high percentage of failures, semifailures, withdrawals for unknown causes, and transfers from one course of study to another in our colleges and professional schools, with all the waste of educational effort and sacrifice of human energy and happiness that these things imply, is a constant reminder to both teacher and administrator of the inescapable demands of vocational and professional guidance. It is a goad which forces us to the disheartening admission that in our zeal for teaching and educating we have failed to meet our first obligation to the beneficiaries of our educational efforts. This first duty of the educator is not to teach but to learn—to learn what the student can learn, to discover what he should try to learn and how he may be most efficaciously helped to learn. That we have no exact information even as to the number of failures that our colleges turn out annually is a fact which might be interpreted by an unsympathetic critic as indicating that our excusable failure has thus far very probably been accompanied by inexcusable neglect.

Reflex Influence of Failure

It is estimated that about 35 per cent of those annually admitted to college fail to achieve the goal for which they entered college. If this estimate is only approximately correct, it means that about a third of each college class is the victim of educational administration. When we consider the reflex influence which this predestined third has on the other two-thirds in dragging standards of scholarship downward, in diverting a disproportionately large fraction of the teaching energy of the institutions from fertile soil to barren, but not otherwise irreclaimable, land, and the general lowering of the morale of the whole college community, the crucial character of the need for an immediate and comprehensive attack on the guidance problem is clear.

Delivered before the Association of American Colleges, Chicago, January 9, 1925.

The question which has been assigned to me for discussion this morning is "What can the college curriculum do for educational and professional guidance?" My answer is that we do not know, but that there is sufficient promise in the guidance potentialities of the curriculum to make it worth serious study. A number of experimental and statistical studies have been made during the past 15 years, of which one of the most important is that reported by President Lowell of Harvard, in the 1911 volume of The Educational Review. President Lowell studied the records of about 2,000 graduates of the Harvard Law and Medical Schools who had previously been graduated from Harvard College. He divided these students into four groups, (1) those who had majored in literature and languages, (2) those who had majored in history and political science, (3) those who had majored in natural sciences, and (4) those who had majored in philosophy and mathematics.

Too Much Stress on Subject Matter

With respect to law graduates, there was not a sufficiently large number of cases in the last two groups to make the results worthy of confidence. His study, therefore, narrows down to a comparison between the professional school achievement of those who had majored in literature and languages and those who had majored in history and political science. His findings were briefly that these various groups of students did equally well in professional school, and his final conclusion was that "in the administration of our colleges, and, indeed, in all our general education, as distinguished from direct vocational or professional training, we have laid too much stress on the subject, too little on the excellence of the work and on the rank attained."

This conclusion seems to me to be unwarrantably pessimistic with regard to the guidance potentialities of the curriculum for reasons which will be stated in a moment. In order to check up on the findings of President Lowell, the research staff in Dean Hawkes's office made a study of 300 graduates of the Columbia Law School who had previously been graduated from Columbia College. These students were divided into groups just as in President Lowell's study. We found that all four groups achieved exactly the same average grade, B—, in both law school and college. Again it is to be noted that there were only two students each in the natural science and philosophy and mathematics groups. Apparently these findings indicate that there is no relation between collegiate subject matter and professional school which may afford a basis for professional guidance. However, in reality, they mean very little, if anything. In the first place both studies are based upon more or less arbitrary groups of courses. They do not deal with specific subject matters. Indeed, the groups of students compared are such as would constitute approximately random samplings of students, and the findings are not far from what we should expect from pure chance selections. But the major weakness of both studies is due to the character of the educational measurements used.

Conclusions of Low Reliability

Every study that has been made of college and professional school grades has invariably indicated that they are extremely subjective in all respects, of unknown significance, of unpredictable variations in standards, and of very low reliability. These vitiating features of the original data are greatly magnified by the mixing of records and standards derived throughout a period of 20 years. These are in brief the reasons why I do not believe that President Lowell's study offers any real evidence against the value of the college curriculum as an instrument of vocational guidance. It should be said, of course, that President Lowell's study was considerably colored by the then much-mooted question of the transfer

of training and that his study was dominated by the concept of college subject matters as preparation for higher studies. The modern attitude toward college courses considers them not as preparatory disciplines but, in so far as guidance is concerned, as a means for displaying particular abilities and effective interests, and it is from this viewpoint that there has been a great revival of interest in the last few years in the college curriculum.

Correlation of Success Lowest in French

What we need to know is not so much the comparative achievement in professional schools of students who happen under the present arrangements to choose particular groups of courses, but rather the relationships which obtain between success or failure in specific collegiate subjects and success or failure in particular professions, and in particular branches of such professions. It was with this question in mind that in this investigation we studied the relation between success in Columbia Law School and success in various courses and groups of courses in Columbia College. None of the obtained correlations are very high but they range in magnitude from 0.18 to 0.56, thus indicating within the limits of reliability of such a small-scaled study as this that there really may be significant differences between various collegiate subject matters with respect to professional guidance potentialities. Taking these correlations in order of magnitude, we begin with French at the bottom of the list and finally reach the total average college grade at the top, with history and political science a close second.

	r	*n*
French	0.18	50
Economics	.28	69
Philosophy	.32	72
History	.36	74
Mathematics	.40	56
English	.42	60
Majors in literature and language group	.34	221
Majors in history and political science group	.54	88
Average grade of all history and political science students (not majors only)	.55	211
Total average college grade	.56	300

Thus it appears that status in the history and political science group is almost as good a prediction of later success in law school as the average of all the college grades together, whereas the status of students in French has very nearly a pure chance relationship to later success in law school. The inference is clear that in professional guidance we must not only emphasize general excellence, but also take account of the subject matter in which achievement is excellent.

These figures are in themselves not important. I cite them merely as one small bit of evidence which indicates and justifies a widespread revival of interest in the specific achievement of students for vocational guidance. Since the Great War we have had a great efflorescence of research, with intelligence tests and special-aptitude tests of all sorts. In spite of the large measure of success which our experiments with such tests have enjoyed, there is, in my humble opinion, a definite turning to the subject matters of the curriculum for vocational guidance data. It is to be noticed that this new tendency is not a break from the testing technique; it is, on the contrary, a natural and logical development of the testing technique.

Intelligence Tests Satisfactory in Columbia

In Columbia College, for example, the intelligence tests have been used continuously since 1919. The Thorndike test of intelligence for high-school graduates has been found to be the best single criterion for admission to college that we have used in Columbia College. Similarly, the Thorndike special intelligence test, used in the Columbia Law School, predicts success in law school better than the average college grade does. These intelligence tests predict success during the first two college years approximately as accurately as the first year in college predicts success in the second year—that is, 0.67 as compared with 0.70. It is clear from these figures that the admission criteria can not be very much improved until the measures of success in college are more accurate and significant. The logical next step, therefore, would be to study methods for measuring higher educational achievement, and such studies have been going on in the office of the dean of Columbia College for more than three years past. The new type tests are now a regular part of the examination machinery in more than a dozen departments of Columbia College and in several of the professional schools of Columbia University. In these departments reliability of the college grades has been raised from an average of about 0.60 to an average of about 0.85.

A study of the relationships between achievement in specific college courses and achievement in the specific professional courses, based upon these more reliable grades, might result in such high correlations as to give us decisive bases for educational and professional advice—particularly if used in combination with all other types of available information. Something of this sort is indicated by the history of the placement tests which have been used in Columbia College experimentally for two years.

The revival of interest in the achievement of students in particular subject matters is merely one manifestation of the desire of educational administrators to get as complete a picture of the individual student as possible. There was a time when at least mild hopes were entertained that some test or tests might turn out to be panaceas to cure all the misfits and maladjustments in the whole educational ladder. This hope, if it ever existed, has given way to the sober realization that in so complex a problem, into which so many currents and cross currents of personality and interest and social and economic opportunity enter, there can be no panacea, and that the best we can do is to increase and make more exact and more conveniently available information about the individual students that we are concerned with.

Little Use Made of Students' Records

In this connection it has recently been widely noticed that very little use is made, and that very little use can be made under the present system, of the previous school records that students present. The chaotic character of these records, dependent as they are upon local standards and local curricula, called into being such examining agencies as the college entrance examination board, the Middle States board, etc. We still hear invidious comparisons made between the prophetic powers of high-school records and of college entrance examinations. In general the faith of colleges seems to favor the college entrance examinations more than the secondary-school records. In the great cosmopolitan colleges which draw their students from all parts of the country

EDUCATION is, in truth, the first concern of society, and it ought to have the energies of society's best minds. The Athenians, who had glimpses of whatever was most glorious, did in this matter leave mankind a great example. Teaching was the honorable occupation of their greatest men. The brightest minds of Athenian philosophy were the instructors of Athenian youth; so keenly was the truth felt that the mature intelligence and moral power acquired in the struggles of a distinguished life could perform no higher function than that of rearing up the same precious fruits in the rising minds of the community.—*John Lalor.*

the college entrance examinations do predict college sucess better than the average high-school grades. But wherever a large number of students goes from one first-class high school to one college, the high-school record has been found to be a very much better prediction of college success than the college entrance examinations. This would seem to indicate that while our lack of faith in high-school records is justified, our lack of faith in the value of the high-school experience is not justified. More positively it indicates that if we had more accurate and more complete records of the high-school experience, college entrance examinations might not be necessary. Our recent experience with new methods for the measurement of specific achievement is sufficient to convince us that it is now possible to secure objective, reliable, significant, and comparable measures of specific achievement throughout the whole educational ladder, and it is only natural that there should be a strong demand for the realization of these much-hoped for possibilities.

Knowledge of Individuals Essential

In my opinion our teaching would be several times as efficient as it is now if a fourth of the present teaching energy could be diverted from teaching individuals to learning individuals and to making the results of such learning available in understandable terms at the right time and place.

Recognizing the fundamental prerequisite for vocational guidance to be accurate measures of all educational products, since the knowable value of all prognostic devices ultimately depends upon their correlations with school products, we are setting the whole energy of the research bureau in Columbia College under the leadership of Dean Hawkes, to the task of developing means for the measurement of achievement in colleges and professional school courses which may give us reliable and comparable data. In the last analysis the quality of our guidance depends upon the character and completeness of the data which are available on each individual student.

It may be of value to attempt a specific and detailed answer to the question "Why is our college guidance so ineffective, and what is the remedy?" The first part is easier to answer than the second, but the answer to the second depends on the answer to the first.

Information Obtained Too Late for Use

1. Our guidance is bad, in the first place, because the information that we do have comes to us too late. I have heard college deans say that very often they knew enough about a particular student in his senior year to advise the student wisely about his college education. Even if this information were available at the beginning of the Freshman year, it would in many cases be too late to help matters very much, because by that time the student's habits are fairly well set. Even Phi Beta Kappa material may be degenerated into college failures, partial or complete, by misplacement throughout the grammar and high school years.

2. The information is never complete. Not only are the important factors of habits, character, and attitudes left to the oblivion of the opinion of comparative strangers, but many of the significant and extracurricular experiences of the student are generally omitted from the records.

Inaccuracy a Crying Fault

3. It is very often inaccurate. For those who have read the scientific literature of the past decade on school examinations this assertion needs no comment.

4. It is rarely, if ever, stated in comparable units for any large body of students such as the average American college has to deal with.

5. In addition to these weaknesses, it is rarely possible to guess successfully the meaning of many of the grades on the record card of a given student. A grade in a given course may really mean almost anything from actual achievement in that subject matter to the private personal opinion of the teacher about the student.

6. The information about students, such as it is, is frequently scattered and not available at the time and place where it could be used. I estimate that less than 1 per cent of the significant information which high school teachers learn about students reaches the college at the right time and in understandable units. There is neither a common language between lower and higher education, nor an adequate liasion system.

Only an Instantaneous Picture Available

7. At their best, the records which we get give only an instantaneous picture of the individual; that is, his reaction to certain examinations taken at the end of his high-school course. They give us no reliable intimations of how the capacity for making such a reaction developed, nor how representative of the student that reaction is.

8. The records consist too much of opinions and general feelings of teachers about students, and too little of actual facts about those students especially in regard to personality and character qualities and effective interests.

9. Finally, even the very best prognostic tests given at college entrance time are very unreliable, because of the advanced age and variations in the age of students entering college. Other things being equal, the testing of students becomes more difficult as we go up the chronological age scale. The personality of the student becomes much more complex, and his capacities become hedged about with a multiplicity of habits and interests, all of which have to be penetrated by tests given in the college years. We should, of course, give tests during the college years, but my point is that these tests would be much more illuminating if they were preceded by many other tests given during the grammar and high-school years.

These loopholes in our present system of guidance define the first remedial steps. We must have closer cooperation between the colleges and the lower schools. The collegiate personnel problem is only an indivisible part or aspect of the whole educational personnel problem, and it can not be hopefully attacked other than as a continuous part. The center of gravity of the educational personnel problem is in the junior high school, and I feel that the major part of the collegiate personnel problem can be solved economically only during the high-school years.

Cumulative Records of Achievement Required

The lower schools should make reliable and comparable measurements of the abilities of their students available to the colleges. We should demand cumulative records of achievement based on objective and reliable measures of known significance. A fair number of secondary schools are already in a position to give us cumulative records of such objective measures, but no channels of communication exist whereby the colleges might get them at the right time in usable form. In some cases our colleges have not provided administrative facilities for using to full advantage the information which lower schools are able and willing to furnish.

When all lower schools are able to furnish adequate records, consideration of college admission may begin where they should always begin, during the first high-school years. There will then be time to separate the college material from the rabble and the most advantageous grooming given to those who must in future bear the intellectual burdens of civilization. Admission may then become active selection rather than passive acceptance of the best of those who happen for one reason or another to apply for admission to college.

More than 5,000 students are enrolled in German, French, and Spanish classes at the University of Wisconsin.

· SCHOOL LIFE ·

Issued Monthly, except July and August
By THE DEPARTMENT OF THE INTERIOR, BUREAU OF EDUCATION

Editor - - - - - - James C. Boykin

Terms: Subscription, 50 cents per year, in advance; to foreign countries in which the mailing frank of the United States is not recognized, 75 cents. *Remittance* should be made to the Superintendent of Documents, Government Printing Office, Washington, D. C.,

MARCH, 1925

Valuable in Itself and For What It Has Stimulated

OF INESTIMABLE VALUE have been the provisions in the will of Cecil Rhodes to establish scholarships at Oxford University for students from the United States and from the British Dominions. The fact that about a hundred picked men from America are regularly in residence at an English University, and are thus beneficiaries of the generosity of the broad-minded donor, is of the greatest consequence because of its effect upon American educational ideals and in promoting the feeling of brotherhood between the two great English-speaking nations.

But the influence of the gift has gone far beyond its immediate effects. It has stimulated many American students not beneficiaries of the fund to seek a part of their education abroad, and its example has led to many other endowments, great and small, to aid students in foreign study.

Only yesterday the Bureau of Education received a visit from Miss Mabel Wellock, a young teacher in a London public school, and a prolific writer and lecturer, who is enjoying a scholarship of £250 and a six-months' leave of absence from her school in order that she may study methods of teaching reading in the schools of the United States. And to-day the announcement comes of the establishment of the John Simon Guggenheim Memorial Foundation, liberally endowing 40 or 50 fellowships for advanced study abroad. A preliminary gift of $3,000,000 from Simon Guggenheim, former United States Senator from Colorado, is the basis of the foundation. These are incidents of recent occurrence and are mentioned for that reason and because they are typical of many other worthy efforts to make of education a matter of world-wide aspect.

The advantages of travel as a means of education have been appreciated from early times; from colonial days to the present young Americans have sat beneath the influence of the great teachers of Europe; the Boxer indemnity fund has brought hundreds of Chinese to this country for study; nearly every educational institution in the United States has on its rolls a considerable number of foreign students; many organizations exist to promote the interchange of students and professors; and many of our great universities maintain "traveling fellowships."

Nevertheless the greatest stimulus in recent years in all this movement was from the Rhodes fund, and it must have first mention in all discussion of international exchange of education and good will.

Metamorphosis of American Educational Organization

IN DEVIOUS PATHS, but steadily and surely nevertheless, we are approaching the ideals of educational organization set forth more than a score of years ago by Dr. William R. Harper, president of the University of Chicago, who has been frequently called America's greatest educational statesman. Doctor Harper's plan, as presented to the meeting in 1902 of the schools affiliated with the University of Chicago, contemplated—

"1. The connecting of the work of the eighth grade of the elementary schools with that of the secondary schools.

"2. The extension of the work of the secondary schools to include the first two years of college work.

"3. The reduction of the work of these seven years thus grouped together to six years.

"4. To make it possible for the best class of students to do the work in five years."

So firmly imbued was Doctor Harper with these ideas that a year later—that is, in 1903—he is said to have predicted that "ten years from now the high schools all over the country will have added a fifth and sixth year and will be doing college work which now falls to the first two years of the college courses."

The ten years that he fixed went by without extensive actual change in the situation. In the meantime another educational statesman had become active. Dr. James H. Baker, president of the University of Colorado, began an agitation for revision of the educational program along lines similar in many respects to those advocated by Doctor Harper. After thorough investigation extending over several years, Doctor Baker and the able men associated with him on a committee of the National Education Association produced a report which was printed by the Bureau of Education under the title "Economy of Time in Education."

It is clear that Doctor Baker anticipated that prompt and general revision of the characteristic organization of American education would follow the publication of that report, for the need was conclusively proved. Both Doctor Harper and Doctor Baker were true prophets even if they failed to appraise the full force of the spirit of laissez faire in those who direct the individual institutions.

At last, 23 years after Doctor Harper's definite pronouncement and 12 years after Doctor Baker's report, it is evident that the tide is running strongly in the direction that they prognosticated. The recent movements in Massachusetts, Kansas, and Oregon, and the declared desire of President Goodnow of Johns Hopkins University to eliminate the freshman and sophomore classes of that institution, added to all that has gone before in California, Texas, Missouri, Illinois, Michigan, Minnesota, and many other States, prove the general acceptance of the junior college idea. It seems but a question of time when the traditional four-year college course as a unit will be modified materially in the majority of our institutions and even discarded in many of the universities under private control.

The junior high school, taking the pupils after six years of elementary study, seems to be equally a certain development of the early future, if it can not be considered as having already arrived. So strong is the attitude in its favor that it seems now to be merely a practical question of administration and finance to provide for its general adoption. Not only in this country, but even as far away as New Zealand, are its advantages realized, as the letter from Mark Cohen in another column of this issue shows.

We are definitely in a period of metamorphosis. It is inconceivable that in the final development we shall have as our national system that minute subdivision of institutions implied by the approved list which embraces (1) the kindergarten or preprimary school, (2) the elementary school, (3) the junior high school, (4) the senior high school, (5) the junior college, (6) the senior college, and (7) the professional or graduate school. All these we shall have, undoubtedly, but not as separate institutions.

The place of the kindergarten is with the primary school as an integral part of public education. The kindergarten, maintained apart and without coordination with the classes which normally follow it, is fast disappearing.

In the cities junior high schools distributed with reference to the convenience of the pupils are desirable not only from the pedagogical but from the administrative standpoint. There is no longer need for argument in that relation.

Combination of junior colleges with senior high schools in every municipality

whose population justifies it has been repeatedly proved advantageous in theory and in practice. To consider only one aspect of the question, it is cheaper to educate a young man at home than abroad. State taxes are borne largely by the cities, and when all the cities provide for the higher education of their own youth State taxes may be by so much reduced.

The time will never come when State universities will lose their usefulness, nor indeed can it be foreseen that they will be able to dispense with their freshman and sophomore classes, for they must continue to provide (1) for those who reside in their immediate vicinity, (2) for those who reside in localities in which no junior colleges are provided, and (3) for individuals in cities who desire to take the full four-year college course in one institution.

One of the greatest advantages in bringing the senior high school and the junior college under the same organization is in the possibility of overcoming the grievous overlapping and duplication which are well known to exist between the high school and the college. Doctor Harper's view that one year may be thus saved by the average student and two years by the best is in substantial agreement with the statement of Doctor Baker and his associates that two years may well be saved from the entire course of study. Recent studies especially those by Dr. Leonard V. Koos, of the University of Minnesota, lead to like conclusions. The full measure of benefit from this coordination will come only after extended experience, and it has not yet been realized.

The establishment of junior high schools, senior high schools, and junior colleges in small cities and in rural districts must of necessity be handled according to local conditions. The combinations to be made must be determined by practical considerations, but they offer no insuperable difficulties. The objective should always be to provide the highest practicable grade of education which the population of each community warrants, and to bring the higher grades as near as possible to the student.

Private junior colleges do not now in general confine themselves to the work of two years, and there is no reason why they should do so. It is entirely fitting for such institutions to offer the work of the senior high school and even of the junior high school if circumstances demand it.

The universities, freed in whole or in part from the lower classes, may and will adopt a different attitude toward their student body and will be able more readily to arrange their professional and other advanced courses as units beginning with the junior year. Only distinct gain can come to them from the separation of the junior colleges.

Chicago Board Provides Classes for Adults Wherever They Are Wanted

Active Cooperation of Club Men and Women. Schools in Railroad Yards, Factories, Office Buildings—Everywhere! Recreation Combined with Work and Students Enjoy Their Experiences

By FLORENCE C. FOX

Assistant Specialist in City Schools, Bureau of Education

WORKMEN in the yards of a large railroad corporation in Chicago were eager to learn English. Through the yard physician they secured the services of Miss Wetmore, the supervisor of adult education in the city school system. Where to find a place to hold the "school" was the next problem. When they had found an empty freight car in the yard the manner of heating it was another obstacle, for the thermometer was registering about 13 degrees below zero. Finally the car was shunted down the track and connected with a steam pipe, and the lessons were quickly under way.

This is only one of many lines of work that are carried on in Chicago to make American citizens out of the foreigners who find their way here, or the native Americans who have lacked opportunities for education and are illiterate. Mothers' classes are held in school buildings and in settlement houses. These women talk English brokenly; they write it awkwardly; they spell it haltingly. Yet a gleam of triumph can be seen in their eyes as they conquer some particularly difficult word pronunciation or letter formation.

Women's Clubs are Especially Active

The women of the city take charge of these classes and in all new school buildings a special room is set aside for the work. In all the women's clubs committees are working night and day in this service. Club women teach, and the Colonial Dames pay for the care of children during the mother's lessons. The Council of Jewish Women make a house to house canvas and gather in the women who desire to join one of the classes. The Daughters of the American Revolution, the women's city clubs, the Women's Christian Temperance Union, and many others in different localities are all helping the plucky woman who presides over the varied lines of work throughout the city.

Factory classes, including both men and women, are held in nearly all manufacturing plants. Hotel classes are made up of bus boys, kitchen people, and room girls. A survey of environment largely conducted by the association of commerce is part of the plan. This organization maintains a standing committee of 18 for printing necessary material and a "flying squadron" of 37 for field work. They donated last year $10,000 toward necessary expenses. Men's organizations throughout the city are active in this work.

In the stores the porters who scrub the floors and the window washers are eager participants in these study hours. Many of the large department stores donate an hour of the worker's time for this lesson.

Opportunities for Night Workers

Many superintendents of office buildings offer opportunities to their scrub women who work at night to spend an hour in learning the rudiments of the three R's. "These women are overworked and overtired," Miss Wetmore said to me. "They go home in the morning to housekeeping and the care of children with little time for rest and sleep before their work begins again in the evening. We try to give them a good time along with the instruction and many of them come early on their own time to enjoy the recreations and entertainments we provide for them."

"It is all a very flexible program," she continued; "at any time, any place, the year round, wherever there are people who want to be taught we establish classes for them." "How are the teachers trained" I asked? "Many now are in preparation," she replied. "A course of teacher training in this work has been established by the board of education at the city training college where school credit is given students. Institutes are held six times per year where methods are discussed, and they are largely attended by club women. The Illinois State general federation has its classes for teacher training." Many other agencies she mentioned which are helping to prepare instructors to assist in a movement so little known and advertised, and yet so vital in its effect on the civic life of the city.

Nine foreign countries are represented at the Kansas State Agricultural College. The president of the Cosmopolitan Club of the college is a native of India.

Oxford University in the View of an American Rhodes Scholar

Impressions Described Two Years After Graduation. Extravagance of Natural Beauty and Variety of Wondrous Architecture. Immutable Customs Which Every Student Must Adopt or be Unhappy. Many Newcomers Erroneously Consider "Dons" as Fossils. Examination System Makes Cramming Impossible. Nearly all Students Participate in Athletics and no Questions of Eligibility Arise

By JNO. J. TIGERT

PERHAPS there is no place in the world about which so much has been said and written as the splendid and historic city of Oxford, nestling in the arms of the Isis and the Cherwell like a setting of beautiful gems. The extravagance of her natural beauty and the variety of her wondrous architecture have been for centuries an unending marvel to admiring tourists and a ceaseless pride to loyal Britons. This "City of Spires," with her profusion of pointed pinnacles, rounded domes, and towering battlements, which from their summits "whisper the last enchantment of the Middle Ages," with her green, velvety quadrangles and world-renowned walks, has beggared the descriptive powers of the ablest writers and has furnished an absorbing topic for literary tyros.

She has long been the Utopian ideal of the British youth, viewed prospectively with longing anticipation in school and retrospectively with unfading memory and undying devotion in afterlife. The sketches of Oxford are legion, colored by artists from every viewpoint. The picture of her which comes from the hand of the resident Briton differs from that of the transient American tourist as a canvas of some old Italian master differs from that of a modern impressionistic painter.

The old Oxonian portrays her in a manner which appears lurid to the one who has dwelt in the ancient seat of learning on the banks of the Cam, and is unappreciated by those who are unfamiliar with the life of either of the great English universities. Again, as Andrew Lang points out, the pictures drawn by Oxford men themselves are as numerous as the myriad types of undergraduates. The fact that he possesses an entirely new point of view is the only apology which an American Rhodes scholar may offer for writing about a subject already so trite and worn.

My first impressions of Oxford were not altogether favorable, and this, I think, is true of most Rhodes scholars who go to Oxford from this country. One could hardly expect it to be otherwise when he considers that the American youth, dropped suddenly into the unique environment of Oxford, is about as much out of his element as the proverbial fish out of water. But, with few exceptions, they speedily adapt themselves to the new conditions, and as soon as they have done this Oxford becomes for them a place of enchantment, which they learn to love and revere and are loth to leave. And yet some, unfortunately, remain disgruntled to the end of their three years' career, due in every instance to a failure to conform to the conventional life of the place. Instead of casting themselves into the molds of Oxford customs and ideas, which are indeed as immutable as the laws of the Persians and the Medes, with characteristic American boldness and energy they strive to remold and override these time-honored traditions with the latest American fads.

These misplaced endeavors do not affect Oxford life one jot or one tittle, but reflect much unhappiness upon those who are guilty of them and are a source of annoyance to others. The maxim "When in Rome, do as Romans do" is both wise and conducive to happiness when applied at Oxford. But be it said, again, to the credit of most of the Rhodes men, they are not so insensible and obdurate as long to "kick against the pricks," and wisely giving up the effort to Americanize Oxford and docilely allowing themselves to be Oxfordized—if one may use this term—thereby convert their own dissatisfaction into happy contentment and materially contribute to the peace of others. A love and a veneration for the old place springs up in their hearts, which continues to grow till the last moment of sojourn within her gates. . I have in mind one who declared soon after his arrival at Oxford that he would resign his scholarship at the end of the first year, but who not only completed the three years, but even continued in residence at his own expense after the expiration of his scholarship.

Probably the first thing that attracted my notice after my arrival at Oxford was the ancient atmosphere of the place and what appeared to me to be old-fashioned tendencies. I thought the "Dons" fossil-

HIGH STREET, OXFORD

Architecturally this street is regarded by many as the finest in the world. In the foreground on the left is University College, and on the right is Queen's College. The spire in the center is of St. Mary's, the University Cathedral

Reprinted from London Quarterly Review, January, 1909.

ized, and much of Oxford worthy of relegation to a gallery of antiquities. In fact, Macaulay somewhere expresses a similar opinion of the Oxford of his day. This feeling on my part, which was shared with the other young Americans, is no doubt accounted for by the great difference in character of American universities and the sharp contrast which Oxford presents to them.

PEMBROKE COLLEGE

Attended by the author of this article. Dr. Samuel Johnson wrote the first English dictionary there. William Blackstone and Sir Thomas Brown were students

Institutions of learning on this side of the Atlantic, with a few possible exceptions, are far too young to have developed unchanging customs and stereotyped modes such as have remained inviolate at Oxford through generations of passing undergraduates. Our institutions, in their present unsettled condition, readily permit rapid changes under what we believe to be a progressive spirit—and no doubt we have more ample opportunity for progress than exists at Oxford. The simple matter of dress well illustrates the point. American college styles change annually, and vary from one extreme to the other, whereas at Oxford changes in dress are scarcely perceptible, and the soft cap, Norfolk jacket, and grey flannel trousers are well-nigh perennial. In this particular, at least, I think I prefer the Oxford way; it is certainly less troublesome and more inexpensive.

It is undoubtedly true that the Dons are sometimes impractical and unacquainted with expeditious business methods—a fact which impressed itself upon Mr. Rhodes—but it is equally true that, as a rule, they are far more competent and thorough in their scholarship than our American professors. One seldom finds a Don who is not kind and affable. Many display extraordinary personal interest in their young hopefuls, and few fail to obtain the reverence and love of those who daily sit at their feet for instruction and guidance.

The close personal contact of tutor and tutored affords a considerable advantage, I think, over our classroom system. In our large institutions the instructors rarely ever know in a personal way the men who compose their classes and almost as rarely recognize them by sight outside the classroom. So acknowledged is this evil that in some of our larger universities, notably at Princeton, a system has been introduced which is similar to the Oxford tutorial system. Furthermore, the Oxford device of making everything depend upon a single searching examination seems to result in greater thoroughness and more lasting knowledge. In our colleges, where examinations are set every semester, and these upon a few specified texts, it is often easy to neglect the regular work in the classroom, and then, by a single night's cramming, to make a creditable showing when the examination test comes. Knowledge which was gathered in this manner I found to be superficial and transient. Crammed knowledge doesn't stick very long.

At Oxford cramming is a sheer impossibility. It would require several months, reading night and day, to run hastily through the volumes which might be considered the bare essentials for an Oxford honor school. The fact that the examinations are set upon no definitely prescribed texts, but simply upon the subjects, and the additional fact that the examiners are not likely to be the tutors of the examinees or even the lecturers whom they have heard, are features which struck me as peculiarly advantageous. Under these conditions there is very little prospect of "spotting" the questions which an examiner will ask, and it is evident that it requires more work and is productive of more lasting knowledge to master many lectures and books from various sources than to acquire the substance of a single text. To know, for example, all that is contained in Anson's book on contracts, admirable though it is, is not to know the law of contract.

These are some of the salient features which impressed me about the Oxford system. In justice to our own institutions I might say that though it appears from what I have said that our institutions lack somewhat in thoroughness, yet this is largely offset by the breadth of our courses. Our graduates have a wider acquaintance with the various branches of knowledge and science than

CHRIST CHURCH COLLEGE AND CATHEDRAL

In the background is "Old Tom" Tower, which was designed by Sir Christopher Wren

graduates of Oxford, even though they are apt to deal with them in glittering generalities without a thorough grasp of any one branch. Such a grasp comes with us only in the specialization which one gets in the work for a doctor's degree or a professional course, and as a matter of fact undergraduate work at Oxford resembles largely the work of our graduate schools. This explains the fact, often astonishing to Americans, that at Oxford the master's degree is acquired without additional work after one has taken the bachelor's degree. All that is necessary is the lapse of a certain period of time and the payment of fees.

INSIDE THE QUADRANGLE OF BRASENOSE COLLEGE

In the background is the dome of Radcliffe Library, a part of the great Bodleian Library, and the spire of St. Mary's Cathedral

Athletes the Rule, Not the Exception

The athletic spirit is more widespread at Oxford, though less intense, than in this country. Those who take part in athletics here are almost as few as those who do not over there. The bookworm is rarely met at Oxford, and those who do not take some part in the athletic life are rarer still. At Pembroke College we had about 80 undergraduates, being the smallest college at Oxford, but almost every member of the college represented it in some phase of sport. I can remember days when an actual majority of us were engaged in intercollegiate contests of various kinds on the same afternoon. But where athletes are the rule and not the exception, they cease to be heroes and demigods. The great oarsman, footballer, or cricketer in England does not see his picture in the daily papers and read lurid accounts of his prowess on the water and the gridiron. This is seldom done even for the most celebrated "Blues."

The number of men engaged is a greater test for the utility of athletics than the extraordinary excellence of a few representing the college or university. Measured by this utilitarian principle of the greatest benefit to the greatest number, we are far behind old-fashioned Oxford in this respect. Again, no American who indulges in sport at Oxford will fail to be impressed by the gentlemanly and equitable character of the contests. Unnecessary roughness in football is conspicuous for its absence, and wrangling is unknown. I played tennis in my college six for the three years of my stay at Oxford, and I have never known a disagreement, though the players make all the decisions themselves without an umpire or other third party. The most commendable thing, however, is the complete absence of professionalism. This germ, which oftentimes has killed athletics in our institutions, is nonexistent at Oxford, and no questions ever arise as regards eligibility and amateur standing.

Amusement on Both Sides

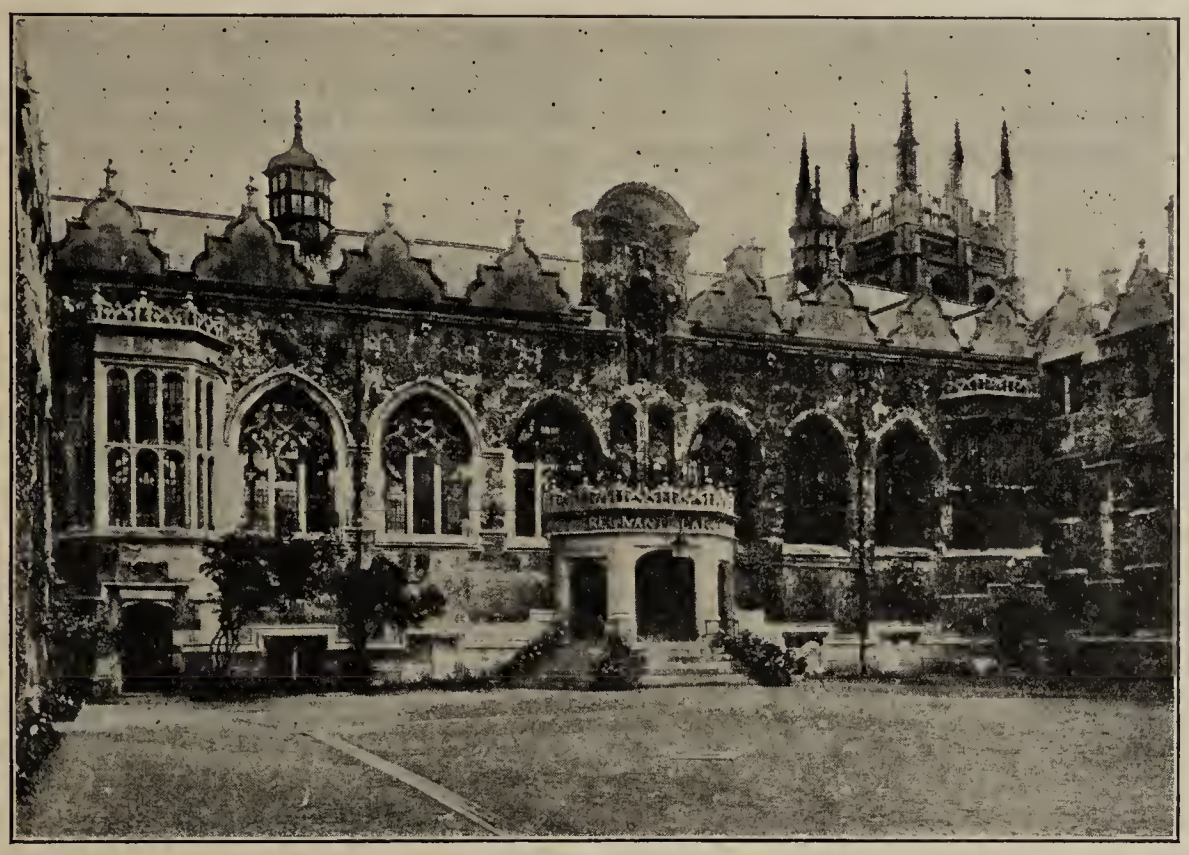
The first Rhodes scholars were an unending source of amusement in many ways for some time after their arrival, but there was no end of things which struck them as comical. I was often conscious of being a laughingstock, but quite as frequently I had a laugh at the expense of my English cousins. During our early days at Oxford many of us created a good deal of amusement by appearing on the river in the many-colored garbs of our native institutions, instead of donning the conventional white sweaters and "shorts." One day I appeared wearing the yellow V of Vanderbilt University on my breast. The privilege of wearing the varsity letter in this country corresponds to the prerogative of wearing the blue at Oxford or Cambridge. An Englishman seeing me from one of the barges inquired of a Rhodes scholar, who happened to be standing near: "What does that V stand for?" "It stands for Vanderbilt," was the reply. "Oh," exclaimed the young Briton. "Is that Mr. Vanderbilt?"

My days at Oxford are branded deep into my heart, and already I look upon them as the most potent years of my life; but I anticipate that as time goes by and I get a wider perspective of them

CHRIST CHURCH DINING HALL

Christ Church College was founded by Cardinal Wolsey. It was attended by several of the Kings of England and by a number of premiers, including Gladstone

I shall realize more fully their true significance. I am now convinced that when I went to England I was filled with many prejudices, and my opinions of things British were badly warped. And this is generally true of Americans, whose patriotism and love for their own country



ORIEL COLLEGE
Attended by Cecil Rhodes, founder of the Rhodes scholarships

received their first impulse from and are fostered by the stories of the Revolutionary War and the deplorable annals of 1812.

The life at Oxford destroyed in me those germs of enmity, and engendered in their stead a feeling of love and pride in the marvelous old mother country, whose past history is unequaled even by that of ancient Greece or lordly Rome, and whose flag has gone around the world with civilization, peace, and goodwill following in its wake. As the years fly, by the hearts of the Rhodes scholars will beat with ever-increasing love for our royal, imperial alma mater, and with deepening gratitude to our great benefactor—Cecil John Rhodes.

David Livingstone is linked with Lord Clive and Sir Stamford Raffles as an empire builder, and assigned as the subject for an essay in a prize contest offered by the Royal Colonial Institute, open to pupils in all schools in the British Empire as well as to all British children wherever located.

A class for parents who seek information on child training during the preschool period will be established by the Denver public schools. The whole course is not yet determined, and the class is frankly an experiment.

Too Many Changes in Teaching Personnel

Two and a half years was the average tenure of principals and superintendents in South Carolina schools in 1923–24. At that time 86 per cent were serving their first, second, or third year. The median tenure for the United States, according to the 1923 National Education Association Year Book, is but three years.

A study of the situation in South Carolina shows that the holding power of small rural schools for both principals and teachers is very low, and that, even in the small towns, only about 50 per cent remain more than two years. In the larger towns and cities 60.2 of the superintendents could show a service of five years or more, the period ranging from 6 to 30 years.

Explanations suggested for these conditions are that many teachers after the first year discover their inaptitude for the work or become discouraged by the lack of future offered in salary and promotion and to the want of cooperation on the part of school boards, especially in small places, too many of whom "hire and fire" every year. The situation demands consideration and action, in the opinion of the University of South Carolina's Weekly News. Immediate needs are higher educational qualifications for superintendents and teachers, more adequate rewards for service in the way of compensation and advancement, more intelligent cooperation on the part of parents and school boards, and teaching conditions that will attract men and women of ability and training.

Higher Prices Cause Greater Economy

Large savings in the purchase of textbooks and supplies, variously estimated at $14,988 and at $33,305, were made in one year by the Newark, N. J., public schools, by the adoption of a plan of viseing orders for such supplies. Present prices of textbooks are 55 per cent higher than in 1914, and in order that funds might be used to the best advantage a system was adopted providing for the viseing of all orders of principals, with the results stated. Great care is exercised that economy is not gained at the expense of injury to the schools. The aim is to have all helps needed, but no waste.

A BUMPING RACE ON THE ISIS
Each of the 22 colleges of Oxford University has an "eight" and a barge. In these races any shell which is bumped from behind must withdraw

Avocational Education Approaches Vocational in Importance

Commercialized Amusements Constitute America's Greatest Industry. Neither Children nor Adults Know How to Play. Provision for Recreation is a Public Function. Modern School Systems Recognizing Importance of Play

By JAMES E. ROGERS

Director Community Recreation Training School, Playground and Recreation Association of America

AMERICANS need to learn the art of enjoyment; of self-entertainment. To so great a degree have we lost the art of self-expression that we pay to be entertained. The greatest American industry is that of commercialized amusements. Is this not an indication that we are losing the art of self-expression, the real purpose of education? We must teach children to play wisely and wholesomely. Children do not know how to play. Grown folks do not themselves recreate because they do not "know how." The city, the machine, the distribution of labor, and other agencies have robbed man of his birthright.

A Confession of Faith

These truths I believe to be self-evident:

1. That constructive, wholesome recreation is real education.
2. That school playgrounds are as essential as school buildings.
3. That provision for recreation is a public function—a municipal utility as much as are streets, sewers, and water supply.
4. That education is a year-round process for 12 months, and not 9.
5. That the three summer months when schools are closed often militate against the school term unless playgrounds are provided under leadership.
6. That there are four R's instead of three: Reading, Riting, Rithmetic, and Recreation.
7. That modern school systems have recognized the importance of play by providing the space, the facilities, and the direction.
8. That the school plant should be used as a community recreation plant after school hours.
9. That the hiring of play teachers is an educational function.
10. That we need avocational as well as vocational education.

Play and Education

That constructive play is an educational force of real and potential value has long been recognized. One needs but read Joseph Lee's "Play in Education" to know the significance of this instinct in the growth and development of the child and the adult. Groos's two books, "Play of Animals" and "Play of Man," have demonstrated their educational values. Richard Cabot's "What Men Live By" elevates play to the fine arts and proves that it is one of the most powerful instincts, making for the health and joy of the individual and the human race. Children and men must recreate themselves through their play. The founders of modern educational thought have all stressed this potential educational force. Froebel, Pestalozzi, Rousseau, Montessori, Wirt, Dewey, and others all place primary values upon this all central and powerful interest motive. It is the creative motif in life. It makes for the arts. It means the culture of the race. It is through this medium that man feeds his imagination, emotions, and soul. If the materials be fine, he, too, will be fine; if they are bad, he will reflect his materials.

Play and the Child

Play is the serious business of childhood. Play is preparation for life. It is life and the living thereof. A child must play to live, grow, and develop. It is his very being—as important as food, sleep, or shelter. A child finds himself and the world through his play. An abnormal or subnormal child is usually one who has not played or who has not had the normal opportunity to express its play periods at their proper time and place. This is the field of study—the influence of play on the defective and the delinquent. Child psychologists tell us that the child must express itself at these play periods; if it does not, after life shows the lack and defects. There is the "big Injun" age, the dramatic age, the "gang" age, and others—all these can be utilized for educational purposes. The gang can be transformed into a Boy Scout troop or a baseball team, making for helpfulness and teamwork. There is the nurture period when children play house and have pets. Then there is the age that builds and makes, when we must bring in the handcrafts. Playgrounds are doing much in the handcraft field. There is, too, the rhythmic period when children learn coordination and bodily poise. We must give proper outlet to these desires to nurture, to build, to throw, to run, to dance. If we do not, we shall have abnormalities, perversions, and delinquencies. Mischief is the play instinct perverted or gone astray. It is the wrong kind of play. As a child plays, so he reaps; so he learns, grows, and becomes. Dissipation is wrong playing in the adult. The way a man uses his spare time determines the kind of a man he is.

The Adult and Play

As the child plays so will the adult find his recreation. Wholesome recreation is needed for older folks. For the adult play is a part of his rational living. It is an indispensable part of his daily routine. He needs it as much as a job, a family, or religion. Sometime within the 24 hours he must have wholesome recreation to refresh, relax, and recuperate. He must find expression for his desires, his dreams, his talents; if not, unrest and trouble result.

Our next truth is that school playgrounds and athletic fields are as essential as the school buildings. This is an axiom growing in importance. One need but travel over the country to see the splendid spaces bought by school boards for playgrounds. Joliet, Ill., a town of 50,000, has 1 school with 20 acres and the others average more than 5 acres for play. We talk no longer in terms of square feet per child, but in acres per school. Elyria, Ohio, a town of 25,000, has just bought an athletic field of 18 acres for its high school. These are not isolated places but are average. High schools now have their stadiums, as, for instance, the schools of Tacoma, San Diego, Peoria, and many others. What the Gary, Ind., school system did is proverbial. Every school has a playground a block square and a gymnasium and auditorium. In modern school systems more space is devoted to playgrounds and athletics than to the school buildings.

School Playgrounds as Necessary as School Buildings

Need we ask why? All work and no play makes Jack a dull boy. A systematic and educationally conducted recess, with noon and afternoon play period, makes for better students and better class work. This has been tested and proven. It means clearer brains, more active bodies, newer blood, rejuvenated muscles, and all this makes for better study and recitations.

Then again, we know that playgrounds and athletic fields are in themselves classrooms where the greatest lessons of life and character are taught and learned; hence the need of an educator or leader in

charge of this delicate laboratory. In play periods we have the biggest opportunity to teach ethics and morals. We need not have a special recitation for these subjects. Moral conduct and ethical training are taught by act and not precept. It is doing right, not preaching it, that helps us to form right habits. Your playground is your training camp. Here can be taught, under wise leadership, fair play, the rules of the game, following skilled leadership, and the other lessons of life. Here is real fundamental education. These are the lessons that make for success in the individual and in society. For this reason schools should maintain their physical education and recreation departments for 12 months rather than 9.

Recreation a Public Function

Our next truth is that recreation is a public function—a municipal utility. It is remarkable to what extent and how rapidly this fact has been recognized over the country. The Year Book of the Playground and Recreation Association of America shows that nearly 700 cities and towns of all sizes and all types are now providing recreational facilities from tax funds. In many instances the school department is doing much, and rightly so, because it already has the grounds, the buildings, the facilities, the teachers, and the children. Milwaukee through its school board spends hundreds of thousands of dollars a year for its school recreation centers devoted largely in the evenings to adult recreation. Chicago operates many school centers for neighborhood recreation. Cleveland, New York, Detroit, San Francisco, and practically all of our large city-school systems use the school plant for recreation both for children and adults. Not only is this true of the large cities but also of many smaller communities. Not only high schools but often grammar schools have large gymnasiums and auditoriums.

A Year-round Process

Education is a year-round process which can not be cut off at the end of nine months. Universities are now talking of four quarters and are holding summer sessions. This use of the facilities all the time means economy and efficiency. Is it not a waste to use school lands and buildings only 5 hours of 24, 5 days out of 7, and 9 months out of 12? No industry could be conducted on this plan.

The school plant should be operated in the afternoons and evenings for physical education and recreation and it should not be closed during the summer. Any principal or teacher knows what a summer vacation means to discipline and scholarship, especially if these summers have been spent in mischief on the street. It takes weeks to get regular school work back to its normal routine. Many a fine student has been ruined by a bad summer.

Study your problem of retardation and discover what influence the wanton play of summer had to do with it. These three months during the summer can be fruitful of the best in education. On the playground, in addition to games and sports, can be taught and enjoyed the handcrafts, gardening, toy making, and rhythmics. Here on the playground is the place where vocational and avocational education becomes one.

Recreation is not only an instrument for health, the correction of physical defects and a mental stimulus, but it is profoundly an instrument for character building and for citizenship. Play has tremendous educational power because it touches the soul, it catches the child through its own initiative and imagination. Recreation builds morals, discipline, and loyalty. Why did the Army camps use recreation as a morale builder? What develops the spirit of loyalty in college more than the "sings," the cheer leaders, the sports, and the recreational life? Shall we not harness and use this force for the best? The way to reach the child's soul is through its interests, its desires, its dreams.

Modern School Systems Alive to Their Opportunities

The next truth is that school systems are now providing more adequately for play space, facilities, and leadership. Few modern school buildings are erected which do not include a gymnasium and auditorium. Most high schools now have swimming pools. A high school in a town of 50,000 recently spent $20,000 for its stage scenery, lights, and equipment. School authorities are providing for recreational leadership, and many are taking care of the three summer months. In large numbers school plants are being used after school hours for community, social, and recreational purposes. The grounds are opened after school hours for the play of the neighborhood. The buildings are thrown open in the evening for neighborhood recreation and social gatherings. The gymnasium is used not only by the school teams but in the evening by city teams and industrial leagues. And this is right and just, because these facilities are public property and should be functioning for the larger rather than the smaller part of the 24 hours of the day. The stage is now used by the community for little theater groups. The auditorium is serving for community lectures, music memory contests, and for the use of parent-teacher associations. In brief, the whole school plant, indoor and outdoor, is becoming a community center, functioning for the social and recreational needs of all throughout the year.

The Need for Leadership

Recreation leaders and physical education teachers are as essential as history and mathematics teachers. The difficulty is to get the trained worker and leader. Colleges, universities, and special training schools can not graduate them fast enough to meet the demand. Workers in this field must be more than mere coaches or drillers in setting-up exercises. They must be community-minded organizers and executives who think of having every school boy and girl participating in the games and activities—everyone doing something worth while. The leader should be an educator who selects his activities because of their educational values. Such a leader does not emphasize picked teams and stars, but rather the progressive development of every pupil. Care must be taken in the selection of such a person. Athletics can make or break a school system, and the leader is in a strategic position to do good or evil. He can teach ideals and character building, sportsmanship and fair play, or he can do infinite evil by advocating the gospel of win at any cost, by "hook or crook." Too often we employ mere coaches—winners of games—rather than conservators of health, right living, and happiness.

Teaching the Art of Living

We must have vocational training, for in order to live we must know how to earn a living. Most people do not know how to live properly because they have not been taught. Most children do not know how to play because they have not been directed. The majority of adults are dependent upon mechanical amusement or commercialized entertainment because they do not know how to amuse themselves and do not have inner resources. The school must teach the real lessons of life. They must show us how to live.

Carry Your Diploma in Visiting Italy

Bona fide students may obtain free entrance to Italian galleries, museums, etc. Harry P. Fletcher, American ambassador at Rome, in a dispatch to the Secretary of State calls attention to the Italian laws governing the issue of permits for this purpose. Degrees and diplomas, or other credentials, submitted must be authenticated by an Italian diplomatic representative or consular officer accredited to this country or by the American ambassador at Rome. Persons who desire this privilege are warned by Ambassador Fletcher to take the necessary steps before leaving the United States.

School and Public Libraries in Small Communities of Indiana

Indiana Law Requires Every School to Have a Library. In Small Communities Books are Generally Poorly Selected and Not Properly Kept. Public Libraries in Better Condition

By ARTHUR R. CURRY
Secretary Indiana Library Commission

IN SPEAKING of the relation in small communities between the school library and the public library, I shall discuss briefly the present conditions of the school libraries and the public libraries in small communities in Indiana, and then I shall mention what is done by the commission to further library service to children of school age.

My observation has been limited, but as it accords with the findings of a committee which made a thorough survey of our school libraries in 1921 I assume that my statement of conditions will be accurate.

The law requires that each of our several thousand schools shall have a library, but the collections of books in the most of our schools hardly merit the name of libraries. They are, in the main, out-of-date books, without classification or arrangement, scattered in various classrooms. Sets of authors, series of the poets, miscellaneous textbooks, and old encyclopedias constitute the average school library. The books have been purchased for many of the schools from book agents without any provision for their care or use. Consequently they are poorly selected, poorly cared for, and little used.

Book Lists are Effectively Employed

In the public libraries in small communities the books have been better selected, are better cared for, and are in more constant use. This is largely accounted for by the facts that many of our librarians in small communities have had a summer school course in library work and have had considerable aid from the public library commission. Members of the commission staff have been making advisory visits to these libraries for many years, and to most of the small libraries the commission has distributed a book list, which has been of great service as a guide to the selection of books. At present the book list is sent to every public library in the State whose income is less than $1,500 a year. For a number of years libraries receiving less than $3,500 annually received the book list as a gift from the commission.

In general the librarians in small communities have less education than the teachers in the same communities. The school does have standards for the teachers; the library boards may employ whom they please. Thus we found fair book collections and poorly educated persons on the one hand and better educated persons and poor book collections on the other. This situation does not make for satisfactory cooperation between the school and the public library.

Personality of Librarian Means Much

The degree in which school children use the public library depends very largely upon the ability of the local librarian. In some cases the librarian merely lends to those who come for the books; in others she provides lists for outside reading and places the books for the several grades on separate shelves; in still others she places collections in the school rooms, supervises their use, makes talks on the use of books, and conducts a story hour. Sometimes classes are brought to the library for instruction in the use of the catalogue, reference books, etc. Many of our librarians have stimulated pupils to read for credit during vacation time. Little work of this sort, however, is done in our small communities.

The public library commission has always recognized its obligation to improve the condition of our school libraries, and it has served them generously for 20 years through supplying them with traveling library books. Back in 1904 a trained librarian, Miss Ida M. Mendenhall, who was also a college graduate with teaching experience, was employed to take charge of the commission's work with school libraries, and she gave lectures on library work in many of our State normal schools. Her work was greatly appreciated, but had to be discontinued because of insufficient funds. From 1916 to 1920 members of the staff visited schools to aid in putting the libraries into shape and to establish records and proper methods of care and service wherever the school authorities were willing to provide for the living expenses of the organizer while the work was done. Even this service had to be discontinued, and it was not until 1921, when Miss Della Frances Northey was added to the staff as supervisor of school libraries, that service to schools again became one of the main features of the commission's work.

It soon became apparent that school libraries once organized do not stay in condition, but the lapse of two or three years with incidental changes in the teaching staff usually result in the disintegration of any system of library records. And so we began our present method of surveying a county school system, in company with the county superintendent, and giving service to all the schools of a county rather than scattering our work over the whole State.

County Unit Will Benefit Libraries

A development now in prospect in Indiana is the establishment of the county unit of school administration. This, if it comes to pass, will eliminate some of the reckless book buying and duplication that has resulted from the purchases of township trustees. It should strengthen the school libraries as units and should tend to the establishment of more county libraries in our State.

Much progress is made through our cooperation with the State department of public instruction. Library standards have been set for both elementary and high schools, and we are using our best efforts to bring the schools into line with these standards. Those who wish the standards in detail will find them reprinted in the October number of the Library Occurrent. They are in full accord with the recommendations made in the Certain report. This is the report of the Committee on Library Organization and Equipment of the National Education Association and of the North Central Association of Colleges and Secondary Schools.

We have discontinued our traveling library service to schools, except to State-aid schools, and are recommending that the schools build up their own working collections of reference books and supplementary reading sets. We urge them to rely upon the public libraries for their general reading, so as not to build up duplicate collections in the same locality. We are using the progress of the schools to stimulate better service on the part of public libraries, so that they will prove worthy of the part they are to take in the educational program of the State.

An address before the League of Library Commissions, Chicago, January 2, 1925.

The American Home Economics Association offers a prize of $50 to the person who submits the best design for an emblem of the association to be used on the cover of the Journal of Home Economics and on the stationery, programs, badges, and pins of the association and its affiliated organizations. Competing drawings should be sent to Harriet Goldstein, Division of Home Economics, University of Minnesota, St. Paul, Minn.

A Christmas celebration at Santa Rosa, Nueva Ecija, P. I.

American Methods Prevail in Philippine Education

Philippine schools are conducted according to American methods and ideals as far as possible. Luther Parker, acting division superintendent of schools of Nueva Ecija, writes that for many years he has emphasized character training by means of pupil participation in the activities of the schools and by the designation in each large school of a supervisor of character training.

His division embraces a population of 250,000, and 32,000 children are in 200 schools. An earnest effort is made to utilize the latest and best methods employed in the States. Mr. Parker writes cordially of the benefit which he has received from SCHOOL LIFE. Teachers' institutes, parent-teacher associations, safety leagues, bands of mercy, and many other auxiliary organizations which Americans are accustomed to consider peculiarly their own have a prominent place in the school economy of this Province, at least, of the Philippines.

School Nurses Successfully Used in Massachusetts

Until the advent of the school nurse, health programs in rural Massachusetts were very inadequate. In many towns medical inspection was the only feature, though some towns made provision for oral hygiene. Fairhaven, Falmouth, and several other towns have done splendid health work in the schools for more than a decade. Eighty towns of less than 5,000 population have been conducting dental clinics for one or more years. Some had traveling clinics operating under the auspices of farm bureaus, while others were conducted in cooperation with municipal authorities, nursing associations, or branches of the American Red Cross.

Since the enactment of legislation requiring the employment of school nurses in all towns, improvement has been marked. Nutrition and dental work are promoted, weighing and measuring are done in practically all towns, and during the past year many towns have served milk to grade pupils during the morning session. The nurse helps the school physician with the annual physical examination and makes independent inspection of pupils and buildings. She visits the homes of pupils and confers with parents in regard to health problems. A recent investigation by the State Department of Education shows that fully 99 per cent of the pupils attending public schools in Massachusetts are receiving the benefit of school nursing service.

Important Accession to the National Organization

Utah parent-teacher associations have been admitted to full membership in the National Congress of Parents and Teachers. Heretofore the Utah associations have not been connected with the national organization, which now embraces 46 State branches.

The first local parent-teacher association in Salt Lake City was organized in 1908, according to reports, and since that time many associations have been formed throughout the State. In 1914 representatives of these associations united to form the Home and School League, which was affiliated with the Utah Educational Association. Child-welfare work, classes in health education for parents, and community recreation are among the activities of the Utah parent-teacher association.

Bureau of Education Attacks High-School Problem

Proposes to Assist in Systematizing Instruction. Enrollment Increasing Seven Times Faster than Population

ORGANIZATION of a new service in the Bureau of Education of the Interior Department for the purpose of assisting in solving the problems and systematizing the instruction in high schools throughout the country has been announced by Commissioner Jno. J. Tigert.

As a first step toward perfecting the proposed service, the commissioner called a conference of representatives of nine national and regional secondary education organizations to be held February 24 at Cincinnati in connection with the annual meeting of the department of superintendence.

Increase in attendance of high schools during recent years has made secondary education one of the big problems of free public education in the United States. For a long time most of the children left school after completing the grammar-school course, but during the past 30 years the attendance at high schools in this country has increased from 200,000 to 3,500,000. Enrollment in high schools is increasing seven times as fast as the Nation's total population. The development of the junior high school is an outgrowth of this situation.

The result has been a rapid reorganization and expansion of high schools that created serious problems. To assist in meeting these, the Bureau of Education is planning, at the request of interested educators, a permanent organization on a cooperative basis to act as a research agency and a clearing house of information.

The attempt to give the pupils of small high schools the same opportunities as the pupils of large high schools has entailed a much greater expense for the small schools. The average cost per pupil in the small schools is sometimes from 5 to 10 times as great as in the larger schools. The small schools comprise 80 per cent of all the high schools of the Nation, and they are attended largely by the farm population. They require, therefore, a different type of organization and of subject matter.

As a result of a "Learn English campaign" in Rochester, N. Y., the pledges of 2,500 persons to join a class in English and learn to speak, read, and write the language were obtained. The goal, originally set at 2,000, was raised when this mark was passed.

New Books in Education

BY JOHN D. WOLCOTT
Librarian Bureau of Education

ALMACK, JOHN C. *and* LANG, ALBERT R. Problems of the teaching profession. Boston, New York [etc.] Houghton, Mifflin company [1925] xvii, 340 p. 12°. (Riverside textbooks in education, ed. by E. P. Cubberley.)

The increased interest in the profession of teaching during recent years is a leading reason for the production of this book. It shows first what the leading professional problems are, and then follows with a statement of the factors involved in the solution. In several instances a new analysis and organization is attempted, and references are also made to pertinent scientific investigations, with a view to aiding teachers and teachers' organizations.

ATHEARN, WALTER S., *ed.* Measurements and standards in religious education, containing standards, score-cards, scales and other instruments of measurement developed for use in the Indiana survey of religious education, by Walter S. Athearn, W. L. Hanson, E. S. Evenden, N. L. Engelhardt, *and others*. New York, George H. Doran company [1924] 532 p. plates, tables, diagrs., forms, facsims. 8°. (The Indiana survey of religious education: vol. 2.)

The instruments of measurement described in this volume were used for studying, comparing, and interpreting the conditions of religious education in Indiana, and are suitable for use in similar surveys of other territory.

DEARBORN, NED HARLAND. An introduction to teaching. New York, London, D. Appleton and company, 1925. xv, 337 p. tables, forms. 12°.

The treatment of subjects in this book is from the viewpoint of beginning teachers and of beginning students of education. The work is intended to serve at least three functions, namely, guidance in selecting the teaching position for which a candidate is best qualified, a survey of professional preparation, and the development of a proper professional attitude.

FLEXNER, ABRAHAM. Medical education; a comparative study. New York, The Macmillan company, 1925. ix, 334 p. 8°.

The general tendencies and operative principles in the development of medical education in the United States and in certain European countries are here made the subject of a comparative study. The book discusses first the basic conceptions regarding medicine and medical education, passing to a characterization of the clinical, the university, and the proprietary types of medical schools. The general education demanded as preliminary to a medical course is next described, giving special attention to the requirements in basic sciences and modern languages. The medical curriculum as found in Europe and in America is also compared, followed by discussions of the laboratory sciences, of the clinics, and of institutes for medical research, closing with the important subject of costs. Mr. Flexner's analysis of the conditions affecting medical education is capable of application to other forms of professional education as well.

FRYER, DOUGLAS. Vocational self-guidance: Planning your life work. With an introduction by Harry Dexter Kitson, and contributed chapters upon the business professions by leading specialists of New York city, and the business professions for women by Lorine Pruette. Philadelphia, London [etc.] J. B. Lippincott company [1925] xvii, 385 p. tables, diagrs. 12°.

The author of this maual develops a plan for vocational self-guidance for the use of both young men and young women, whether in or out of school. The various occupations are described, and tests and analysis charts are inclosed as aids both for self-analysis and occupational analysis.

KELLER, FRANKLIN J. Day schools for young workers; the organization and management of part-time and continuation schools. New York and London, The Century co., 1924. xxiii, 577 p. tables, diagrs., forms. 8°. (The Century vocational series, ed. by C. A. Prosser.)

Doctor Keller is principal of the East Side Continuation School, New York City, and in this book presents the administrative, supervisory, and teaching experience gained in this school, which is the largest school of its kind in the world, serving 12,000 working boys and girls.

LEWIS, ERVIN EUGENE. Personnel problems of the teaching staff. A study of some of the outstanding personnel management problems that arise in the administration and supervision of a public school system. New York and London, The Century co., 1925. xvii, 460 p. tables, diagrs. 8°. (The Century education series, ed. by C. E. Chadsey.)

Public school administration has two major phases—(1) material and (2) personnel. This book deals with the second of these phases, which is the more difficult and the more important of the two, because it includes the body of persons necessary to carry on the school system. Personnel management has been extensively considered in relation to commercial and industrial establishments, but in education it has not received the attention which it deserves. The author covers in a comprehensive way the various aspects of the selection, employment, management, and professional and social status of teachers. Among the problems handled are those relating to home talent in teaching, the married woman teacher, measuring the merit of teachers, and the teacher's load.

MILLIS, WILLIAM A. *and* MILLIS, HARRIETT H. The teaching of high school subjects. New York and London, The Century co., 1925. xviii, 477 p. 8°. (The Century education series, ed. by C. E. Chadsey.)

Doctor Millis is president of Hanover college, Hanover, Ind. His textbook is intended to aid in preparing teachers for service in the smaller high schools where they will have to teach more than one subject. It gives in an elementary way the general principles of high school instruction, and also directions for teaching the specific subjects of the curriculum.

MOORE, ANNIE E. The primary school; the improvement of its organization and instruction. Boston, New York [etc.] Houghton Mifflin company [1925] xii, 340 p. illus., tables, diagrs. 12°.

Prevalent defects in childhood education are pointed out by the author for the purpose of finding a remedy. Good examples of organization and instruction from our public schools are described for the benefit of others. An effort is made to show that modern theories of education are workable wherever directed by intelligence and good will.

PAYNE, ARTHUR F. Organization of vocational guidance. New York, McGraw-Hill book company, 1925. xvi, 438 p. tables, diagrs. 8°.

A comprehensive presentation is here made of the technique and methods of vocational guidance as thus far devised and recommended by authoritative research, experiments, and practice. The volume covers the entire field of vocational guidance, giving the history, evolution, terminology, principles, and assumptions of guidance, and the fields where and means by which guidance is, or should be, employed. Typical chapters are those dealing with the "six main elements of a complete guidance system" and the "ten strategic points in school systems for vocational guidance." The administrative features also receive attention. Ample reading lists are appended to the work.

PRICE, RICHARD REES. The financial support of State universities. A study of the financial resources of State universities in the light of the experience of the universities of the old Northwest Territory, with a suggested policy for the future. Cambridge, Harvard university press, 1924. xv, 205 p. tables. 8°. (Harvard studies in education, pub. under the direction of the Graduate school of education, vol. 6.)

The universities maintained by the States carved out of the old Northwest Territory, Minnesota included, are taken for this study as representative of the financial experiences and present status of State universities in the country at large. This is done on the ground that within that area the American State university as we know it to-day had its origin and principal development. As a preliminary to the historical survey, a descriptive sketch is given of the difficult situation in which the universities of the United States found themselves about the year 1920. Against the historical backbround, there follows an examination of the duty and function of the State university in relation to the whole educational system of the commonwealth. The author concludes that the resources of our States are adequate to continue the support of higher education, and suggests a financial policy to be followed in future for this purpose.

PYLE, WILLIAM HENRY. Nature and development of learning capacity. Baltimore, Warwick & York, 1925. 122 p. illus., tables, diagrs. 12°. (Educational psychology monographs, no. 25.)

The purpose of the studies reported in this book is to discover the nature and course of mental development with particular reference to the development of learning capacity. Among the questions taken up are those of comparative intelligence due to sex and racial differences, and the relative capacity of city and country children.

STORMZAND, MARTIN J. *and* O'SHEA, M. V. How much English grammar? Baltimore, Warwick & York, 1924. 224 p. tables, diagrs. 12°.

An investigation of the frequency of usage of grammatical constructions in various types of writing, together with a discussion of the teaching of grammar in the elementary and the high school. The purpose is to show how much and what phases of grammar should be stressed in language and grammar courses.

WASHINGTON : GOVERNMENT PRINTING OFFICE : 1925

Some of the Educational and Scientific Associations Which Meet During the Spring of 1925

AMERICAN ACADEMY OF POLITICAL AND SOCIAL SCIENCE:
President, Leo S. Rowe, Director Pan American Union, Washington, D. C.; *Secretary*, J. P. Lichtenberger, University of Pennsylvania, Philadelphia; meeting, Philadelphia, May 15–16, 1925.

AMERICAN ASSOCIATION FOR STUDY OF THE FEEBLE MINDED:
President, Groves B. Smith, Henry Ford Hospital, Detroit, Mich.; *Secretary,* B. W. Baker, Laconia, N. H.; meeting, Raleigh, N. C., May 8–11, 1925.

AMERICAN ASSOCIATION OF DENTAL SCHOOLS:
President, U. L. Ward, Ann Arbor, Mich.; *Secretary,* DeLos L. Hill, 612 Grant Building, Atlanta, Ga.; meeting, Chicago, Ill., March, 1925.

AMERICAN ASSOCIATION OF MUSEUMS:
President, Chauncey J. Hamlin, 110 Delaware Ave., Buffalo, N. Y.; *Secretary,* Laurence V. Coleman, 2 West 46th St., New York, N. Y.; meeting, St. Louis, Mo., May 17–21, 1925.

AMERICAN ASSOCIATION OF UNIVERSITY WOMEN:
President, Aurelia H. Reinhardt, Mills College, Calif.; *Secretary,* Mina Kerr, 1634 Eye St. NW., Washington, D. C.; meeting, Indianapolis, Ind., April 8–11, 1925.

AMERICAN ASSOCIATION OF WORKERS FOR THE BLIND:
President, Robert B. Irwin, 41 Union Square, W., New York, N. Y.; *Secretary,* Charles B. Hayes, 41 Union Square, W., New York, N. Y.; meeting, New York, N. Y., June, 1925.

AMERICAN CHEMICAL SOCIETY:
President, L. H. Baekeland, 247 Park Ave., New York, N. Y.; *Secretary,* Charles L. Parsons, 1709 G St. NW., Washington, D. C.; meeting, Baltimore, Md., April 5–10, 1925.

AMERICAN COUNCIL ON EDUCATION:
President, C. R. Mann, 26 Jackson Place, Washington, D. C.; *Secretary,* H. W. Tyler, Massachusetts Institute of Technology, Cambridge, Mass.; meeting, Washington, D. C., May 1, 1925.

AMERICAN HUMANE EDUCATION SOCIETY:
President, Francis H. Rowley, 180 Longwood Ave., Boston, Mass.; *Secretary,* Guy Richardson, 180 Longwood Ave., Boston, Mass.; meeting, Boston, Mass., March 31, 1925.

AMERICAN MEDICAL ASSOCIATION:
President, William A. Pusey, 7 West Madison St., Chicago, Ill.; *Secretary,* Olin West, 535 North Dearborn St., Chicago, Ill.; meeting, Atlantic City, N. J., May 25–29, 1925.

ASSOCIATION OF CHURCH DIRECTORS AND MINISTERS OF RELIGIOUS EDUCATION:
President, C. I. Hellstrom, East Orange, N. J.; *Secretary,* Edna L. Acheson, 414 West 121st St., New York, N. Y.; meeting, Detroit, Mich., April 22, 1925.

ASSOCIATION OF COLLEGES FOR NEGRO YOUTH:
President, Joseph L. Peacock, Shaw University, Raleigh, N. C.; *Secretary,* J. T. Cater, Talladega College, Talladega, Ala.; meeting, Raleigh, N. C., April, 1925.

CLASSICAL ASSOCIATION OF NEW ENGLAND:
President, Paul Nixon, Bowdoin College, Brunswick, Me.; *Secretary,* Monroe N. Wetmore, Williams College, Williamstown, Mass.; meeting, Cambridge, Mass., April 3–4, 1925.

CLASSICAL ASSOCIATION OF THE ATLANTIC STATES:
President, Evan T. Sage, University of Pittsburgh, Pittsburgh, Pa.; *Secretary,* Charles Knapp, Barnard College, New York, N. Y.; meeting, Swarthmore, Pa., May 1–2, 1925.

CONVENTION OF AMERICAN INSTRUCTORS OF THE DEAF:
President, N. F. Walker, Cedar Springs, S. C.; *Secretary,* Ignatius Bjorlee, Frederick, Md.; meeting, Council Bluffs, Iowa, June, 1925.

EASTERN ARTS ASSOCIATION:
President, A. H. Wentworth, 169 Church St., New Haven, Conn.; *Secretary,* F. E. Mathewson, Dickinson High School, Jersey City, N. J.; meeting, Springfield, Mass., April 23–25, 1925.

EASTERN COMMERCIAL TEACHERS ASSOCIATION:
President, Harry L. Jacobs, Providence, R. I.; *Secretary,* Frank A. Tibbetts, Dickinson High School, Jersey City, N. J.; meeting, Philadelphia, Pa., April 9–11, 1925.

EASTERN MUSIC SUPERVISORS CONFERENCE:
President, Richard W. Grant, State College, Pa.; *Secretary,* Bertridge Tucker, 14 Brookway, Nutley, N. J.; meeting, New Haven, Conn., March 18–20, 1925.

EDUCATIONAL CONFERENCE, COLLEGE OF EDUCATION, OHIO STATE UNIVERSITY, COLUMBUS, OHIO:
Chairman, George F. Arps; *Secretary,* P. R. Stevenson; meeting, April 2–4, 1925.

MIDDLE WEST SOCIETY OF PHYSICAL EDUCATION AND HYGIENE:
President, J. Anna Norris, University of Minnesota, Minneapolis, Minn.; *Secretary,* Floyd A. Rowe, Board of Education, Cleveland, Ohio; meeting, Chicago, Ill., April 9–11, 1925.

MUSIC SUPERVISORS NATIONAL CONFERENCE:
President, William Breach, Winston-Salem, N. C.; *Secretary,* Grace V. Wilson, Topeka, Kans.; meeting, Kansas City, Mo., March 30–April 4, 1925.

NATIONAL ACADEMY OF SCIENCES:
President, A. A. Michelson, University of Chicago, Chicago, Ill.; *Secretary,* David White, U. S. Geological Survey, Washington, D. C.; meeting, Washington, D. C., April, 1925.

NATIONAL ASSOCIATION OF ACCREDITED COMMERCIAL SCHOOLS:
President, B. F. Williams, Des Moines, Iowa; *Secretary,* H. E. V. Porter, Jamestown, N. Y.; meeting, Asheville, N. C., June, 1925.

NATIONAL ASSOCIATION OF PUBLIC SCHOOL BUSINESS OFFICIALS:
President, R. M. Milligan, St. Louis, Mo.; *Secretary,* John S. Mount, State House, Trenton, N. J.; meeting, Kansas City, Mo., May 19–24, 1925.

NATIONAL CONFERENCE OF SOCIAL WORK:
President, W. J. Norton, 316 East Jefferson Ave., Detroit, Mich.; *Secretary,* W. H. Parker, 25 East 9th St., Cincinnati, Ohio; meeting, Denver, Colo., June 10–17, 1925.

NATIONAL CONGRESS OF PARENTS AND TEACHERS:
President, Mrs. A. H. Reeve, 7700 Lincoln Drive, Chestnut Hill, Philadelphia, Pa.; *Secretary,* Mrs. A. C. Watkins, 1201 16th St. NW., Washington, D. C.; meeting, Austin, Tex., April 27–May 2, 1925.

NATIONAL UNIVERSITY EXTENSION ASSOCIATION:
President, Harold G. Ingham, University of Kansas, Lawrence, Kans.; *Secretary,* James A. Moyer, State House, Boston, Mass.; meeting, Lawrence, Kans., April 29–May 1, 1925.

NEW ENGLAND HISTORY TEACHERS ASSOCIATION:
President, Albert Farnsworth, Worcester, Mass.; *Secretary,* Horace Kidger, Newton High School, Newtonville, Mass.; meeting, March 21, 1925.

NEW ENGLAND MODERN LANGUAGE ASSOCIATION:
President, Charles W. French, 525 Boylston St., Boston, Mass.; *Secretary,* Michael S. Donlon, 18 Sharon St., West Medford, Mass.; meeting, Boston, Mass., May 9, 1925.

NORTH CENTRAL ASSOCIATION OF COLLEGES AND SECONDARY SCHOOLS:
President, Charles H. Judd, University of Chicago, Chicago, Ill.; *Secretary,* Harry Morehouse Gage, Coe College, Cedar Rapids, Iowa; meeting, March 21, 1925.

NORTHWEST ASSOCIATION OF SECONDARY AND HIGHER SCHOOLS:
President, Bruce E. Milliken, Great Falls, Mont.; *Secretary,* Philip Soulen, Moscow, Idaho; meeting, Spokane, Wash., April 8–10, 1925.

PROGRESSIVE EDUCATION ASSOCIATION:
President, Eugene R. Smith, Brookline, Mass.; *Secretary,* N. B. Hawkins, 10 Jackson Place, Washington, D. C.; meeting, Philadelphia, Pa., April 23–25, 1925.

RELIGIOUS EDUCATION ASSOCIATION:
President, D. J. Cowling, Northfield, Minn.; *Secretary,* T. G. Soares, 308 North Michigan Ave., Chicago, Ill.; meeting, Milwaukee, Wis., April 22–25, 1925.

SCHOOLMEN'S WEEK (University of Pennsylvania):
President, Arthur J. Jones, University of Pennsylvania, Philadelphia, Pa.; *Secretary,* LeRoy A. King, University of Pennsylvania, Philadelphia, Pa.; meeting, Philadelphia, Pa., March 26–28, 1925.

SOCIETY FOR THE PROMOTION OF ENGINEERING EDUCATION:
President, A. A. Potter, Purdue University, LaFayette, Ind.; *Secretary,* L. F. Bishop, University of Pittsburgh, Pittsburgh, Pa.; meeting, Schenectady, N. Y., June 16–19, 1925.

SOCIETY OF PROGRESSIVE ORAL ADVOCATES:
President, M. A. Goldstein, St. Louis, Mo.; *Secretary,* Mrs. Owen Young, 5307 Maryland Ave., Chicago, Ill.; meeting, Detroit, Mich., June, 1925.

WESTERN ARTS ASSOCIATION:
President, Frank C. Stanton, Dayton, Ohio; *Secretary,* Raymond T. Fell, Bloom Junior High School, Cincinnati, Ohio; meeting, Memphis, Tenn., May 5–8, 1925.

EDUCATION DEFINED

EDUCATION by means of institutions of learning is the principal agency which society has evolved to assure social progress. Education, when thus conceived, has three distinct aspects: (1) Giving to the largest possible number of people a basis for effective membership in the social group—general education; (2) giving the members of society the training whereby they may render most effective service in the several vocations—vocational and professional training; and (3) pushing forward the boundaries of knowledge, thus making possible further and further advances of human achievement—research.

The place of higher education is to take up the first and second aspects where the high schools leave them and, in cooperation with research agencies outside the universities, to assume responsibility for the third aspect. It thus becomes clear that the training for social leadership of those who carry their education beyond high school and giving to them a thorough preparation in those vocations which depend for their success upon the completion of at least a high-school education are functions of higher education; but above all, research and training students for research are functions peculiar to higher education.

—From An Educational Survey
of the University of Pennsylvania, 1924.

SCHOOL LIFE

Volume X
Number 8

April
1925

A TYPICAL COMPANY STREET, PLATTSBURG BARRACKS, N. Y.
Students who attend the Citizens' Military Training Camps live in Regular Army pyramidal tents

Published Monthly [except July and August] by the Department of the Interior
Bureau of Education . . . . . Washington, D. C.

GOVERNMENT PRINTING OFFICE

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SCHOOL LIFE is an official organ of the Department of the Interior, Bureau of Education. It is published monthly except in July and August. The subscription price, 50 cents a year, covers only the actual cost of printing and distribution. Subscriptions should be sent to the Superintendent of Documents, Government Printing Office, Washington, D. C., and not to the Bureau of Education. Single numbers are sold at 5 cents each. For postage to countries which do not recognize the mailing frank of the United States, add 25 cents a year.

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Published Monthly, except July and August, by the Department of the Interior, Bureau of Education
Secretary of the Interior, HUBERT WORK - - - - - *Commissioner of Education,* JOHN JAMES TIGERT

VOL. X WASHINGTON, D. C., APRIL, 1925 No. 8

Good Citizenship the Aim of Citizens' Military Training Camps

Thirty-nine Camps Will Accommodate 38,000 Young Men for 30 Days. No Obligation for Subsequent Military Duty. Emphasis upon Physical Development and Inculcation of Duties of American Citizens. Informal Discussions Replace Lectures. Instruction Supplements Work of Schools. True Democracy Prevails, and no Favors are Shown. All Necessary Expenses Borne by United States Government

By ROBERT C. DAVIS
The Adjutant General, United States Army

SINCE no obligation for military service is implied by attendance during the first three years, citizens' military training camps differ materially from other educational undertakings of the Military Establishment of the United States. They occupy a position so unique in the educational program of the Government as to warrant special consideration. The purpose of these camps is to bring together young men from all sections of the country on a common basis of equality, under the most favorable conditions of outdoor life, and through thoughtful behavior, physical development, athletic excellence, and mass training to benefit them individually, while affording them a better understanding of the position they occupy as citizens in the teamplay of the Nation.

Origin in Business Men's Camp

While the military training camp idea was enunciated in 1913, it first came before the country as a national movement with the organization of a business men's training camp at Plattsburg, New York, in the summer of 1915. The national defense act of June 3, 1916, officially authorized training camps, afterwards designated as citizens' military training camps, and later amendments to the act have altered but little the original provisions. The record of accomplishment is impressive. Temporarily suspended by our participation in the World War, the movement gathered fresh impetus in 1920 and 1921. In the summer of 1922, 22,000 young men attended 28 camps; in 1923, 24,500 were enrolled in 27 camps; in 1924, 34,000 trainees reported to 29 camps. In 1925, 39 camps will accommodate approximately 38,000 candidates.

Wide geographical distribution has been a guiding principle in arranging attendance. Applications were received in 1924 from all but 247 of the 3,089 counties in the United States, and actual enrollments were secured from all but 420 counties. On the basis of the estimated total population of the United States, the rate of C. M. T. C. enrollment in 1924 was 1 to 3,225 inhabitants.

Majority of Trainees are Students

Inasmuch as the great majority of the young men who attend these summer camps come from the schools and colleges of the country, the schedules and programs are so arranged as to supplement the work of the educational institutions.

In the camps of 1925 formal lectures by instructors will be avoided, for it is thought that short conferences or talks, in which candidates take part in practical demonstrations and discussions, will usually accomplish better results. Some of the subjects which the trainees will be asked to discuss include the meaning of liberty, constitutional government, and national defense.

The trainees give their time, their energy, and their thought. The country becomes real to them not as an isolated village, a bit of a great city, a lonely farm, or a place that holds a job, but as an entity, an ideal—something to be guarded and loved. The duties and responsibilities of citizens are stressed. The significance of the Supreme Court and the Constitution are considered, and each individual is expected to offer his own ideas on every subject, not for purposes of argument, but to develop that clarity of thought and knowledge of the fundamental principles of our form of government without which he can not hope to place a true value upon the advantages of American citizenship.

In the camp a young man counts for what he is, not for what he has or was. Each learns to obey and each is trained to lead. In the citizens' military training camp true democracy prevails. The young men live together in the same tents, work together in the same squads, are subject to the same firm but fair discipline, and share everything in common. Among them there is absolutely no distinction of any sort except that distinction which each man may earn for himself by his own character, his own ability, and his own hard work.

Calm Sleep Follows Active Day

It requires actual experience to know that the sweetest sleep is to be found in an Army cot after a full day in the open; that the fairest comradeship that comes to any man is that of men from widely different walks of life grouped together in the same tent, each fulfilling his own particular responsibilities, expecting no favors, and doing his honest best for the common good.

If nothing but physical betterment were to be derived from a summer's course of training under competent instructors, that in itself would make the course worth while to young men between the ages of 17

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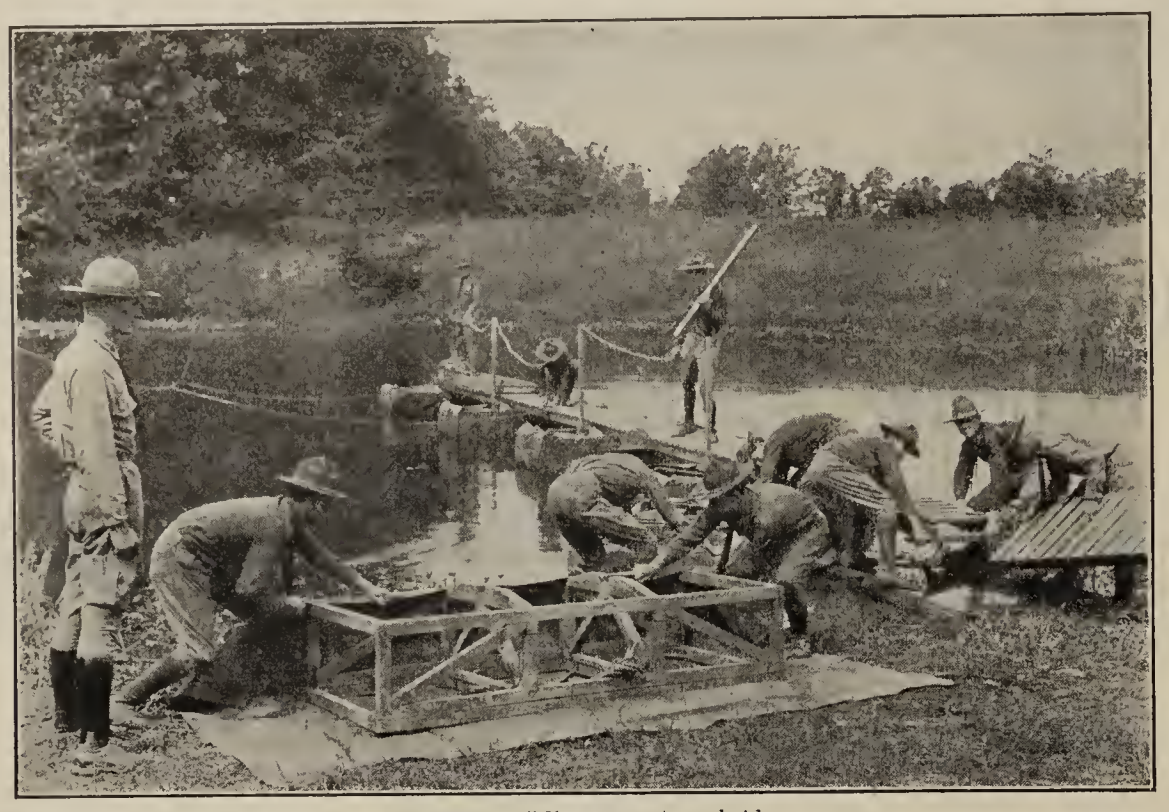
and 31 years who come from the office, the store, the factory, and the school; but there is much more to be gained through earnest participation in a training camp, namely, a closer sense of business partnership with the United States Government, a keener interest in the welfare of that Government, a greater degree of mental alertness, a valuable experience in the benefits of discipline under proper conditions, and, finally, a new resolve to become more worthy of the title of American citizen.



Students building a pontoon bridge

Results attained in past camps indicate that the average American youth, under proper auspices and conditions, easily learns discipline and obedience—discipline and obedience not merely to his superiors but to himself, which is more important. He learns team play and that after all the ability to cooperate is of more value than the ability to compete.

To Command, Learn to Obey

A cardinal principle applied in all camps is the well-established one that before one can learn to command he must first learn to obey. Whether a young man comes from a home where a sense of duty has been inculcated since his earliest memory or where he has been raised in an atmosphere of indulgence he is bound to get a new and better idea of his duty toward his country and his fellow man.

The spirit of camaraderie which prevails in all camps instills in the young man "on his own" the desire to cooperate cheerfully and to prove his mettle in the eyes of his associates.

An important feature of every training camp is the period devoted to athletic and physical exercises. There is no standing on the side lines or watching from the bleachers. On the contrary, it is a case of all in the game and the game for all. The effort to develop athletic leaders is earnest, and the young man should return to his home or school with sufficient knowledge to introduce new mass athletic games to his mates. This results in more players and fewer onlookers; more enthusiasm and less indifference.

Such a program must prove of interest not only to the participants and their parents but to athletic and physical instructors and others charged with the physical welfare of large bodies of men.

A typical athletic scene at camp

The War Department has adopted the standard physical tests prepared by the National Amateur Athletic Federation, and this measure of physical fitness has in the past been applied to every trainee. This year it will not be compulsory. The great popularity of these tests is certain to cause a demand for them on the part of trainees who wish to measure their qualifications against a known national standard.

These tests are so standardized that they give an accurate gauge on the all-round athletic ability and muscular coordination of every young man, no matter what age. They consist of four events, viz, 100-yard dash, running broad jump, running high jump, and bar vault.

Athletic Tests are Reasonable

The tests require that the candidate run 100 yards in a certain time limit, clear a certain distance in the running broad jump, clear a bar at a specified height in the running high jump, and go over the bar in the bar vault at a certain height in that event in order to qualify as up to the standard for his age.

A boy of junior high school standard, for instance, is required to run 100 yards in 13⅖ seconds, to make 13 feet in the running broad jump, and to clear 4 feet 2 inches in the running high jump, and 5 feet in the bar vault. The senior high school and college standards are correspondingly but only slightly more severe.

By using these tests in all citizens' military training camps this summer a national yardstick will be applied for measuring the relative physical standards of young men in various parts of the country. The fundamental purpose of these tests is, however, to raise the physical standard of the youth of the country and to initiate action which, it is hoped, may eradicate many of the physical defects now existing in the young men of the Nation.

The justly famous Army setting-up exercises have an important place on every camp program. Boys are taught the correct methods of developing their bodies by devoting a few minutes daily to physical training, which will stand them in good stead in the years ahead of them. Special training provides a means of improving the physical condition of those temporarily subnormal physically. Suitable candidates for the special training are those who, upon examination at camp, are found to possess such minor temporary conditions as postural defects, immaturity, underweight and underdevelopment, functional cardiac disorders, and other defects of minor importance which are capable of demonstrable improvement by training. Students possessing abnormalities which may be aggravated by training, or permanent physical defects not susceptible of improvement, such as markedly defective vision, defective hearing, and gross abnormalities of permanent and disqualifying nature, are not suitable for training and are rejected.

Setting-up exercises

Idleness and Overwork Equally Avoided

The inculcation of the spirit of fair play in all things is fostered and developed. The full schedule of 30 days spent in the open air eliminates the pernicious elements of idleness. The necessity for making all instruction popular and for creating and maintaining enthusiasm in the daily work is kept constantly in mind. Among other things this requires that a nice balance be maintained between too much and too little work.

Carelessness and untidiness are among the worst of American faults, and these are not tolerated at the camps. The beauty of order is impressed in no uncertain manner throughout the month. Neatness is stressed; tents are inspected daily, and an example of efficiency is set in all things by the instructors. Courtesy is expected and required. Each hour of the 24 has its allotted task with the resultant regularity in hours for eating, sleeping, working, and playing.

Church services are never compulsory, but the candidates are encouraged to attend their own church service. The insistence by the War Department that sufficient chaplains of all faiths be assigned to training camps assures parents that they may lend their sons to the camps without a qualm as to the moral results.

The finest testimonials that can be desired have been submitted to the War Department by satisfied mothers and fathers all over the country, many of whom have personally visited the camps and studied them at first hand. These letters tell their own story—some dealing with the spoiled child, others with the backward youth who never learned to take his proper part with others, and still others with the normal boy who, like his forefathers, is determined to play his appointed part in the game of life. All of these letters tell of individual improvement and of the hope of the parents that other boys will learn of the aims, purposes, and accomplishments of the summer camps.

Tanned, vigorous, with new ideas as to personal hygiene, a sense of duty to their country fresh in their minds, a new feeling of comradeship for their fellow citizens, carrying themselves with a new snap and grace, these young men will scatter over the country at the conclusion of the citizens' military training camps of 1925 far more valuable as citizens than ever before. Indeed they are the vanguard of that new America which is destined to lead the youth of our country into those endeavors which have for their one and only object the true Americanization of Americans.

Students from the camp at Fort Douglas bathing in Great Salt Lake

NOTE.—The United States Government pays all neeessary expenses. Payment is made for transportation to and from home at the rate of 5 cents a mile over the shortest usual route. Uniforms, shoes, hats, shirts, leggins, and other artieles of soldiers' clothing, necessary laundry, good wholesome food, bedding and living quarters, and medical attention are all furnished free of charge.

Cincinnati Plan of Teacher Training Requires Cultural and Professional Preparation

Five Years After High School Graduation Required to Complete the Course of Study. Two Years in College of Liberal Arts Followed by Three Years in College of Education

By WILLIAM McKINLEY ROBINSON
Assistant Specialist in Rural Education, Bureau of Education

PREPARING TEACHERS in the College of Education, University of Cincinnati, involves both cultural and professional study. Believing that a liberal amount of each is necessary, the college provides five-year professional teacher-preparing curricula based on high school graduation as a prerequisite. Such curricula are organized in the following fields of specialization: Kindergarten, kindergarten-primary, elementary, high school, home economics, physical education, music, and art.

For the most part, the work of the first two years is of the liberal-arts character. The student registers in and pursues work that satisfies the requirements of the College of Liberal Arts. Certain of the liberal-arts courses, such as mathematics and political science, are especially organized and adapted for teachers. Certain other courses, such as educational psychology and general and individual hygiene, are prescribed during these two years of liberal training for those planning to teach. This 60-hour liberal arts prerequisite to the professional courses tends to eliminate undesirable students who might enter if the requirements were lower. Furthermore, the social status of those pursuing the teachers' professional curricula in the college is as elevated and dignified as that of any other professional group in the university.

Specialized Training Follows Cultural Study

The work of the last three years is of a professional character. The student registers in the College of Education and elects one of the professional curricula. Most of this curriculum is taken in the College of Education. During the first two (third and fourth college years) of the professional years, specialization is emphasized from the instructional or classroom point of view. Specialized subject matter and methods courses are given. "In all courses in education, the theory is coordinated daily with practice by the study of cases in educational psychology and actual classroom, teaching, observation of regular and special demonstration lessons in the public schools, visitation upon social agencies competent to illustrate certain scientific preachments, brief assignments to public-school teachers for assisting in classroom detail other than teaching, etc."

The city school authorities have designated two elementary schools as demonstration and experimental schools for the College of Education. Prescriptions such as world geography, sociology, or ethics must be completed in the College of Liberal Arts during this period, in addition to other approved electives before the student is eligible to enter his fifth year of preparation. Upon successfully completing the second professional year, students preparing for regular grade or high school teaching may receive the bachelor of arts degree from the College of Liberal Arts; those completing the other curricula may receive the degree of bachelor of science in education from the College of Education.

Practice Teaching in Fifth Year

The last of the professional years (fifth college year) is devoted to advanced instruction, half-time teaching in the public schools, and daily preparation for the next day's teaching. This furnishes specialization from the performance, or field, point of view. The advanced instruction consists of practical discussions of the teaching problems that are faced daily and such advanced courses in education as seem most desirable for the individual student.

Under a cooperative arrangement with the city school system the fifth-year student becomes a member of the city teaching staff on the half-time basis. He has actual charge of a group of pupils and receives for his services $600—half the minimum salary paid beginning elementary-school teachers. Thus the student teacher obtains his experience in a real public school instead of in a nontypical—so-called "model"—practice school. When he enters his first full-time teaching position, few or no adjustments will be necessary; no abrupt changes are made from theoretical courses, and his practice teaching was in situations like those in his new school.

The practice teaching is supervised and supplemented by (1) cooperating teachers on the staff of the College of Education who are skilled in classroom procedure and responsible for the grades or subjects taught, and (2) university specialists in educational theory and practice. Each elementary school cooperating teacher supervises two groups of pupils and four student teachers. Two of these student teachers—one for each group of pupils—teach full time in the forenoon and two in the afternoon.

The city provides an adequate number of schools for the cooperative student-teaching during the last year of professional preparation. Eight elementary schools, four high schools, and one junior high school are employed this year for this purpose. As many as necessary are available for the use of the college. To provide the most favorable opportunities for preparing teachers the college is affiliated not only with the municipal university, the city elementary schools, and the junior and senior high schools, but also with the Cincinnati Kindergarten Training School and its 90 kindergarten centers, the College of Music, the Conservatory of Music, and the Art Academy.

Vacancies Determine Number to be Trained

The number of vacancies in the city school system that will occur in succeeding years is estimated, and students with aptitude and ability, other things being equal, are guided into the curricula preparing for those fields in which the vacancies are expected. Thus the college hopes partially to regulate the supply of prepared elementary and secondary teachers to the annual local needs. If the student successfully completes the final year of one of the professional curricula, he is awarded the degree of bachelor of education, equal in rank to the professional degrees conferred in law, engineering, etc., and is rated on the preferred lists for appointment in the Cincinnati public schools. He has completed approximately one-half of the requirements for the master of arts degree.

College graduates from other institutions with the required undergraduate preparation in education are admitted to the graduate school and are also eligible to make a contract with the city board of education to do half-time student-teaching with pay. Although the cooperative plan was not organized primarily for the purpose of assisting students through a stipend to continue their educational preparation, this by-result should not be overlooked.

Alumni Honor Nebraska High School Principal

A trip to Europe, in the form of a gift of $1,000, was presented recently to the principal of the Aurora (Nebr.) High School, by the high school alumni association, as an expression of appreciation of 26 years of fruitful service. Leave of absence for a year with half pay was granted by the school board.

Cincinnati Meeting of Department of Superintendence

Few Cities Able to Care Properly for Numbers Who Now Attend Meetings. Marked Courtesy to Visitors. Exhibits More Than Usually Attractive. Curriculum Revision and Individual Development the Outstanding Subjects of Discussion. Seven-Minute Reports of Specific Accomplishments. Work of College Professors Severely Criticized. Program Strikes High Note of Public Service and Patriotism

By KATHERINE M. COOK
Chief Rural Education Division, Bureau of Education

CINCINNATI, for the first time since 1915, furnished the setting for the fifty-fifth annual meeting of the Department of Superintendence and allied organizations. If courtesy, hospitality, and service could compensate visitors for the discomfort and time-consuming inconvenience of living in homes and small hotels remote from the crowds and the meeting places, Cincinnati citizens certainly would have supplied that compensation. From Judy O'Grady to the Colonel's Lady, at stores, in cafes (when places could be secured in them), on street cars, or in taxicabs—and certainly these must have done a thriving business during the convention—all were courteous and ready to direct and assist.

The Department of Superintendence has grown beyond the capacity for entertainment of any but two or three cities in the United States. To this there seemed general agreement. Serious minded school officials intent on four days of intensive and profitable conference and discussion will scarcely find it agreeable to continue to accept meeting places where hotel and auditorium accommodations are not adequate and reasonably centralized. Many of the 14,000 reported as in attendance were forced to take rooms in the suburbs, and consequently long rides to and from meeting places and headquarters. They hope unanimously that it may be at least another 10 years before a city with as inadequate hotel accommodations is selected.

Materials for Instruction Well Represented

On the other hand, Music Hall offered ample and convenient accommodations for exhibits rarely found elsewhere. The multiplicity and variety of exhibits showed the value of this convention as an advertising medium. From the smallest piece of school equipment to the modern motor bus, from a carefully prepared exhibit in art education to one in schoolhouse planning, nothing was overlooked which would familiarize one with modern school practice so far as materials are concerned. The school art exhibit was particularly notable and helped to emphasize the portions of the program devoted to the schools' contribution to beauty in education for life appreciations.

The Program

If one judges the outstanding movements in education to-day by the programs for discussion as presented by the department, it is apparent that they center round the curriculum and its correlate—organization, as represented by individualized versus group instruction. The curriculum held the center of the stage, beginning with yearbook reports of the Society for the Scientific Study of Education presented by Gray, Zerbes, and others on Saturday night, and culminating with the Wednesday morning program. Beginning with a consideration of the curriculum as the paramount issue in education to-day, by Doctor Judd, University of Chicago, the subject was discussed from the following points of view: How to attack curriculum making scientifically, Horn, of Iowa; how to meet the needs of both the community and the individual, Withers, of New York; how one city has attacked the problem, Threlkeld, of Denver; ending with the proposal of a cooperative plan for curriculum revision by Scott, of Springfield, Mass. The last report was an outline of a plan for cooperation and exchange of reports on progress and experimental curriculum making, with the National Education Association acting as a clearing house of information. It proposed that each city superintendent of the country report to the National Education Association units of progress in curriculum revision as they are made and that that organization make them available to all other cities considering revision.

Curriculum Receives Unwonted Attention

Consideration of the materials of instruction permeated all meetings including sectional programs. In consideration of elementary and high school problems, especially those of the junior high school, the curriculum received unwonted attention. The development of better international understanding through the secondary school and training for world citizenship as an eighth objective in secondary education were among the plans advocated. Teachers' colleges and normal schools took a prominent place on the curriculum band wagon and are considering new context and procedure in preparation of teachers' courses, discarding the experience and opinion basis for more scientific plans, that of job analysis being among those emphasized as of importance.

Individualized Instruction

Second only in prominence to the curriculum was the matter of individual instruction, organization for and problems concerned with its administration. Tuesday evening Superintendents Washburne, of Winnetka, and Stoddard, of Bronxville, N. Y., addressed themselves to the problems involved in its introduction and administration in the school system. Doctor Kilpatrick followed with an appraisal of the Dalton and Winnetka plans. Among other things, Doctor Kilpatrick emphasized the point that after all the large problem is revision of curriculum materials and that the main fault of both plans is that they make no provision for this revision. Another objection raised was lack of sufficient provision for group contacts through socialization and for necessary "concomitants"; i. e., indirect outcomes of teaching not definitely classified. Discussion followed, led by F. C. Ayer, of the University of Washington, and participated in by Courtis, of Detroit, Freeman, of Chicago, and others.

Opponents Demand Conclusive Evidence

Opponents of the individualized instruction idea as well as the great mass of school people still working with the prevailing organization who are waiting, Micawberlike, for more definite and conclusive evidence to turn up, were equally intent on discussions of scientific methods of grouping children based on results of

intelligence and achievement tests, and with specific objectives in particular subjects or for particular groups.

The Education Bill

As a third distinguishing feature of the meeting as a whole, it was noticeable that for the first time in years discussion of the Sterling-Reed bill for a department of education (or of the same plan known by another name) was conspicuous by its absence. Even the resolution favoring a department of education took on a mild and modified form as compared to other years and may be interpreted as an indorsement of a department of education and relief without subsidies rather than a department with subsidies as provided in the Sterling-Reed bill. Other resolutions urged the adoption of the child labor amendment; approved legislation recently passed providing for $19,000,000 for the Washington school-building program; favored character training; indorsed efficient financial management of school systems and independent control by school boards; and emphasized the importance of education as a potent means of establishing international understanding.

Concerning the General Program

Other high lights among the programs of the large general group were the Tuesday morning program devoted to 7-minute contributions on specific accomplishments of the year, the Thursday morning program concerning the contribution which colleges should make to education, and the Thursday afternoon pageant and musical program.

Of the 7-minute contributions, nine were made by city superintendents each describing some outstanding activity of the year just passed in his own system. Miss Olive Jones outlined proposed plans for a home for retired teachers, and Doctor Strayer set forth examples of the anomalous situation created when the business and educational management of a school system are separately administered. Doctor Ballou described the introduction of educational research into the Washington school system. Superintendent Johnson of San Diego outlined the centralization feature of library work in his system. Superintendent Lewis, of Flint, discussed a personnel audit of the teaching staff. Superintendent Gowans, of Hutchinson, Kans., told how education week was used to contribute to increased interest on the part of citizens. Superintendent Newlon intimated that by-products of the curriculum-making program in Denver were of no less moment than the new curriculum itself. Superintendent Borden told how vocational information is used in South Bend, Ind., and Superintendent Nugent how the schools are taken to the parents in Jersey City, N. J. These short, snappy and condensed contributions had the punch and suggestion of actual experience quite apart from the realm of theory and were listened to with unusual interest.

At the Thursday morning program, Superintendent Boynton, of Ithaca, caused a mild sensation, throwing a bomb into the otherwise peaceful consideration of the service which colleges and universities should render to schools. Superintendent Boynton paid his respects to the college curriculum, entrance requirements, and college professors as teachers, accusing them of being poor teachers with little interest in individuals and in general service, but addicted to the writing of books and conducting of school surveys. The department voted to send a copy of the address with its compliments to every college president in the United States in a resolution which the presiding officer characterized as "sending a missionary tract to the heathen on how to teach the true American doctrine."

Happiness through Music and Art

Thursday afternoon's program, unusual as to organization for participation, execution, and arrangement, was a notable exemplification of President McAndrews's idea that life, liberty, and happiness are fostered by the schools through expression in music and art. The first part of the afternoon was devoted to happiness and school music, the second to happiness through art expression.

The Teachers' chorus of the Indiana public schools, composed of 300 teachers, presented a program of public-school music adapted especially for its appeal to pupils of secondary school age. The chorus organized in 1922 for the purpose of giving teachers an opportunity for instruction in choral singing and conducting, has won cordial recognition at Cincinnati and probably elsewhere for musicianly accomplishment. The annotations on the program following the selections added to the listener's appreciation of the beauty of the music and its adaptation to school use.

A pageant, "The public school's contribution to the Nation's happiness"; a processional by the children of the public schools of Cincinnati, representing in its different episodes joy in childhood, in youth, in nature, in the practical arts, in the fine arts, in literature, and in service; and ending with the singing of "America, the beautiful" by the chorus and audience, completed an afternoon unique in departmental programs.

Washington, D. C., carried off the honor of supplying the next president. Superintendent Ballou won over Superintendent Gwinn, of San Francisco, by the narrow margin of 10 votes.

Genius of President Displayed in Program

The program as a whole was of unusual interest, professional in tone and sounding a high note of public service and patriotism. In both the latter it was McAndrewesque in character. The genius of the department president was apparent in the arrangement of the program. Each unit followed out an idea expressed in a quotation, generally one expressing a patriotic sentiment. Quotations were from the preamble of the Constitution, the Bill of Rights, ordinance of 1847, or from noted Americans. According to the program announcements, the sentiments were from Bureau of Education Bulletin 28, 1913, compiled by Henry R. Evans.

A few examples will offer sufficient illustration: Monday afternoon the department met in five groups, A, B, C, D, and E. The Group A program discussing equality of educational opportunity was headed by the quotation, "From the beginning these States engaged as the duty of government to secure to all equal rights to life, liberty, and the pursuit of happiness." The discussions were by United States Commissioner of Education Jno. J. Tigert for the Nation; County Superintendent A. F. Harman, of Montgomery County, Ala., for the South; and State Superintendent E. W. Butterfield, of New Hampshire, for the North. In Group B a health education program followed the key quotation, "All men are endowed by their Creator with certain inalienable rights. Among these is life." Group C, "To establish justice." The topics were "Justice for pupils," "Justice for teachers," and "Justice in high places." Group D, "To insure domestic tranquil-

A MAN'S EDUCATION must be mainly his own work. He may be helped or he may be embarrassed greatly by his environment; but neither books, nor teachers, nor apparatus, nor other surrounding conditions of any kind will be of any avail unless he himself furnish the energizing spirit which shall put them to account. A mind is not molded as an earthen vessel is fashioned by the hand of the potter. It molds itself by virtue of an inherent force which makes for symmetry or for deformity according to the direction given it by consciousness and will. Libraries, universities, museums, and foreign travel are powerful auxiliaries to a man who is determined to be educated; but he will find them of no avail if he makes them anything more than secondary instrumentalities in the work. On the other hand, no lack of such advantages will prevent a man from securing a valuable education who is resolved to educate himself.—*F. A. P. Barnard.*

lity." Topics; "Student government," "Controversial subjects in high school," and "Labor and capital."

Contributing to the different programs were speakers from State universities and colleges in 15 States, a representative but not an extensive number of State superintendents, a large number of city superintendents, elementary and high-school principals, professors in State teachers' colleges, municipal universities, and normal schools. Beside educators, several organizations, including the United States Army, National Committee on Mental Hygiene, the American Child Health Association, the Farmers' Cooperative Associations, the American Federation of Labor, and the press were represented. An examination of the list of speakers indicates that 33 of the 48 States were represented by one or more.

Other Departments and Allied Groups

Group A of the Department of Superintendence, under the chairmanship of Commissioner Tigert, was devoted to consideration of rural education. Doctor Tigert discussed recent constructive accomplishments in the United States indicating specific points of progress in financing, administering, and supervising rural schools, all of which tend toward raising rural education to the professional plane attained in urban school systems. A film showing school buildings, equipment, and school work, illustrating the progress discussed, was shown. Superintendent Harman, of Montgomery County, Ala., schools, speaking for the South, showed in his address and through pictures the splendid achievements of the rural school system under his administration. Doctor Butterfield, commissioner of education for New Hampshire, traced the development of progress in equalizing educational opportunity in the North and illustrated his lecture by slides and moving pictures.

Every State Able to Provide Schools

The program prepared for the department of rural education under the presidency of Macy Campbell, Iowa State Teachers' College, was notable for scholarly contributions. The initial program was devoted to consideration of the economic background of rural education. Dr. F. H. Swift, of Teachers College, Columbia University, gave an illustrated address showing through slides the inequalities in tax burdens and educational opportunities which follow unscientific methods of raising and distributing school funds. Doctor Swift also pointed out constructive remedial measures, stating that his study of financing systems in one-fourth of our States had convinced him that no State was unable to provide for the maintenance of an adequate elementary and secondary school system for all of its children. Doctor Swift's clear and adequate discussion was followed by a brilliant address on cooperative marketing and supporting education, by Aaron Sapiro, attorney for the Farmers' Cooperative Associations, Chicago. An interesting discussion of both addresses from the floor followed.

The splendid pace set by the initial program of the department was followed Tuesday and Wednesday afternoons, the former devoted to outstanding achievements of consolidated schools in the making of citizens, building up and educating rural communities, and high points in general service, the latter to the development of the consolidated school discussed from the point of view of national distribution, organization under the county unit plan, improvement in standards, and the preparation of the principal for the consolidated school. Sectional programs were held Thursday morning. State Superintendent Harris, of Louisiana, and Prof. Mabel Carney, of Teachers College, were among the speakers.

Teacher Preparing Institutions

The American Association of Teachers' Colleges, the National Society of College Teachers of Education, and the City Teachers' Training School Section, including among them all of the teacher preparing groups, attracted many notable speakers who appeared on the different programs, including several presidents of teachers colleges as well as representatives from the University of Pennsylvania, Johns Hopkins University, University of Pittsburgh, Teachers College of Columbia University, University of Cincinnati, University of Washington, and others of importance. Strong movements to raise entrance requirements, to revise curricula, lengthen courses, and otherwise improve standards of teacher-preparing institutions are widespread if one may judge from programs presented.

The Department of Elementary School Principals, a young but rapidly developing organization, the National Association of Secondary School Principals, the Department of Vocational Education, National Vocational Guidance Association, the Primary Council, and the National Council, were among other allied groups presenting interesting and profitable programs.

The Bureau of Education and the Department

The Bureau of Education, Department of the Interior, was represented on the program by four speakers, some of whom made more than one address at different sessions. Headquarters on the ballroom floor of the Gibson Hotel were centrally located and attracted a large number of educator guests during the meeting. The usual bureau dinner in the interest of the work-study-play or platoon plan schools was well attended. Commissioner Tigert presided. Among the speakers were Superintendents Davidson, of Pittsburgh, and Cody, of Detroit; Principals Bryan, of Birmingham, Ala., and Boyce, of Milwaukee; and Miss Williamson, of Dayton, Ohio.

The usual number of college alumni and fraternity dinners were given on Wednesday and other evenings, and a large number of breakfasts, luncheons, and special dinners impossible to enumerate provided for reunions, conferences, and social diversion.

Recent Growth of Music Clubs in Virginia

"Virginia has 32 well-organized and active music clubs belonging to the national federation," writes Margaret L. Gill in the Virginia Teacher. Of the 32 clubs, 6 are junior.

The first county federated music club was organized in Fluvanna County in 1920, so recent is the county organization. The oldest city music club is in Petersburg, dating from 1898. It is not possible to compare fairly the work of town and county music clubs, for their aims are entirely different. While clubs in the larger centers are able to accomplish more in bringing great artists to their towns, music clubs in the smaller places mean much to their communities, and relatively their membership is greater.

The Fluvanna County club has a membership of 62, and gives eight concerts annually. The Junior Fluvanna club, with a membership of 20, presents four concerts during the year. This compares favorably with the largest clubs in the State. Roanoke, with a membership of 500, gives 12 or more concerts each year; and Marion, with 100 members, undertakes three or more yearly.

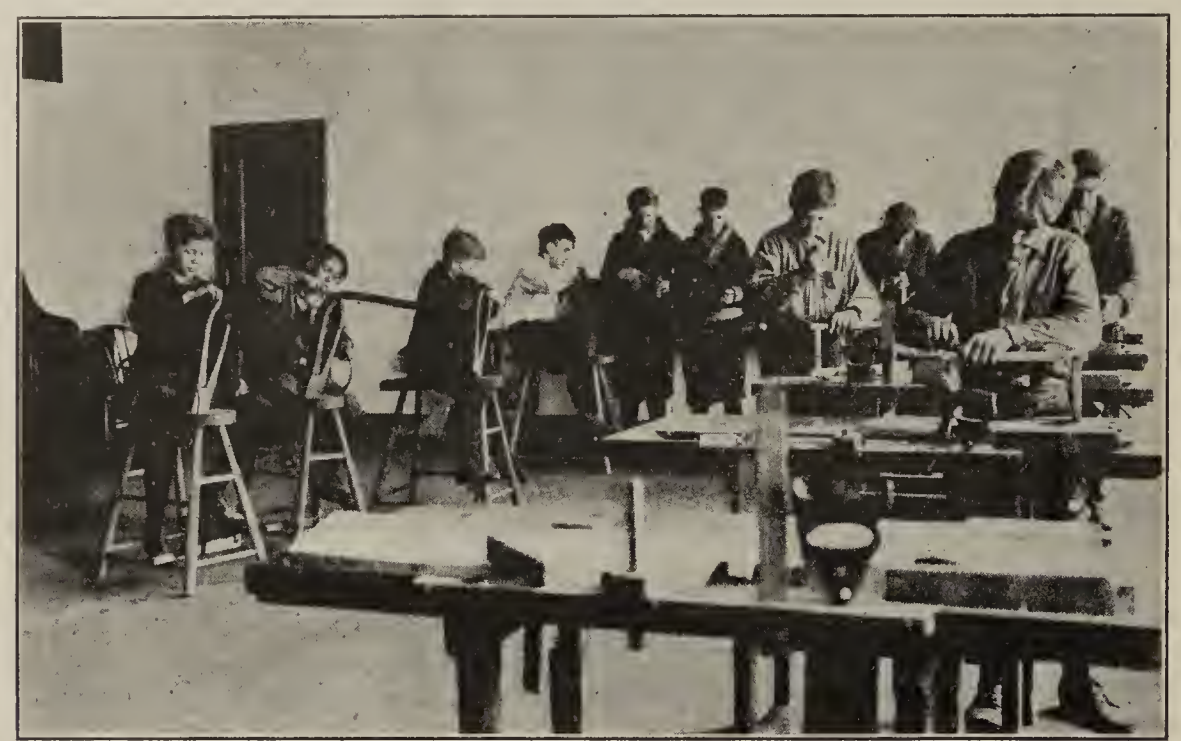
The purpose and activities of the clubs vary widely; the range of dues is from 10 cents to $10 a year. In some organizations self-culture or musical creation is the object; in others, the cultivation of musical appreciation in the community. Practically every club in the State has recently increased in membership. Roanoke has developed from 20 members in 1908 to 500, and Fluvanna County from 12 to 62.

Until they are up to grade standards in spelling and penmanship pupils from the ninth grade up, in the Lake Odessa (Mich.) High School are required to continue these studies. Tests are given every six weeks.

School System of Portage County is Thoroughly Organized

All Schools Consolidated and 22 of them Offer High-School Instruction. Supervision and Administration of Schools Aided by Committees of Principals and Teachers. Local Educational Agencies Lend their Cooperation

COOPERATION is the foundation principle which governs the administration of the public-school system of Portage County, Ohio—cooperation between the county supervisory staff and the local school officers and teachers; cooperation between the school authorities and the auxiliary educational agencies of the county; cooperation from the Kent State Normal College; and above all, cooperation, ungrudging and complete, from the patrons of the schools and the taxpayers of the county, according to C. E. Pore, the county superintendent, who supplied the facts and photographs utilized in this article. In this the Portage County schools are blessed above the most of the school organizations of the country.



A class in harness making, Franklin Township

Superintendent Has Four Assistants

Twenty-three consolidated schools, every one on a paved road, constitute the school system of this county. Twenty-two schools of the twenty-three offer high-school as well as elementary instruction. The county superintendent is assisted by four supervisors, two of whom direct the work of the schools in music, another that in manual training, and another that in writing and in art. The county superintendent appoints standing committees of principals and teachers to organize and direct school activities of the county which may be benefited by such cooperation.

An athletic committee formulates rules, schedules games, assigns referees, adjudicates disputes, and conducts tournaments and field meets. Sixteen of the schools maintained football teams last year. Thirty-six boys' and girls' basket-ball teams are scheduled to play interschool contests every Friday night of the season.

A committee on literature and music arranges competitive speaking and singing contests, which involve as participants practically half of the high-school pupils.

The "Speedometer committee" directs the publication of a yearbook, the name of which is indicated by the name of the committee; local responsibility for this book is assumed by student editors and business managers.

The current publicity committee prepares each week a double column of Portage County school news. This material is distributed to seven papers, the combined circulation of which includes practically every resident of the county. Each school has its own news representative. To him a return post card is sent every Monday on which he writes the news notes of his district, returning the card to the central office on Friday. Articles on special topics are prepared as occasion demands.

Standard Tests Regularly Administered

A testing committee has charge of all tests in the county. They not only prepare examination questions in the elementary subjects for the first semester finals and in the high-school subjects for the second semester finals, but also supervise the administering of standard tests. They chart the results and prescribe remedial instruction.

The lyceum committee has saved 25 per cent of the cost of lecture courses by conducting them cooperatively. This committee prepares from the offerings of half a dozen lyceum bureaus a list of speakers and musicians suitable for the county circuit. Each principal in the 23 consolidated school districts chooses from this list those best suited to his local requirements. From a centrally located hotel the persons so employed make their appointments with the several schools.

Once a year the school exhibit committee arranges a display of school work from the different schools, at which the

Randolph School Building, Portage County, Ohio

work is judged and prizes are given. Practical work in art, dressmaking, mechanical drawing, woodwork, harness making, and forging are especially emphasized.

The Portage County schools enjoy the cooperation of other local educational agencies. The farm bureau's club leader enrolls the boys and girls in vacation courses which supplement their school work in domestic science and agriculture. The county board of health employs a trained nurse who makes the schools her special field of operation. A registered Red Cross nurse frequently assists schools which are in need of her services. The Young Men's Christian Association cooperates through its secretary in giving motion picture programs and in conducting educational tours and a summer baseball league for school pupils.

Annual exhibit of manual training

Normal College Facilities Freely Used

The Kent State Normal College assists the teachers of the county by providing special courses when desired, giving demonstration lessons, lending library materials, and assisting in the annual teachers' institute. The college gymnasium and auditorium are open for school contests and programs. On the day allowed by law to the teachers each year to visit other schools normal college seniors conduct their classes so that the pupils lose no school days. To become as familiar as possible with the work they are to teach, the normal students of the preceding day visit the classes of the teachers they are to relieve.

The Franklin Township consolidated school, 1 mile from Kent, is affiliated with the college for observation and practice teaching. The college contributes to its financial support and also provides a kindergarten specialist and special teachers for music, art, domestic science, manual training, and agriculture. Furthermore, under the terms of the agreement, the college provides for medical inspection in this school and furnishes instruction for all its pupils above the eighth grade in the normal college high school.

All this cooperation, enthusiastically and loyally given, has placed the schools of Portage County in the front rank of the rural schools of Ohio.

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Aid to Adults in Selecting Educational Institutions

More than 1,850 courses of study open to working men and women of Greater Boston have been listed in the second annual catalogue, "Educational Opportunities of Greater Boston," published by the Prospect Union Educational Exchange of Cambridge. The information has been collected from the catalogues and reports of 130 accredited schools and social agencies of Greater Boston. Instruction in almost every subject is offered, special attention being given to part-time and evening opportunities suitable for persons who can devote but a small part of their day or evening to study.

The Prospect Union Educational Exchange is not an advertising medium for schools, but it aims to present trustworthy information to people who need it, and its concern is for them rather than for the schools listed. In addition to this information service, the Educational Exchange offers free vocational counsel and educational advice to men and women. Since its beginning in September, 1923, more than 400 persons have been served by the exchange.

A third annual school pilgrimage this year will bring 130 public-school boys from Australia to England. The boys will also visit France, Italy, Switzerland, and Belgium. These tours are arranged by the Young Australia League to broaden the educational life of young people of the Commonwealth.

The National University Extension Association will meet in Charlottesville, Va., April 30–May 2, 1925, and not in Kansas City, as previously stated.

Portage County physician administering serum to immunize pupils against diphtheria

· SCHOOL LIFE ·

Issued Monthly, except July and August
By THE DEPARTMENT OF THE INTERIOR, BUREAU OF EDUCATION

Editor - - - - - - James C. Boykin

Terms: Subscription, 50 cents per year, in advance; to foreign countries in which the mailing frank of the United States is not recognized, 75 cents. *Remittance* should be made to the Superintendent of Documents, Government Printing Office, Washington, D. C.,

APRIL, 1925

Benefits of Citizens' Training Camps Clearly Proved

FROM any standpoint from which they may be viewed the efforts of the United States Government to upbuild the physique and morale of the Nation's youth by means of the citizens' military training camps deserve the most cordial support. Judged by the results that have been abundantly shown the idea was an inspiration, and the operation of the camps has been a national benefit of high order.

The declared purpose is to develop men physically, mentally, and morally; to stimulate patriotism and good citizenship; and to establish self-discipline and the spirit of cooperation. If these ends are attained even in part, the camps are worth to the country far more than the moderate sums that are expended upon them; but there is every reason to believe that their measure of success has been more than partial. The fast increasing demand for enrollment in the camps and the enthusiastic approval of parents whose boys have attended them clearly show that those who have the best opportunity of knowing what the camps actually do are their warmest advocates.

It would seem that to any normal red-blooded young American a month in such surroundings is an ideal outing. The tasks assigned assume the aspect of sport, for everybody does them; the purely military features are attractive to most boys and in a single month they are not likely to become irksome; the athletic games and exercises are of the sort that Americans most enjoy; the studies are as practical and fruitful as may be; the general atmosphere is wholesome and stimulating.

For experiences far less beneficial it has been necessary in the past to pay round sums. Now, attendance at the citizens' military training camps is service to the country, and every necessary expense, even transportation to the camp and back, is borne by the Government. It is no wonder that insistent demand has made it necessary to establish the camps in every part of the country; in the coming summer one will be within convenient access to every young American.

Prestige of Department of Superintendence Steadily Growing

FOUR YEARS ago about 6,000 persons were registered as attending the meeting of the Department of Superintendence in Atlantic City. By common consent it was agreed that the attendance of such numbers was incompatible with the best interests of the organization. This consideration, together with others which concerned the control of the department, led to complete reorganization. Conditions of eligibility to membership were restated; independence of the National Education Association in financial matters was declared, and all organizations not directly concerned with educational supervision or administration were denied the right of official recognition if their meetings were held simultaneously with the Department of Superintendence. Fifty-five branches of the National Education Association were included in the program of the Atlantic City meeting and the effect of the new provision was to reduce to 14 the number to be recognized thereafter.

It was confidently expected that smaller attendance, greater tranquillity, and more effective work would result from the reorganization. How far wrong the anticipations were is shown by the attendance of about 13,000 at the recent Cincinnati meeting—more than twice as many as at Atlantic City four years ago. The restrictions upon membership and the limitation upon the privilege of voting and of participating in the business meetings have placed full control of the organization where it belongs, and have increased its working efficiency, but all the difficulties and inconveniences that come from large gatherings are greater than ever before.

The effort at exclusiveness in itself increased the interest of those who are entitled to membership and aroused a greater desire on the part of others to be present during the deliberations of the recognized leaders of the profession. Human nature remains the same through all the ages.

Bolivia Summarily Stops Study of Law

TO DISCONTINUE a study because it is too popular would seem to an American to be quixotic. Yet that has recently been done in Bolivia, and under the circumstances, it was not quixotic but a display of eminent common sense.

South Americans generally have a strong predilection for the study of law. In Bolivia that tendency is so marked that occupations considered essential to the welfare of the Republic were neglected, and the law classes were full and overflowing, although the number of lawyers in the country was far greater than the business available could properly support.

The propriety of discontinuing the faculties of law in all the universities of Bolivia has been discussed in the National Congress for some time with the full approval of the Ministry of Public Instruction. Finally a compromise has been reached by which the minister has abolished the first-year course at once, the second-year course in 1926, and the third-year course in 1927. After that time the faculties of law in Bolivia will cease to exist until it is considered desirable to re-establish them. In this way those who have already begun the study of law will be allowed to graduate, but no new students will be admitted.

The minister of instruction expects to extend the technical and scientific courses in the universities to take the place of the abolished law courses. This information comes from the American chargé d'affaires at La Paz, through the State Department.

Recruits Needed for Teaching Profession

HIGH-SCHOOL commencements are near at hand. Approximately 350,000 boys and girls—six times as many as a quarter of a century ago—will be graduated from public high schools during this year. Then what? Statistics collected by the Bureau of Education in past years indicate that about 112,000 will go to college and about 50,000 will enter other institutions to continue their education.

Many of the 54 per cent who do not expect to continue their education might be persuaded to do so. Assistance should be given those who are planning to continue their studies, in order to prepare them for that vocation for which they are best adapted and in which they can render their greatest service to society. Education offers one of the greatest fields of service. The teacher is entrusted with preserving and passing on those experiences of the race most worth while, and with directing the development of the latent ability of each child in order that he may make his fullest contribution to society.

Women are entering more than heretofore the fields of administration and research. Men are entering the ranks as teachers in increasing numbers. The number of men students enrolled in teacher-preparing courses in normal schools and teachers colleges during the last biennium for which statistics have been compiled has increased more than 71 per cent. The percentage of men teach-

ers has apparently increased in the past four years from 18½ to 22½ per cent of the total number employed.

The field of education is not a one-track affair; it offers a variety of types of occupation. Administration has added new fields for specialization; among them are supervisors, health officers, service directors, librarians, vocational guidance directors, and social advisors. Research is of growing importance. Specialists are needed to direct the development of the school curricula; to assist in improving the methods of instruction; to procure, compile, and interpret statistics; and to devise, administer, and supervise the giving of standardized tests. And then teaching itself offers many new fields for specialization, such as for the nursery, the physically handicapped, the mentally defective, the immigrant and other adult workers desiring further education. Art, music, and physical education are receiving new emphasis and require specially prepared teachers.

The field of education is not overcrowded. The increase in educational facilities to meet the needs of a growing population demands more workers. The development of better standards in education demands that those workers be more adequately trained. The salaries now paid are enough to attract men of the best type. The time is at hand for them to resume their places in the schools.

South American International Students' Conference

Under the auspices of the Young Men's Christian Association, the ninth annual camp meeting of international students, consisting of official delegations from the centers of learning of South American Republics and distinguished persons from the neighboring countries, was held at Piriapolis, Uruguay, in January. The purpose of this camp meeting and conference, as outlined by Hoffman Philip, American minister to Uruguay, was to advance the physical and mental development of the youth of the American Republics.

Special attention was paid to gymnastics and open-air exercises, such as football, basket ball, tennis, swimming, riding, with competent instructors in charge. Conferences and conversations regarding the political, social, and educational problems of the day also occupied a primary place in the life of the camp; and particularly those problems which pertain to the intellectual life of South America were discussed. Prominent men of learning, numbering 120 in all, from Argentina, Bolivia, Brazil, Chile, Paraguay, and Uruguay were in charge of this aspect of the development of the youth.

Bureau of Education a Clearing House for Research in Secondary Education

Cooperation with Associations and Other Agencies Concerned with Work of Secondary Schools. A National Committee to Initiate, Direct, and Coordinate Research. Functions Assumed by Bureau of Education

By EUSTACE E. WINDES
Associate Specialist in Rural Education, Bureau of Education

IN RESPONSE to urgent appeals, Dr. Jno. J. Tigert, United States Commissioner of Education, has agreed to undertake to organize for cooperative research the agencies which are concerned with secondary education. The Bureau of Education will function as a clearing house for this purpose. The need for this service is plain.

The matter of joining in such undertaking was presented to the Southern Association of Colleges and Secondary Schools (the first organization to meet after the undertaking was decided upon) at the December, 1924, meeting. That association appointed a committee of three to agree with the Bureau of Education on a program of cooperation. This program was presented at a conference of representatives of the National Association of High School Inspectors and Supervisors, the National Association of Secondary School Principals, the National Society of College Teachers of Education, the Southern Association of Colleges and Secondary Schools, the North Central Association of Colleges and Secondary Schools, the New England Association of Colleges and Secondary Schools, the Association of Colleges and Preparatory Schools of the Middle States and Maryland, the Northwest Association of Secondary and Higher Schools, and the California High School Teachers' Association, held in Cincinnati in connection with the meeting of the department of superintendence of the National Education Association.

Representatives Unanimous in Support

The representatives of these organizations unanimously requested authority to convey the invitation of Commissioner Tigert to their respective organizations to appoint a member to form with members of other organizations a national committee whose function would be to initiate, direct, and coordinate research in secondary education.

The invitation of Commissioner Tigert was acted upon by three organizations which met in Cincinnati, and committee members were named. Other organizations are expected to name committee members at their first meeting. It is contemplated that these members and selected individuals will be added to a committee previously organized by the Bureau of Education for the purpose of studying problems of the small high school, and that a general committee on secondary education will be formed.

Some of the proposed activities of the Bureau of Education in setting up this service are:

Bureau Assumes Attitude of Cooperation

To assume the duties of the office of executive secretary of the committee; to serve as a repository of information in the way of raw data made available through specific studies on forms approved by the committee, theses of graduate students on secondary education topics, and other special research studies made by any of the cooperating organizations independent of the general committee, such information to be distributed by the Bureau of Education in the way agreed upon as desirable by the general committee and the Commissioner of Education; to collect data for research studies authorized by the general committee, tabulate or assist in tabulating data on authorized studies, undertake through its own personnel to make studies recommended by the committee and approved by the Commissioner of Education; to publish such theses and special studies as are recommended by the committee and approved by the Commissioner of Education, and to prepare and distribute periodical lists of available data, theses, or special studies under way or completed by member institutions of cooperating organizations.

Practical Geography Taught by Ships' Routes

A school in Southampton, England, has its playground on the roof. The fact that the sailing of great ocean liners from this port can be seen from the roof is made to contribute to the study of practical geography. On a large map painted on the roof, miniature vessels follow the course of the seagoing ships to all ports of the world, and from this an elaborate geography scheme, based on actual observation, has been built up.—*Teachers' World, London.*

Significant Phases in Movement for Equality of Educational Opportunity

Increased Aid to Rural Schools from State Funds. Larger Unit of Administration Makes for Equality. Elimination of Weak Districts by Consolidation. Higher Standards of Rural Supervision. Centralized Authority for Teacher Certification. Increased Compensation Follows Better Preparation. High Schools Available to Farmers' Children. Improved Types of Rural Schoolhouses.

By JNO. J. TIGERT

United States Commissioner of Education

"FROM the beginning, these States engaged, as a duty of government, to secure to all equal rights of life, liberty, and the pursuit of happiness." Every nation is dominated by an ideal. The ideal of America has lain in an aspiration for that equality for its citizens which finds its basis in equality of opportunity. Opportunity is determined very largely by education.

Twelve million, or slightly more than one-half, of the school children of the United States are now attending schools in the open country and small villages. Rural schools in the past have not offered opportunities comparable in any sense to those of urban schools. The teachers in these schools have been poorly paid and poorly prepared. The buildings and equipment have been meager. There has been little or no supervision. Financial support has been inadequate. The length of term has been short, and in practically every significant detail these schools have lagged behind the more fortunate schools in the cities. There has been no more significant movement in education in recent years than the rapid overcoming of the handicaps under which our rural schools have labored, and no movement could contribute more toward the realization of our ideal for a square deal in equal opportunity for all American children. So rapid and so varied have been the strides that have been taken for the betterment of our rural schools that a very large volume would be filled in giving even a bird's-eye view of what has been accomplished. Here we are undertaking to sketch a few of the prominent features of this movement.

Equalization by More Liberal Financial Support from the State

In the ultimate analysis most of the disparity of educational opportunity arises from difficulties in financial support. Some communities which possess valuable minerals or fertile agricultural land bear the burden of supporting the schools with little difficulty. Other communities which do not abound in natural resources or advantages find it an economic impossibility to provide good schools. It is obvious that this inequality can not be met except by taxation and financial support from a unit which is large enough essentially to include within it much of that part of the region which possesses natural advantages in wealth. The State is the legal unit for educational administration and control, and the natural unit for taxation, to accomplish measurable equality in school opportunities. This has become clearly recognized in all parts of the United States in recent years.

Score of States Increased Appropriations

The progress of State support is evidenced by the fact that nearly a score of States within the past few years have materially increased their support for rural schools. The States have been appropriating larger percentages for the support of education from their funds and have been setting aside a specific amount for equalization. In Texas and Alabama approximately 50 per cent of school expenditures are furnished by the State. Recently New York has increased its State funds about $20,000,000, and the State of Pennsylvania has assumed the payment of approximately 50 per cent of the salaries of rural teachers. Some of our Western States make an appropriation of $25 and even $30 per capita for all children of school age. Of these Utah is an example.

The State of Arizona augments its county funds sufficiently to provide about $45 per capita, with the minimum of $1,500 to each one-teacher school, and $3,000 to each two-teacher school. California supplements its county funds in such a magnificent manner that $60 and $90 per capita, respectively, are available for each elementary and high school pupil in the State. Massachusetts meets the problem of unequal local wealth with increased State funds distributed on a basis of inverse ratio to local tax valuation. The equalizing fund in the States of Maine and Mississippi is distributed very largely at the direction of the chief school officer of the State. Indiana, Oklahoma, North Carolina and West Virginia give aid to the weaker districts by increasing the length of term. Altogether, 28 States have provided for equalizing funds from State sources within recent years. During the scholastic year 1923–24, 12 States reported to the Bureau of Education marked increases in the State apportionments, or the initiation of new programs for enlarging State support.

Equalization Through Administrative Organization

Equality of educational opportunity is dependent upon adequate administration as well as upon adequate finances. Correlative with increased State support in financing schools, we find the rapidly enlarging unit of administration for rural schools. A widespread attempt is being made to substitute professional administration for the outworn system of rural supervision by politicians, inspectors, and annual visitants.

The county unit of administration in some form is now in vogue in 22 States. At present 12 States are seeking a larger and more effective organization for the administration of rural schools.

Equalization Through Consolidation

The merging of small districts into centralized units for school purposes has made possible the erection of consolidated schools all over the United States, thus bringing to 2,500,000 American boys and girls living in the country, educational opportunities which are quite comparable to those which boys and girls living in the cities enjoy. In 1916, there were 7,000 of these consolidated schools in the Nation. In 1924, their number had doubled. In this eight-year period 30,000 old-fashioned one-room schools, which correspond to the pioneer stage of development and the ox cart in transportation, were closed or expanded into centralized or consolidated schools. Between 1917 and 1922, two leading States closed as many as one-third of their one-room schools by providing the opportunities of consolidated schools, and in five States about 20 per cent of the one-room schools were closed in this way. Twenty-seven States are now giving financial aid to

An address before the department of superintendence, Cincinnati, February 23, 1925.

further consolidation and transportation of pupils. Incomplete but fairly reliable data enable us to say that we are now spending annually about $30,000,000 for transporting approximately one and one-quarter million children to 14,000 consolidated schools.

Equalization Through Better Supervision

Supervision, as understood in well organized city systems, was practically unknown in our rural schools a decade or so ago. During the past 8 or 10 years the need of professional supervision for rural schools has been realized practically everywhere. Thirty-seven States have established fully or partially a distinct administrative machinery by which such supervision can be secured, and six States are now in the process of organizing supervisors for intensive work through their State departments of education. In the past few years we have progressed from the situation in which we had one or two supervisors in each of a dozen isolated counties to the point where we now have approximately 1,250 rural supervisory assistants employed in 560 counties in 37 States. About 20 per cent of these supervisors have been added to the force during the past two years.

State departments of education, with trained State directors as members of their staffs, universities, colleges, and normal schools, through the provision of proper courses of study, and other important agencies are combining to emphasize the need and provide for supervision for rural schools on a basis comparable to that which is general in city schools. At least six States are now definitely aiming at an objective which will put rural supervision on the same basis as urban supervision. At least four States have actually made provision for a supervisor for each 30 to 40 teachers on a State-wide scale in their rural territories. Seven States have recently inaugurated intensive in-service training for supervisors and superintendents in rural schools.

Equalization Through Supervision and Administration

Twenty-two of the States now provide in-service training for rural school superintendents by conferences devoted to the study of professional administration and instructional supervision. State supervisors of rural schools have ceased to be inspectors and their work now belongs properly in the class of expert supervision. Assisting county superintendents with demonstrations, teachers meetings, conducting in-service training for teachers, planning county wide school programs for superintendents and supervisors, and similar things are among the types of work now being done by State upervisors. Thirty-five States now have 75 State rural supervisors, or persons doing a type of work similar to supervision. Alabama has 13 State rural supervisors, the largest number reported to the Bureau of Education for any State.

Equalization Through Teacher Certification

Formerly, thousands of teachers served in country schools with no education beyond the high school, and many with even less. Comparatively few obtained the advantage of college preparation or special professional training, which is usually considered necessary for employment in city schools. Of late, notable improvement in professional preparation and certification of rural teachers has been accomplished by centralizing authority for teacher certification in the State departments of education and by eliminating the practice of granting certificates or conducting examinations in the counties or localities. Sixteen States have accomplished the elimination of examination or expect to do so at an early date. Fifteen States have reported to the Bureau of Education definite progress during the year 1923–24 in raising the standards of certification of teachers. This statement can be comprehended in its fullest significance only when we remember that unless a State program for securing better teachers includes laws and regulations requiring professional training in addition to high school graduation, offers salaries commensurate with the qualifications demanded, and provides adequate facilities for training the required number of teachers to make the necessary annual replacements, little or no progress can be made in the direction of improving teachers for rural schools. Heretofore rural schools have had to be content, in a large measure, with teachers who were left after the cities had supplied their needs.

It is gratifying to know that along with the improvement in certification requirements for the professional preparation of rural teachers, there is a corresponding increase in compensation. In 1912, the average salary of the public-school teacher city and rural, was $492. In 1922, it was $1,166, an increase of 137 per cent in 10 years. For the past four years, county superintendents have reported to the bureau of education the salaries of rural teachers. These reports show that salaries vary directly in proportion to the size of the school, small salaries in the one-teacher schools, with a slight increase in the two-teacher schools, a larger increase in the schools having three or more teachers, and the largest increase in the consolidated and village schools. The average salaries in the consolidated schools increased from $964 in 1923 to $1,017 in 1924.

Equalization Through Adequate Teacher Preparation

No State has an adequate supply of prepared teachers if we consider two years beyond high school graduation as a minimum standard. Forty per cent of the States are unable to secure an adequate supply of teachers, if the standard is only one year beyond high school graduation. Remembering this general shortage of adequately trained teachers, it is encouraging to know that 60 per cent of the rural teachers of Michigan have completed one year of professional preparation beyond high school graduation; that 68 per cent of the beginning teachers in the one-room rural schools in Connecticut last year were normal school graduates, and that 57 per cent of the 305 graduates of the Maryland State normal schools entered one and two teacher schools last year. These facts, considered in connection with the high standards of certain States which in the course of two or three years will require a minimum of one or two years of professisonal preparation for their teachers, under terms of laws already enacted, afford excellent testimony of the progress that is being made in professional preparation for rural teachers.

Departments of rural education have now been established in nearly two score teacher training institutions. One hundred and twenty-two State teachers colleges and normal schools are now offering 257 courses in rural education. Courses in rural education are required for graduation

THE TRUE SECRET of success in the management of our schools, as well as in all educational efforts, is found in the interest felt and manifested by the people. When parents express an earnest desire to have good schools, and sympathize with the teachers in their work; when they demand suitable persons for school committees, the best teachers, and generous provision for the schools, failures, or even partial success, is hardly possible. It is the indifference of parents, the inactivity of those who should be interested, that neutralizes the efforts of good teachers and makes poor, worthless ones self-satisfied when they accomplish nothing, or only evil. Every indication that the people of any neighborhood or town are taking a lively interest in educational matters affords fresh encouragement to hope for the good time coming as near at hand.—*New England Journal of Education, Feb. 27, 1875.*

in the State normal schools of Connecticut. The increased enrollments in extension courses and in summer schools are further indications of more intensive teacher preparation. Eighty-six per cent of the teachers of Alabama were reported as having pursued some kind of professional study during the past year. Wyoming reported 50 per cent of its teachers in summer schools alone. Arkansas reported an increase last year of 80 per cent in summer-school attendance, and Pennsylvania an increase of 133 per cent in the past three years. These are typical reports which indicate what is happening in the improvement of professional preparation for teachers generally.

Additional teacher-training institutions are established each year. In 1923 five such institutions were opened, and in five States money has been voted for the establishment of State normal schools which have not yet been opened for students.

Equality of Opportunity in Secondary Education

For a long time secondary schools, such as are found in every city, were infrequent in rural communities. Centralization and consolidation have made possible high schools in the open country comparable in their facilities to those situated even in the large cities. Practically all States now have legal provisions through which all children may attend a high school without direct tuition charge. In many cases tuition is paid from public funds of State, intermediate, or local district. Transportation at publie expense is a common expedient in the majority of our States. In every State extensive curriculum revision is carried out to provide education suited to community and occupational needs. So great has been this movement for secondary education in the rural communities that at the present time more than 80 per cent of all the high schools in the United States are located in the open country or in villages of less than 2,500 population, although the population served is less than 50 per cent of the total population.

Per Capita Cost Less in Cities

This movement is all the more remarkable when we realize that the per capita expenditures are much greater in these schools because of smaller attendance than in the city schools. Statistics collected by the Bureau of Education show that in many instances the per pupil cost in Virginia, Arizona, and other States in these small schools is sometimes almost 75 per cent greater than in large schools. The high costs in small schools are due very largely to the effort to provide a varied educational program. The success which has been achieved through consolidation, transportation, payment of tuition, and the establishment of high schools serving small pupil groups in rural communities is proved by the following data: In New York State 1.69 per cent of the pupil population of the rural districts were enrolled in high school as compared with the State average for all pupils, including the cities, of 1.64 per cent. In 1922 Montana enrolled approximately 32 per cent of the farm population of high-school age as compared with 33.6 per cent of nonfarm population. Oregon enrolled 50.6 per cent of the farm population as compared with 46.5 per cent of the nonfarm population. In Maine the corresponding percentages were 49 per cent as compared with 42 per cent; and in New Hampshire 52 per cent as compared with 49 per cent. In the States of Maine, New Hampshire, and Oregon there is as high and even higher percentages of teachers who are college graduates employed in rural high schools than in the city schools, and in these States all high schools are accredited by the same general standards.

It is often noted that tests of achievement have shown that children in rural schools are inferior to children in corresponding grades in city schools, but recent studies made in the Bureau of Education involving more than 18,000 high-school pupils from all States indicate that this inferiority is not due to inability to do the work of the school. Measured by standard tests in intelligence and by achievement through the high-school years, farm pupils show a normal distribution of ability. Compared to the nonfarm children studied they make slightly better progress through high school. The children tested in this study, farm and nonfarm, came up through the same school systems.

Equalization Through Buildings

In many rural sections of America to-day we can find school buildings as costly and as adequate for education purposes as we find in the larger cities. This has been brought about by statutory provisions requiring approval of all plans for school buildings by State officials by the policy of centralization and consolidation of small schools, by State appropriations for building and by standardization of school buildings through statutory provision or otherwise. The rapidity with which rural school buildings are transformed from the old inadequate, unsanitary and unattractive type into up-to-date buildings comparable in many instances with the best that can be found in the cities, is astonishing. One State reports 450 rural schools which were rebuilt during the past year to meet specific requirements set up after inspection by members of the State department of education. Another State reports 246 rural schools inspected and improved. Another reports that during the past decade in which the present law has been in effect 1,100 new schoolhouses have been built and many more remodeled, while still another reports that 1,000 will qualify for State standards during 1924–25. Altogether 19 States have recently reported to the bureau marked and definite progress in the improvement of rural school buildings.

High Ideals may be Realized

There are numerous other phases at which we are aiming toward our goal of equalization in educational opportunity. A good deal might be said of what is accomplished through general activities, through improvement of laws relating to rural schools, and especially about the equalizing tendency resulting from the movement for State courses of study, but this short and cursory review must come to an end. We have presented in the merest outline some of the significant and conspicuous developments which are raising to a higher level all the schools of America and hastening the coming of the day when all boys and girls, wherever they may be born, may find readily accessible to them an education through the secondary school, under adequately and professionally prepared teachers, with courses of study scientifically adapted to their needs, in buildings which are comfortable, beautiful, and sanitary.

Normal Schools Require Proficiency in Elementary Subjects

Examination in elementary subjects was made a requisite by the board of education of New Jersey, in 1922, for entrance to the State normal schools. So great was the number of high-school students who failed to qualify, that reviews in spelling, English, and arithmetie have since been conducted regularly in the schools. The result is that 68 per cent of the applicants for normal schools were able to pass this examination in June, 1923, and in the examination held in December, 1924, the percentage of those who passed had increased to 74.

Establishment of a municipal university is under consideration in Boston. The city council in September, 1924, requested the school committee to consider the advisability of such action and to report the findings to the city council. The board of superintendents recently made a report to the school committee in which the establishment of a municipal junior college was suggested.

The Child with Imperfect Hearing in the Public School

Service of Alexander Graham Bell in Directing Attention to Number of Pupils with Impaired Hearing. Defects Often Not Suspected by Teachers. Efficient Lip-Readers Should Teach Many of the Children

By FRED DELAND, *Bethesda, Md.*

THOUSANDS of pages tell the story of the invention of the electric speaking telephone by Alexander Graham Bell and of the numerous honors he received for his many scientific achievements. Hundreds of other pages tell of his contributions to the betterment of the race; to his life-long unselfish efforts to help regain and preserve for deaf children their rightful heritage of equal educational opportunities.

But here is a phase of his services in behalf of the child handicapped with imperfect hearing that should interest the present generation of teachers of hearing children in our public schools. More than 40 years ago Alexander Graham Bell repeatedly called attention to the increasing prevalence of imperfect hearing, not only among adults, including teachers, but among pupils in public schools for hearing children. He earnestly endeavored to have the public and the profession understand the difficulties such public-school pupils experience in striving to keep up with their classes, and how discouraged and morbid a sensitive child may become whose sense of hearing is even slightly impaired. He never called such children deaf, nor even hard of hearing. To him they were children with imperfect hearing; not yet deaf enough to be sent to a school for the deaf, but rightfully entitled to the services of a special teacher qualified to teach them how to use the eye road to the brain. For the State constitution promises equal educational opportunities to all.

Slight though many of these cases of impaired hearing probably are, yet, if most cases of "imperfect hearing" are of the slowly progressive type, prompt remedial measures might result in restoring normal hearing conditions in some cases, and thus save some pupils from later experiencing miseries inherent in the condition known as loss of hearing in adult life. That is why he thought the hearing of all pupils should be tested by competent physicians at least once each year.

Often this impairment in hearing is unsuspected by teacher and parent. Teacher is apt to think the pupil is dull and inattentive. Parents regret that the child is not as bright as the other children. Meanwhile the pupil is becoming despondent because of inability to keep up with the class.

How many pupils have imperfect hearing? There are no authoritative statistics. Thorough tests would probably show that in 25 per cent of all pupils the sense of hearing is impaired in some degree, and that in many of them the hearing is so imperfect that the services of a teacher who is a lip reader herself should be employed to help such pupils to become lip readers while some remnant of hearing remains. Unless the teacher is herself an efficient lip reader, there is apt to be less sympathetic understanding of the difficulties that pupils with imperfect hearing have to contend with. It is that sympathetic understanding that makes the hard-of-hearing teacher of lip reading such an efficient instructor of the hard-of-hearing adult. For the pupil with imperfect hearing in the public schools the teacher with good hearing will probably be the better teacher, provided she is an efficient lip reader; otherwise it is doubtful if she will be.

Special Attention to Library Work for Children

A six weeks' course on school library work will be given by the New York State Library School, Albany, N. Y., July 6 to August 15. Special attention will be given to book selection for children, reference work, and teaching the use of the school library to pupils.

Applicants who have had two years of college work or are normal school graduates, not over 40 years of age, will be given preference. No tuition charge will be made for residents of New York; other students will pay $20 for the course.

Of Such Is the American Republic Constituted

Among pupils in the New Haven (Conn.) public schools are representatives of 45 different nationalities or racial stocks, not including white Americans, who number 9,291 out of a total enrollment of 32,266. Italy sent the largest group, 11,869: Russia came next, then Poland, Ireland, England, etc. The countries contributing ranged from the West Indies, through Europe to Asia, Ceylon, Australia, thence to South America, and Canada. Pupils born abroad numbered 1,057.

Individualized Instruction Discussed in Philadelphia Conference

How school children may be taught individually so that they may advance through school according to their respective abilities was a topic discussed at a conference held at the University of Pennsylvania, Friday, March 27. The program for the conference was prepared cooperatively by the Bureau of Education of the Department of the Interior and the School of Education of the University of Pennsylvania.

Among those who took part in the program were Miss Helen Parkhurst, principal Children's University School, New York City; A. J. Stoddard, superintendent of schools, Bronxville, N. Y.; E. E. Windes, associate specialist in rural education, Bureau of Education; Dr. Lucy W. Wilson, principal of the South Philadelphia High School for Girls; Miss Ruth Penfield Sill, Philadelphia Trade School for Girls; and Dr. A. J. Gerson, associate superintendent of schools, Philadelphia, Pa., W. S. Deffenbaugh, chief, city schools division, Bureau of Education, presided.

It was pointed out by the speakers that some administrative plan should be worked out so that the individual differences in children may be better provided for than under a "lock-step" system of semiannual promotion. The advantages and the disadvantages of the Dalton and other plans of individualized instruction were discussed.

Mechanical Aid to Intelligence Testing

A new machine to tabulate and average tests of mental abilities has been designed by Prof. Clark L. Hull, of the psychology department of the University of Wisconsin. Its purpose is to aid in vocational guidance, especially of adolescents from 14 to 24 years of age, by determining their present aptitude and ability.

The mechanism, called "an automatic correlation computing machine," stands in the university laboratory and is operated by electricity. Half the expense was furnished by the National Research Council, and it was constructed by the university's chief mechanician and a mechanic under Professor Hull's supervision. In describing its operation, the designer said: "I put a series of psychological tests in the machine, the computation of which ran into hundreds of numbers, pushed the button, and went out to lunch. When I returned, the paper had run through the machine, compilations running into columns were completed, and the machine had automatically shut itself off."

One-Teacher Schools Still Upheld in Many Communities

Local Sentiment Sometimes so Clings to Ungraded Schools that Their Veriest Faults Appear as Virtues. Veteran County Superintendent in Nebraska Stoutly Defends the Small School. Approval of His People Shown in Elections

UNGRADED one-teacher schools, with the traditions of generations about them and with their supposed economy of operation, are so firmly fixed in the lives of thousands of Americans that all the arguments for consolidation and all the examples of

One-teacher school in a German community

communities which are ranked as progressive have failed to make appreciable headway against them in the minds of those persons.

The Bureau of Education is and has been for many years committed to the advocacy of consolidation of rural schools when the circumstances justify it. Intelligent application of this policy requires full consideration of the views of those who oppose it in whole or in part, and also an examination of the reasons which animate those who maintain separate schools for small numbers of children under conditions which appear to be altogether favorable to consolidation.

Simultaneously with the description of the school organization of Portage County, Ohio, which is printed on another page of this issue, a letter came to the Bureau of Education from F. J. Vogltance, superintendent of public instruction of Colfax County, Nebr., describing the schools under his control.

In physical characteristics the two counties are similar. Both are on the level prairie and intersected by small streams. The Platte River forms the southern boundary of the Nebraska county. Colfax County covers 405 square miles and has a population of about 12,000. Portage County with an area of 521 square miles contained 36,269 persons in 1920. Agriculture is the principal pursuit in both counties, but the towns in the Ohio county are larger, more numerous, and not so distinctly of the agricultural type as those of the Nebraska county.

Both communities are composed of energetic, thrifty, and prosperous people, typical of their respective States. A characteristic of Colfax County is the existence of a few settlements composed almost wholly of persons who retain in great degree the national customs of the countries from which they came. One of these settlements, for example, is Irish and another is German. English is the medium of instruction in all the schools, however, and little appears in the schools themselves to show the difference in the nationality of the pupils.

The striking contrast between the schools of Portage County and those of Colfax County is in the adherence of the officers and people of the latter to the one-teacher schools. The reasons advanced are typical, and it is well worth while to set them forth as they are presented by Superintendent Vogltance. The statements following were taken from his letter and from documents which he furnished.

Colfax County contains 60 school districts. In 53 of them one-teacher schools are maintained; 3 schools have 2 teachers each, and 1 school 3 teachers. Six of the districts are classed as town districts. Four standard high schools are maintained in the county and some secondary instruction is given in four other districts.

One of the one-teacher schools enrolled only 6 pupils in 1923–24, and 18 enrolled 15 or fewer. Only one one-teacher school had as many as 38 pupils enrolled; the average was 18 per school.

The question of consolidation has been presented several times to the voters of Colfax County or parts of it, and every time the negative vote has been overwhelming. The elements which influenced the voters and are effective in maintaining the present form of organization are thus stated by Superintendent Vogltance:

1. The average tax for 1923–24 in one-teacher school districts was 2½ mills per dollar; in two and three teacher districts, 2¾ mills; in the four high-school districts, 11.9 mills. The extension of "high-school districts" is considered unprofitable, and the feeling is that it is cheaper for a

A standard school in the open country.

farmer to pay for his child's room and board in town for four years than to pay the high-school tax all the time. Automobiles are numerous in the county; there is one to every four in the population. Many pupils drive from their homes in the country to the high school in the town in their own cars.

Standard school in an Irish community

2. Every pupil in a one-teacher school sees and hears every other pupil recite, and he therefore learns from the experience of others. A child in such a school is practically in every grade of it as long as he is in that school. Pupils often enter the one-teacher schools unable to speak a word of English, yet before the end of a year they speak the language and understand it, simply by hearing it constantly and associating with those who speak it.

3. In the one-teacher schools, pupils are promoted by subjects rather than grades, and often actually make greater progress than those in the graded schools, because the instruction is largely individual.

4. Any pupil in a one-teacher school may recite in the classes in which he can keep up. His progress, therefore, is natural; there is no hindrance.

5. Pupils generally must solve their own problems unaided, and thus develop independence of thought and self-reliance. In this the ungraded schools, though apparently at a disadvantage, are superior.

6. It is easier to safeguard the morals of children in a small school than in a large one.

7. The obstacles and inconveniences of the average rural school prepare the child for the battles of life. It is the wind and the storm that season the oak.

The schools of Colfax County are in general well built and well equipped. Fourteen of the fifty-three one-teacher schools are classed as "standard schools" under the State law.

Many schools other than the 14 already declared standard meet the requirements in nearly all particulars. All the schools of the county are open nine full months and no teacher has had less than a complete high-school course. In the 53 one-teacher schools are 4 pianos, 20 phonographs, and 32 organs. Seven have telephones and 2 have electric lights. All but two have good reference books and all have some library books. Steam heat is provided for one of the buildings and six others have basement furnaces. A few of the smallest schools are heated with the same kind of stoves that are used in the homes of the pupils.

Only one school in the county has less than one acre of playground and some have as much as two acres. Physical exercise is emphasized, but playground apparatus is not provided nor favored because of the damage to it during the summer vacation in which it can not have proper care.

The majority of the people of the county know little of the objections urged against one-teacher schools. They are satisfied with the organization of the schools they have and constantly strive to make them better. Arguments for centralized schools with motor transportation do not appeal to them, for they prefer for their children to walk 2 miles to an ungraded school rather than to ride 12 miles, for example, to a graded school.

Supervised Study Increases Promotions by One-Fourth

From 20 to 30 per cent more promotions are made by the students in our classes which have supervised study than in those classes which do not have it. Our supervised study is really supervised. The teacher does not sit at her desk and let the pupils wander about in study, but she goes from desk to desk and sees that intelligent interpretation of the text is going on.

Supervised study in these times is becoming a necessity, because of the large number of homes that have not time to give the children an opportunity to do school work in the home. Moving pictures every night, auto riding every night, radio all the time, dances in between, compel supervised study in the schools if school work is to go forward.—*T. C. Clendenin, Superintendent of Public Schools, Cairo, Ill.*

Dormitories for non-resident students continue to be recognized as an essential part of the high school plant in a number of Montana schools. During the past two years, however, several dormitory homes were discontinued because of low enrollment and consequent increased per capita cost to students.

One teacher school in a Bohemian community

Responsibility of Schools for Conservation of Vision

"THERE is urgent need in our public schools for twenty times as many sight-saving classes—special classes for children with seriously defective vision—as now exist," declared Lewis H. Carris, managing director national committee for the prevention of blindness, in an address before school superintendents from all sections of the United States. "There are at present," Mr. Carris said, "approximately 200 sight-saving classes scattered about the country, whereas approximately 5,000 such classes are needed.

"There are in the United States," according to Mr. Carris, "at least 50,000 children with such seriously defective vision that they are unable to keep up with the work of normally sighted children. In most communities one of three things is happening to these unfortunate children: They must attend school with normally sighted children, thereby further endangering what little sight they have, and at the same time bearing the stigma of 'dunces'; they are kept out of school altogether and are thereby deprived of an education; or they are sent to schools for the blind where, because of their partial sight, they are frequently used as eyes by the entire school with harmful psychological effects on themselves as well as on the blind children.

"There is need for one sight-saving class in every group of 5,000 school children. There is also need for much more large type material for use in sight-saving classes and in the homes of children with seriously defective vision."

Mr. Carris urged the superintendents to acquaint themselves with the splendid work being carried on in the sight-saving classes in Cincinnati, which, he said, is one of the very few cities having enough of these classes to take care of all its children with seriously defective vision.

Our Next Ten Years

"AS THE FUTURE grows out of the past, so any prophecy concerning the way ahead must be based on work already done," said Ella Victoria Dobbs, president of the National Council of Primary Education, in an address, "Our next 10 years," before the council.

"The council began in a rather spontaneous gathering of women," who, finding themselves possessed of common interests and ideals, pledged cooperation toward their attainment. These common ideals were expressed in a platform of three brief pinrciples—"a greater use of activities in the primary school, greater freedom of method for the primary teacher, and greater continuity of purpose through closer cooperation with the kindergarten below and the grades above." Out of their profound faith in the value of self-expression as a means of growth, they adopted a policy of free discussion of a common topic. This led to a campaign for smaller classes, movable furniture, and better equipment, that some of the happy activities of the kindergarten might carry over to the first grade.

"Emphasis upon activities led to more general appreciation of the distinction between mere busy work and purposeful activity. The emphasis shifted still further from the time-filling idea of busy work, till free activities were seen in their full significance as the ultimate test of what has been accomplished. Instead of being subordinate and secondary, they came to stand out as the goal toward which the teacher's efforts are directed.

"The emphasis upon these points made more significant the demand for better-trained teachers. Freedom is dangerous in the hands of the unfit. The day is past for the notion that 'anybody can teach little children.' The next decade will undoubtedly show great strides in our understanding and scientific control of problems of early education.

"Already the interaction and cooperation between kindergarten and primary have been beneficial on both sides. Mechanical processes are giving way to more natural activities which develop out of daily experience, and our best primary schools appear as good kindergartens grown large—real child gardens. So the next 10 years may be expected to see a similar continuity of purpose throughout the elementary grades. In the developments ahead, we may confidently expect to find our organization standing on a broad and firm foundation of actual accomplishment in which instead of the question 'Can this child do the work of the second grade?' we will say to the grade above 'This is the foundation of accomplishment thus far attained—build upon it.' "

Science Interests of Rural and of Urban Children

Rural-school children in New York State ask many questions in the field of the biological sciences and but few in that of the physical sciences. City-school children are more interested in physical than in biological sciences, according to surveys made in a few city schools in the United States and Canada. These findings were discussed by L. Laurence Palmer, professor of rural education in Cornell University, at a meeting of the American Nature Study Society which was held in Washington, in conjunction with the recent meeting of the American Association for the Advancement of Science.

The New York investigation is based upon correspondence with about 6,000 teachers in each of the past four years. In order to find out what the nature interests of rural children are Professor Palmer asked the teachers the following question: "What interesting questions in nature study have your pupils asked of you? Indicate the number of years the child asking the questions has been in school."

The greatest objection that might be raised concerning the results is that the type of assistance in science teaching given the teachers has been reflected in the questions asked, Professor Palmer said. This assistance has been in the form of small manuals—40 to 80 pages—issued and distributed by the Department of Rural Education of Cornell University, dealing with the following subjects: Field of science; invertebrate animals; birds; mammals; reptiles and amphibians; fish; woody plants; herbs; geology, meteorology and astronomy; and agriculture.

Professor Palmer believes that the elementary science interests of rural and city children should be considered in preparing a course of study. So far, he says, there is no distinction either in content or method in any of the State outlines. The differences should be, he says, not so much in content as in approach and method.

The present available data on the scientific interests of city children is not yet comprehensive enough to compare it with the facts found in the New York study, chiefly because it does not cover a long enough period of time, and because it includes senior and junior high-school pupils, as well as those of the elementary school grades. Professor Palmer hopes that the New York study will encourage others to collect from the cities data comparable to that collected by Cornell University during the past four years.—*Edith A. Lathrop.*

Bureau of Education's Latest Publications

The following publications have been issued recently by the United States Bureau of Education. Orders for them should be sent to the Superintendent of Documents, Government Printing Office, Washington, D. C., accompanied by the price indicated:

American school buildings. Fletcher B. Dresslar. 100 p. 45 plates. (Bulletin, 1924, no. 17.) 45 cents.

Contents: 1. Location of a schoolhouse.—2. Soil and drainage.—3. Protection against dampness.—4. Planning.—5. Construction and equipment.—6. Lighting.—7. Heating.—8. Ventilation.—9. Toilets.—10. Disposal of sewage.—11. Baths.—12. Swimming pool.—13. Gymnasiums.—14. Playgrounds.—15. Laboratories.—16. Assembly rooms.—17. School architecture and school improvement.—Appendix: Orientation of buildings in Southern States.

Land-grant college education, 1910 to 1920. Pt. I. History and educational objectives. Ed. by Walton C. John. 51 p. (Bulletin, 1924, no. 30.) 10 cents.

List of references on education for citizenship. 16 p. (Library leaflet no. 30, January, 1925.) 5 cents.

Statistical survey of education, 1921–22. Frank M. Phillips. 30 p. (Bulletin, 1924, no. 38.) 5 cents.

Statistics of state school systems, 1921–22. Frank M. Phillips. 42 p. (Bulletin, 1924, no. 31.) 5 cents.

The trend of college entrance requirements, 1913–1922. Harry C. McKown. 172 p. (Bulletin, 1924, no. 35.) 20 cents.

Contents: 1. Introduction.—2. The methods of admission to college.—3. The unit and unit requirements.—4. Academic requirements for entrance to college.—5. Personal requirements for entrance to college, and limitation of enrollment.—6. The flexibility of college entrance requirements.—7. A comparison of the colleges of five sections of the United States in the various phases of entrance requirements.—8. Summary and conclusions.—Appendix.

—*Edith A. Wright.*

Schoolhouse Becomes a Hospital for a Day

Paternos (Wash.) Parent-Teacher Association has rendered a unique community service by arranging for a clinic for surgical operations on school children suffering from throat diseases. Diseased tonsils were removed in one day from 26 children, and adenoids from 10 of the 26. The schoolhouse was converted into a temporary hospital. A Wenatchee surgeon, a local doctor, and six trained nurses rendered the skilled service. Except for a noon intermission, the operations were performed continuously from 9 o'clock in the morning until 6 at night.—Washington Education Journal.

Relation of Class Size to Efficiency of Teaching

A STUDY of the relative value of instruction in large and small classes was conducted in four Ohio cities—namely, Akron, Cincinnati, Cleveland, and Toledo, according to P. R. Stevenson, research associate in Ohio State University, in an address before the Educational Research Association.

"Data were secured from 124 elementary classes in grades 2, 5, and 7. The same pupils were taught one semester in the small class and another semester in the large class by the same teacher.

"The results show that, as teachers now teach, the large classes are approximately as effective as classes one-half their size. Of the three grades examined, small classes were of most benefit to the second grade, a little less effective in the fifth grade, and least effective in the seventh grade. Average school procedure in forming size of classes is just the reverse to date.

"In order to determine the progress of pupils in large and small classes, a series of standardized tests in arithmetic, language, grammar, spelling, reading rate, and reading comprehension, were given at the beginning of the experiment, after a period of 10 weeks, and at the end of another 10-week period.

"Common sense leads us to believe that there must be some point beyond which the size of a class can not be increased without decreasing the efficiency of teaching. Bright children can be taught to advantage in large classes in all the elementary grades tested. The dull pupils, on the other hand, can do their best work when classes are relatively small. The average pupils receive most efficient instruction in medium size and large classes.

"One of the necessary steps in future studies of class size is to determine the type of teaching technique that is best adapted to small classes and large classes. It is evident from the results that teachers either loaf on the job when the classes are small or that their efforts to help the pupils have the contrary effect. The main advantage of small classes, according to the opinion of most educators, is that the teachers can give individual instruction. Either this individual instruction hinders the children in their development or the teachers do not give it."

Report of the National Committee on Reading

"VIGOROUS emphasis should be laid from the beginning on thought-getting and the subordination of the mechanics of reading to thoughtful interpretation," Dr. William S. Gray, of the University of Chicago, told the National Society for the Study of Education in presenting the chairman's report of the national committee on reading.

Doctor Gray reviewed the work of the committee as follows: "The national committee on reading was appointed by Dr. Jno. J. Tigert, United States Commissioner of Education, in 1923, at the suggestion of a representative group of school men. The specific task assigned to the committee was to prepare recommendations concerning important issues in the teaching of reading for the use of school officers and teachers. The recommendations were to be based as far as possible on the results of scientific studies, and on expert opinion where sufficient evidence was lacking. The committee carried on its work for approximately two years, meeting at frequent intervals for group conferences, criticisms, and constructive suggestions.

"The report of the committee appears as part 1 of the Twenty-fourth Yearbook of the National Society for the Study of Education. It considers practically all the major problems of reading instruction as indicated by the following topics: Reading activities in school and in other life activities; essential objectives of reading instruction; an organized program of reading instruction for the grades and high school; the problems of word recognition; the relation of reading to literature and to the content subjects; the materials of reading instruction; provision for individual differences; the use of tests; diagnosis and remedial work; and how to reorganize reading instruction in a school system.

"The adoption of the major recommendations of the committee should result in vitalizing and improving the teaching of reading."

A summary of the committee's outstanding recommendations appears on page 3 of the cover of this issue.

New Books in Education

By JOHN D. WOLCOTT
Librarian Bureau of Education

ANDERSEN, W. N. A manual for school officers—superintendents, principals, and board members. New York and London, The Century co., 1925. xvii, 383 p. 8°. (The Century education series, ed. by C. E. Chadsey.)

This comprehensive handbook for school officers of all kinds offers practical suggestions, concrete illustrations, and helpful information designed to aid in the solution of a great variety of administrative problems and situations, particularly of the smaller school systems. It is based on tried and accepted educational principles.

CLEVELAND FOUNDATION COMMITTEE. SURVEY COMMISSION. Survey of higher education in Cleveland. Cleveland, Ohio, The Cleveland foundation committee [1925] xv, 11–487 p. 12°.

The commission making this survey was composed of Dr. George F. Zook, of the Bureau of Education, chairman, and eight other members. A comprehensive study was made of the needs of Cleveland in the several fields of higher education, with particular reference to the development of Western Reserve University and the Case School of Applied Science in some cooperative organization to meet these needs. In addition to the academic part of the college curriculum, the facilities and needs for commercial, professional, and technical studies, and for graduate work and research, were investigated. The report also contains constructive suggestions for the future development of higher education in Cleveland.

GESELL, ARNOLD. The mental growth of the pre-school child. A psychological outline of normal development from birth to the sixth year, including a system of developmental diagnosis. New York, The Macmillan company, 1925. x, 447 p. illus., tables, diagrs. 8°.

The aim of this work is to give a systematic view of the entire pre-school period of development. The author notes that current tendencies in child hygiene and education are bringing the pre-school years into a new perspective. The basic data of this study furnish an outline of the psychology of infancy, by bringing into systematic view cross-section behavior pictures of the ascending stages of development. The emphasis throughout is on the normal aspects of behavior. The application of norms of development to problems of developmental diagnosis and supervision is treated in the concluding sections.

HARRIS, GARRARD. Elements of conservation. Richmond, Va., Johnson publishing company [1924] viii, 214 p. front., illus. 12°.

A textbook such as this for school use, on the practical subject of conservation of natural resources, is an unusual publication. The volume is especially adapted to conditions in the Southern States.

LIGDA, PAUL. The teaching of elementary algebra. Boston, New York [etc.] Houghton Mifflin company [1925] xvii, 256 p. diagrs. 12°.

Elementary algebra, in its traditional form, is said to be the least satisfactory of our secondary-school mathematical courses. The author analyzes the reasons for this situation, and proposes a remedy, while discussing the following fundamental topics: Lack of proper motivation, the inductive method, relationships, use of the function concept in unifying the subject, fundamentals, and the characteristic formula. The final chapter is a justification of algebra in school and in life, showing the practical value of algebra in everyday activities.

OTIS, ARTHUR S. Statistical method in educational measurement. Yonkers-on-Hudson, N. Y., World book company, 1925. xi, 337 p. tables, diagrs. 8°. (Measurement and adjustment series, ed. by L. M. Terman)

The purpose of this manual is to equip teachers and preparatory students of education with the knowledge of statistical method required for interpreting and understanding the results of educational measurement. The principles of statistical procedure are here presented in a concrete and readily intelligible form, in distinction from other books on the subject which are designed for advanced graduate students of psychology and education.

SEARS, JESSE B. The school survey; a textbook on the use of school surveying in the administration of public schools. Boston, New York [etc.] Houghton Mifflin company [1925] xxx, 440 p. tables, diagrs. 12°. (Riverside textbooks in education, ed. by E. P. Cubberley)

During the past fifteen years the method of experimental research has been applied in education, and educational procedure of all kinds has come to be based more and more upon scientifically ascertained facts rather than upon mere experience or opinion. The practice of making surveys of school systems and of educational institutions has spread widely and exercised a great influence during the period named. This practice naturally culminates in the establishment of permanent bureaus of school research in cities and other communities. Prof. Sears's volume is designed to meet the need of a concise manual of the principles and technique of school surveys, for the use of students of education, and for the guidance of school administrators.

SISSON, EDWARD O. Educating for freedom. New York, The Macmillan company, 1925. xxiii, 225 p. 12°. (The Modern teachers series, ed. by W. C. Bagley)

The attainment of ordered freedom for all is the ideal of education in a democracy. This volume calls attention to the fact that along with our present great expansion in population, in material resources, and in scientific and mechanical power, there are certain conditions in American life to-day which are cause for deep concern and which are to be met by proper education. The author analyzes the present civic and moral status of the American people and the tendencies for the future. Education is discussed with reference to freedom, union, patriotism, civic duty, and world order. Attention is also given to the educative use of history and to Abraham Lincoln and American education.

STEVENS, EDWIN B., *and* ELLIOTT, EDWARD C. Unit costs of higher education, reviewed and presented by the Educational finance inquiry commission under the auspices of the American council on education, Washington, D. C. New York, The Macmillan company, 1925. xv, 212 p. tables, diagrs., forms. 8°. (The Educational finance inquiry, vol. XIII.)

The study made by the educational finance inquiry commission includes the tax-supported institutions of higher education, as belonging to the same system with the public elementary and secondary schools. This volume contains the following for a typical group of State higher institutions: (a) a detailed description of a technique for the classification of institutional expenditures, and (b) the correlation of these expenditures with student and other services so as to display definite, accurate, and comparable cost data. The unit cost technique here developed will probably be found readily adaptable as well to privately controlled institutions of higher education.

TAYLOR, HOWARD. Introduction to educational psychology; a manual for an introductory course. Baltimore, Warwick & York, inc., 1925. 172 p. 12°.

This book presents in outline form the leading facts and problems of educational psychology which the author considers of vital importance in teaching. The material is chosen and organized from the point of view of the student who is just beginning to prepare for teaching as a profession and is in shape to use either as a syllabus in connection with any elementary textbook in educational psychology or as an outline of the course in place of a text. References for reading are given at the beginning of each chapter.

THOMAS, JOHN M., *and* ESPENSHADE, A. HOWRY, *eds.* Bible readings for schools and colleges. New York, The Macmillan company, 1925. xix, 288 p. 8°.

The practice of reading a selection from the Bible at the opening exercises of public schools is now very generally observed in most States of the Union. The selections in this volume have been chosen in order to make available the great passages from both the Old and New Testaments for reading without repetition in the course of a school year. The book is also suitable for use in private schools and colleges that hold chapel services. A table of passages appropriate to special days and occasions is included. The text used is that of the authorized version.

THURSTONE, L. L. The fundamentals of statistics. New York, The Macmillan company, 1925. xvi, 237 p. tables, diagrs. 8°. (Experimental education series, ed. by M. V. O'Shea.)

Beginners in the study of statistics, and also workers in mental measurement who desire a logical interpretation of the mathematical procedure involved, will find this text adapted to their use. Students of the results of current educational research need explanations as here given of the technical phraseology commonly employed in the reports of such work. This manual may serve as an introduction to subsequent study of more comprehensive textbooks of statistics.

WRIGHT, JOSEPH, *ed.* Selected readings in municipal problems. Boston, New York [etc.] Ginn and company [1925]. xviii, 961 p. diags., forms. 8°.

This volume comprises selected readings by standard authorities on the leading problems of government and administration of the modern city, with some attention also to its historical development from ancient and medieval times. One section is devoted to public education in cities, with articles by H. B. Davis, W. S. Deffenbaugh, F. W. Ballou, and Bruce M. Watson. The compiler, Joseph Wright, is superintendent of the library for municipal research at Harvard University.

Issues of Fundamental Importance in Teaching Reading

Summary of Outstanding Recommendations in Report of National Committee on Reading, Appointed by the United States Commissioner of Education in 1923

These, at least, are essential to a satisfactory program for the teaching of reading:

1. A broad conception of the aims of reading instruction, based on a clear understanding of its wide significance in school and other life activities.

2. Vigorous emphasis from the beginning on reading as a thought-getting process and the subordination of the mechanics of reading to thoughtful interpretation.

3. A clear recognition of the vital contribution of wide experience to good interpretation, with special emphasis on prereading experiences and the temporary postponement, if necessary, of formal instruction in reading.

4. Provision for wide reading as an essential means of extending experience and of cultivating strong motives for and permanent interests in reading.

5. A significant increase in the amount and variety of reading materials and a corresponding improvement in their quality.

6. A clear recognition of the fact that both recreatory and work-type reading are essential in a well-balanced program of instruction.

7. Definite provision for the systematic development and independent use of specific reading and study habits in all school subjects.

8. Emphasis on the enjoyment of literature as a means of fuller living, rather than on analysis and detailed study technique in this field.

9. New types of organization and procedure in classes made necessary by the adoption of broader aims of reading.

10. Adequate provision for differences in individual capacities, needs, and tastes.

11. The classroom use of informal tests as essential means of discovering group and individual needs.

12. The continuous study of progress toward the essential objectives of reading, namely: wide experience, strong motives for and permanent interests in reading, and effective habits and skills.

NOTE.—The conditions under which this report was prepared were discussed by Dr. William S. Gray, Chairman of the Committee, in an address before the National Society for the Study of Education. An abstract of that address appears on page 159 of this issue.

GAINS THAT COME FROM A PARENT-TEACHER ASSOCIATION

The Parents Gain—

A first-hand knowledge of their children's school life.

An intimate acquaintance with the teachers and an understanding of the school standards and methods.

A vision of the school needs.

The Teachers Gain—

An opportunity to know the parents of their pupils.

A convenient time to explain to them the requirements of the school.

A social relation that creates a partnership between the home and school.

The Community Gains—

A unity of purpose to advance the welfare of the children and to cooperate with the teachers to that end.

A determination to improve school conditions and to raise the standards of community life.

A conclusion that the schoolhouse is the logical place for social and neighborhood meetings.

—Kansas Congress of Parents and Teachers.

SCHOOL LIFE

Volume X
Number 9

May
1925

PLAYGROUND OF A DAY NURSERY IN LOS ANGELES, CALIF.

Published Monthly [except July and August] by the Department of the Interior
Bureau of Education Washington, D. C.

GOVERNMENT PRINTING OFFICE

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ACCORDING to the plan of distributing public documents, which is prescribed by the Congress, purchasers pay only a portion of the actual cost. Preparation of copy, editing, type-setting, proof-reading, and the like are all done at the expense of the Government. The costs which are borne by the purchaser begin with actual printing from stereotyped plates already made; they include, therefore, only paper, press work, and distribution. The charge for SCHOOL LIFE is a good example of the advantage which the public derives from this system. The edition which is printed for official use, with 2,000 copies to be distributed to libraries, costs approximately 10 cents per copy; but persons who subscribe for the periodical through the Superintendent of Documents are required to pay only 5 cents per copy.

SCHOOL LIFE is an official organ of the Department of the Interior, Bureau of Education. It is published monthly except in July and August. The subscription price, 50 cents a year, should be sent to the Superintendent of Documents, Government Printing Office, Washington, D. C., and not to the Bureau of Education. Single numbers are sold at 5 cents each. For postage to countries which do not recognize the mailing frank of the United States, add 25 cents a year.

A SMALL LIBRARY of pamphlets and booklets, 48 in all, dealing with health and physical education, is issued by the Department of the Interior, Bureau of Education. Prices of the documents range from 5 to 20 cents. A list will be sent upon application to the Commissioner of Education, Washington, D. C.

SCHOOL LIFE

Published Monthly, except July and August, by the Department of the Interior, Bureau of Education
Secretary of the Interior, HUBERT WORK - - - - - *Commissioner of Education,* JOHN JAMES TIGERT

VOL. X WASHINGTON, D. C., MAY, 1925 No. 9

Relative Values of Physical Activities in High Schools

Suggestions for Bases of Measurement. Conclusion Reached that Walking is Most Valuable of all Exercises, and Every High School Should Encourage Hikes. Volley Ball, Playground Baseball, and Swimming Follow in Usefulness and Availability. Long-distance Racing is Last of 16 Activities. "Major Athletics" Best for Promoting School Spirit but Low in Value as Exercise

By HENRY S. CURTIS, M. D.
State Director of Hygiene and Physical Education for Missouri

ONE of the most significant advances in education during the past two decades has been in methods of measuring progress. Physical education has been at a great disadvantage in that it has had neither a measure of the values of its different activities, nor of progress toward their accomplishment. In offering the following scale (Table II), there is no thought that an absolute measure has been found. This paper is not a discussion of interschool athletics, nor of athletic activities in themselves, but only an attempt to measure their relative value in the high-school program.

The activities chosen are the ones that are already found in high schools. The characteristics on which they are rated have been selected as significant in conference with classes at Washington University and the University of Missouri. The activities are rated on the following nine points: Their appeal; their value in creating loyalty and cooperation; their exercise value; whether safe or dangerous; their value in producing good posture; the percentage of pupils who take part; the extent to which they are practiced outside, and the number of years they are continued.

Should Appeal to Students—not Spectators

The first characteristic studied is the appeal to the student body, by which is not meant its appeal to the spectator, but to the participant. Nearly 60 per cent of high-school students are girls. Even though football were the first choice of all boys, its appeal would still be to only about 40 per cent of the student body. Physical education is much more important for girls than for boys in the school program, inasmuch as boys are much more free and are more encouraged to organize their own activities outside. A much larger part of the girls' physical education must come through the school. Health, grace, and beauty, which are by-products of physical education, are much more significant for girls. The question of appeal is often greatly modified by the participation of upper classes, by the facilities offered by the publicity received, and by the quality of teaching. Hockey or soccer will not have any appeal in a community in which they are not played. The rating of appeal here given is based on the supposition that the game is played in the community, as hockey is in England, or as volley ball is in certain communities.

Swimming the Most Attractive Exercise

In giving this rating of the 16 activities, they are so arranged that the one having the highest appeal is numbered 16 and the one with the least is numbered 1. According to this arrangement, swimming, which appeals to nearly all boys and girls, ranks highest. In city playgrounds it is found that children will go a mile and a half to a swimming pool, where they will not go more than a half mile to any other athletic facility. Basketball probably ranks second, and soccer third. At the bottom of the list is field athletics, by which we mean the hammer throw, the shot put, the discus, and javelin. In giving this rating we do not claim an absolute ratio, or that swimming has sixteen times the appeal of field athletics, but merely a relative ranking.

Value Increased by Social Enjoyment

Appeal of the activity to the child is important, because it is the determining factor in its practice outside of school and continuance in future life. The value of activities that are enjoyed is much greater both physically and socially than of activities which are not enjoyed.

The second value is loyalty. Loyalty is fundamental in good citizenship, in community membership, and in a democracy. The great school of loyalty is the team game. It reaches its fullest expression in football, though all team games cultivate this virtue. On the other hand unorganized and individual activities, such as field athletics, jumping, and swimming have practically no value in the development of loyalty, though incidental to any activity there may be loyalty to a leader.

The third test is cooperation. This is intended to include a series of social qualities such as cooperation, honesty, sportsmanship, and the like. In this the rating is almost identical with that in loyalty.

The fourth characteristic is the value of the activity as exercise. Here two considerations are fundamental; first its health and growth value, which comes mostly from the open air, sunlight, and the development of the vital systems of the body; second, how far does the train-

An address delivered before Missouri State Teachers' Association.

43063°—25†——1

ing given meet the needs of modern life. In this column soccer stands first; volley ball second; the short races third, and field athletics last.

The fifth rating is on safety or danger. On this basis, we have estimated football to be most dangerous, swimming second, and basketball third, while tennis, walking, and dancing appear to be about equally safe. Safety, however, is not as important as the other values selected. That danger might not be overemphasized, I have divided each of these scores by 2.

Posture Largely Dependent on Muscular Tone

The sixth score is on the corrective value of the exercise. Here gymnastics is given the first place and volley ball the second, though this does not apply to the majority of gymnastics. Most of the other exercises have practically no direct corrective value, but inasmuch as good posture is largely a matter of muscular tone, any exercise that improves this will have a certain value in improving posture. The exercises which do not have a direct value, but do have an indirect one, are given an arbitrary value of 4 in this scale.

Adding the six scores together, we secure a total score for each activity, and by dividing this total by 6 we have an average value of a class period of exercise. In this total, soccer stands first, volley ball second, basketball third, baseball fourth, and field athletics last.

What percentage of the students take part? It is possible for all to take part in walking gymnastics, playground baseball, swimming, tennis, short track events, and in volley ball, but in the half mile and the mile, the discus and the hammer throw, not more than 10 per cent participate. Multiplying the average value by the per cent taking part, we get the value of a period for the student body. In this column volley ball stands first, soccer second, playground baseball third, and field athletics last.

Exercises that Influence Later Life

But not all of education is obtained in school. This is particularly true of physical education where outside activities have at least as much to do with physical development as school exercises. One of the best criteria of value is how far the activity is carried over to out-of-school hours. We estimate that for every period given to walking we shall get four hours of walking outside; for each period given to baseball, football, and swimming, in the school program, we shall get two hours of practice outside. For basketball, dancing, field athletics, hockey, soccer, tennis, and the longer and shorter track we shall get one hour. For jumping, playground baseball, and volley ball we estimate only one-half hour. Multiplying the value which each exercise has per period for the student body by the number of hours' practice obtained, we have a new score, in which walking ranks first, soccer second, volley ball third, and field athletics last.

Walking First in Life-Long Usefulness

The final test of value for any activity is how far it carries over into life, how many months or years it is practiced after it has been taught at school. It is impossible to give a score on which all would agree, because different activities are practiced for different lengths of time in different communities, depending upon their popularity, the extent to which provision is made for them in the community, the social tradition, and many other things. A satisfactory rating can be given only on the supposition that the activity is practiced and that there are reasonably satisfactory facilities for it. We could not justly rate soccer on the extent to which it is now practiced in America. We must rate it rather on its popularity in England. Likewise, we can not rate volley ball on its popularity in Missouri at present, but rather in the Young Men's Christian Association and in colleges where for a number of years it has had a fair chance. On this basis, we estimate that walking, dancing, swimming, and volley ball may be carried on for 50 years, tennis for 40, hockey for 30, playground baseball and soccer for 20, while gymnastics ordinarily is not practiced outside. Multiplying the exercise value of the lesson by the number of years continued, we get a life value for the activity in which walking ranks first, swimming second, volley ball third, tennis fourth, and field athletics last.

The differences in values in Table I, running from 0.56 to 1,060, are startling. It is not claimed, of course, that swimming is one thousand times as valuable as field athletics. It may be only one hundred times as valuable. It may be that volley ball is not thirty times as valuable as football, but it would be almost impossible to score these activities on the characteristics indicated and have these scores reversed. I have gone over these tables a number of times and never score the activities twice alike, but the variations seldom make any difference in the relative rating. I have had these activities scored, too, by a number of university classes. There is great difference of opinion as to the value of the different activities, but the rating always comes out nearly the same.

Field Athletics of Relatively Low Value

In this total, the javelin, discus, long races, and football score from 0.56 to 19 in a column where swimming scores 870. The major athletics as a whole rank very low. This would not indicate, however, that the major athletics should be dropped. The great value of the so-called major athletics does not consist in their value as exercise, but in their effectiveness in creating school spirit and loyalty. Their effect on the spectator is much more significant than their effect on the team.

We are not concerned wholly, however, with the question of what is desirable in athletics or physical education, but to about an equal degree with what is feasible. We must often consider the cost involved and the space required. The cost of swimming and hockey is prohibitive so far as most schools are concerned. This may be said also of a gymnasium or equipping the student body with the armor necessary to play regular football. Likewise, space is a prohibitive factor in baseball, football, and hockey. Rating these activities on the basis of an average cost and space requirement, again walking ranks first, jumping second, volley ball third, playground baseball fourth, dancing fifth, and basketball sixth.

Walking Ranks Above all Other Exercises

Combining the rating of these activities as exercises with their rating on feasibility, we get a score in which walking ranks first, volley ball second, playground baseball third, and tennis fourth, showing that the ones with the greatest exercise value are also the most feasible ones in a school system. In all of these ratings, the value of the shot put, hammer throw, and discus in the high-school program is negligible. The long races make but little better showing. Gymnastics may be ranked too low, but could scarcely be given a primary place. Football is well down toward the bottom of the list. It is very difficult to score dancing, because dancing is of many varieties. Social dancing, folk dancing, æsthetic dancing, and interpretative dancing each have different values. The score has been given for a type of dancing which is found in high school, so far as any dancing is found, which means a combination of social

TABLE I.—*Feasibility in a school system*

	Cost	Space	Average	Rating on feasibility	Rating on exercise	Combined rating	Rating in a high-school program
Baseball	12	1	6.5	13	10	11.5	11
Basket ball	10	7	8.5	5	11	8	8
Dancing	2	13	7.5	10	8	9	10
Field athletics (discus, hammer, etc.)	9	6	7.5	11	16	13.5	14
Football	4	2	3	16	12	14	15
Gymnastics	3	11	7	12	14	13	13
Hockey	5	3	4	15	7	11	11
Jumps	15	15	15	2	12	7	7
Playground baseball	14	10	12	4	6	5	3
Soccer	11	4	7.5	9	5	7	6
Swimming	1	14	7.5	8	2	5	4
Tennis	7	9	8	6	4	5	5
Track 220−	8	8	8	7	9	8.4	9
Track 220+	6	5	5.5	14	15	14.5	16
Volley ball	13	12	12.5	3	3	3	2
Walking	16	16	16	1	1	1	1

dancing and folk dancing. Dancing may be had without any cost, but for class purposes a gymnasium floor is practically necessary, so the cost score is about the same as for gymnastics.

This is a study of the value of physical activities in the high-school program. If, instead, it had been a study of the value of the physical activities in the elementary-school program, the same activities would have been yet more strongly emphasized, while the major athletics would have held a yet lower place. The sports which seem to have the greatest value at school and in life are walking, volley ball, playground baseball, tennis, swimming, dancing, soccer, jumping, basket ball, and the short races. These are also much the cheapest to provide. They require the least space. They should be furnished in all school systems.

Probably walking represents nine-tenths of all the physical energy most of us develop, outside of the vital processes themselves. It is the only activity that most of us continue in after life. It is said that in walking 20 miles we raise the weight of our bodies vertically 1 mile. It is a decided advantage for students to have a good walk to and from high school. It is not necessary that the high school should be placed in the center of the city. Every high school should have a walker's guide and develop a series of 20 to 30 walks of from 5 to 20 miles each.

TABLE II.—*Value of physical activities in high school*

	Appeal	Creates loyalty	Demands cooperation, etc.	Exercise value.	Safety	Corrective value	Total score per period	Average value	Rating on value of a class period	Per cent of pupils participating	Average value to student body	Hours of exereise per lesson given	Exereise value of lesson	Years continued	Life value	Rating on total score
Baseball	7	14	14	8	5	4	52	8.6	4	40	3.4	3	10.2	10	102	10
Basket ball	15	13	13	11	2	4	54	9.6	3	50	4.8	2	9.6	6	58	11
Dancing	8	0	0	2	7	0	17	2.8	13	60	1.7	2	3.4	50	170	8
Field athletics	1	0	0	1	2	0	4	.66	16	10	.07	2	.14	4	.56	10
Football	6	16	16	7	1	4	48	8	7	20	1.6	3	4.8	4	19.2	12
Gymnastics	2	0	5	9	3	15	34	5.7	10	100	5.7	1	5.7	1	5.7	14
Hockey	5	12	12	12	4	4	46	8.1	6	40	3.2	2	6.4	30	192	7
Jumps	4	0	0	4	3	0	11	1.8	14	70	1.3	1½	1.9	4	7.6	13
Playground baseball	12	11	11	6	6	4	47	8.1	5	100	8.1	1½	12.2	20	244	6
Soccer	14	15	15	16	4	4	64	11.3	1	80	9	2	18	20	360	5
Swimming	16	0	0	13	1	7	35	6.1	9	100	6.1	3	18.3	50	965	2
Tennis	13	9	6	5	7	4	44	7.3	8	100	7.3	2	14.6	40	584	4
Track 220−	11	0	0	14	5	4	34	5.6	11	100	5.6	2	11.2	10	112	9
Track 220+	3	0	0	3	1	4	11	1.8	15	10	.18	2	.36	5	1.80	15
Volley ball	10	10	10	15	6	14	65	10.8	2	100	10.8	1½	16.2	50	860	3
Walking	9	0	0	10	8	4	32	5.3	12	100	5.3	4	21.2	50	1,060	1

Many American Universities are Heavily Endowed

Million-dollar endowments are possessed by 121 American universities. Naturally most of them are institutions under private control. State universities as a rule are not heavily endowed, and only 18 of them are in the millionaire class so far as their productive endowments are concerned. According to figures recently compiled by the Department of the Interior, Bureau of Education, Harvard University, with an endowment of $53,031,769, is the richest educational institution in the United States. Columbia is next, with $41,300,909, and Yale, Leland Stanford, Chicago, Cornell, Johns Hopkins, Carnegie, Princeton, Rochester, and Pennsylvania follow in the order named.

Harvard is first, too, in the value of buiidings, grounds, and equipment, for its plant is worth $22,800,000. Yale is a close second with $21,089,690; and Columbia, Pennsylvania, Chicago, Massachusetts Institute of Technology, and Leland Stanford follow in the list of private institutions.

University of Texas is the wealthiest State university in its endowment, for it has $11,013,028. California follows, with $8,407,775; then Washington, Minnesota, and Oklahoma, all of which have comfortable permanent funds. In value of property and equipment, University of California holds first place among State universities, with $17,782,539. Minnesota is next, with $14,759,642, and Michigan, Illinois, and Wisconsin follow in close succession.

Hopes to Reproduce New England Farm Life

A junior college and preparatory school of individual type has been founded at Avon, Conn., and will be opened September, 1927. The college property, known for a century and a half as Old Farms, consists of 2,000 acres, half of it forest, bordering on the Farmington River. The boys will do community work on the farm and in the shops, but Avon College will be essentially a cultural institution, and no trades will be taught. The aim is to reproduce the New England farm life of a few generations ago, and to offer a well-rounded program of activities which will develop equally the soul, mind, and body of each boy.

Apprenticeship Combined with School Work

Boys Who Can Not Attend High School Are Enabled to Earn Living After Leaving Elementary School

THROUGH cooperation of the school authorities of Ponce, Porto Rico, with employers in various trades, 45 boys in the eighth grade of the city schools received apprentice training after school hours, which enabled them to earn their living when the school year was over. This plan was instituted as an experiment to find out how industrial training can be given in the way best suited to local conditions so as to enable pupils who can not afford to go to high school to enter skilled work after completing the elementary grades.

The school authorities visited all the shops of the city, including bakeries, tailoring establishments, carpenter shops, potteries, photograph studios, blacksmith shops, and others, and explained the plan of apprenticing the boys after school hours. The shopowners, without exception, commended the idea and offered their help. After an investigation of the hygienic and moral conditions of the various shops, and the quality of work done, 14 shops were chosen, representing 11 trades, and the boys were assigned to the kind of trade they liked best.

The boys worked in the shops from 4 to 5 o'clock on school days and also a part of Saturday afternoons, averaging about six hours a week. Every week the shop managers filled in a report card to inform the school supervisor of the boys' attendance, diligence, and deportment. The principals of the schools attended by the boys commended the pupils with good records and urged those with poor records to do better.

It is expected that training the boys to become skillful in trades will develop in them a taste for engaging in this kind of work, and that other boys will be encouraged to take up trades. This will help to interest the people of the city in developing the arts and industries.

New York State College of Home Economics was established in connection with Cornell University by a recent act of the New York Legislature. It is claimed that it is the first college of its kind in the world.

Teaching evolution is barred in the public schools of Tennessee. A law prohibiting such instruction was passed by both houses of the sixty-fourth general assembly and was signed by the governor.

United States Navy a Trade School of Extraordinary Scope

Fundamentals of 22 Trades Taught in 36 Schools. Instruction Continued with Actual Experience at Sea. Life of a Recruit Resembles that of a Schoolboy. Intelligence Tests Play Important Part. Close Correspondence Between Results of Classification Test and Advancement for Satisfactory Service. Training of Navy Applicable to Civilian Occupations after Men Leave Naval Service

By CURTIS D. WILBUR, *Secretary of the Navy*

A PREVIOUS ARTICLE upon this subject in SCHOOL LIFE dealt with the wide diversity of occupations aboard a modern naval ship. It also outlined the general plan which enables the Navy Department to make its own vocational experts from the thousands of untrained men recruited every year. It was shown that it is necessary for the Navy to train most of these men to do the work of definite Navy trades, which are just as specific and just as technical in their requirements as the corresponding trades in civil life, because the repair work and upkeep of the ships at sea require the services of skilled mechanics, who can not be recruited from civil life.

The transition from civilian life to the life of a sailorman entails many changes in a recruit's mode of living. The first part of the training of every new recruit must deal, therefore, with his personal habits and reactions, and must indoctrinate him with the principles of personal hygiene and obedience to orders. When a new recruit goes aboard a crowded ship, he can not be lacking in habits of personal cleanliness, nor ignorant of the proper means of caring for himself and his belongings, without being a nuisance or a menace to other men who must live with him. He can not be entirely ignorant of the common routine, and of the naval customs on board ships, or he will be a hindrance to the necessary work and drills.

Careful Watch for Contagious Diseases

From the recruiting offices throughout the country, where all men are given a thorough physical examination before they are accepted for enlistment, the new recruits are sent to one of the four great training stations, located at Hampton Roads, Va.; Newport, R. I.; Great Lakes, Ill.; and San Diego, Calif. For the first three weeks after their arrival there they are kept at the "receiving unit" of these training stations. These are isolated units where all new recruits receive their first outfit of naval clothing, bedding, etc., of a total value of about $200; where they are inoculated against typhoid fever and vaccinated against smallpox; where they actually begin their training. These three weeks cover the incubation period of contagious diseases to which the men may have been exposed, and during that time they are quartered in small groups and are under constant medical observation.

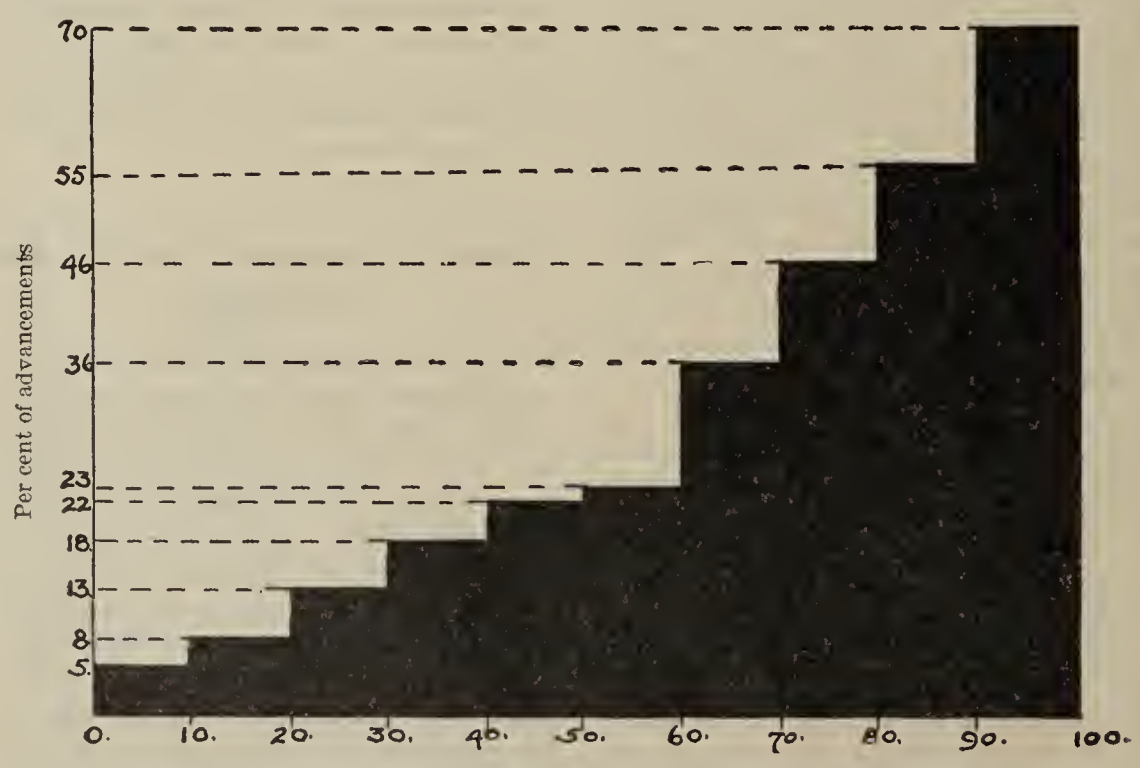
Introduction to Duties of Naval Life

When the recruit goes from the receiving unit to the main barracks of the training station he becomes a member of a well-organized military company. In addition to military training he receives instruction in swimming and in the handling of small boats. He gets an elementary idea of seamanship and nomenclature of parts of the ship. He learns something of the ordinary routine on board which will save him some of the helplessness that a landsman often feels at the beginning of his first cruise. But most important of all, he learns to respond quickly and intelligently to orders and to lay the foundation for that neat orderliness which characterizes the average man-of-war's-man, no matter what his previous training may have been.

One of the most noticeable results of training at our naval training stations is the decided improvement in the physical condition of the average recruit. This is due partly to the proper medical and dental treatment given to those in need of it. It is due also to the regular hours required of men; to the drills; to the setting-up exercises; and to the substantial, well-cooked food, served under sanitary conditions and at regular hours. The weight of each recruit is recorded when he reaches the station and again when he is sent to sea. It is not unusual for a man to gain 15 or 20 pounds in weight during his first eight weeks at the training station, and records show that the average gain for all recruits during this period is more than 6 pounds.

Diversions to Maintain Recruits' Morale

Some restlessness and homesickness are inevitable at training stations, as at any school, where many boys are away from home for the first time, but every effort is made to keep the new recruit busy and contented. Well-stocked libraries, church services, moving pictures, recreational facilities, and athletic contests, all free to the recruit, help to care for his leisure hours. Occasional leave is granted for



Relation between general intelligence and ability to win advancement in the Navy. The graph shows that only 5 per cent of the men who make less than 10 on the general classification test advance in the first year of their service and that 70 per cent of the men who make between 90 and 100 advance within that same period.

visits to near-by places. Every training station has a station football, baseball, basket ball, and track team. Interstation championship series are arranged which improve the spirit and morale in the same way that these athletic contests do at any boys' school or college.

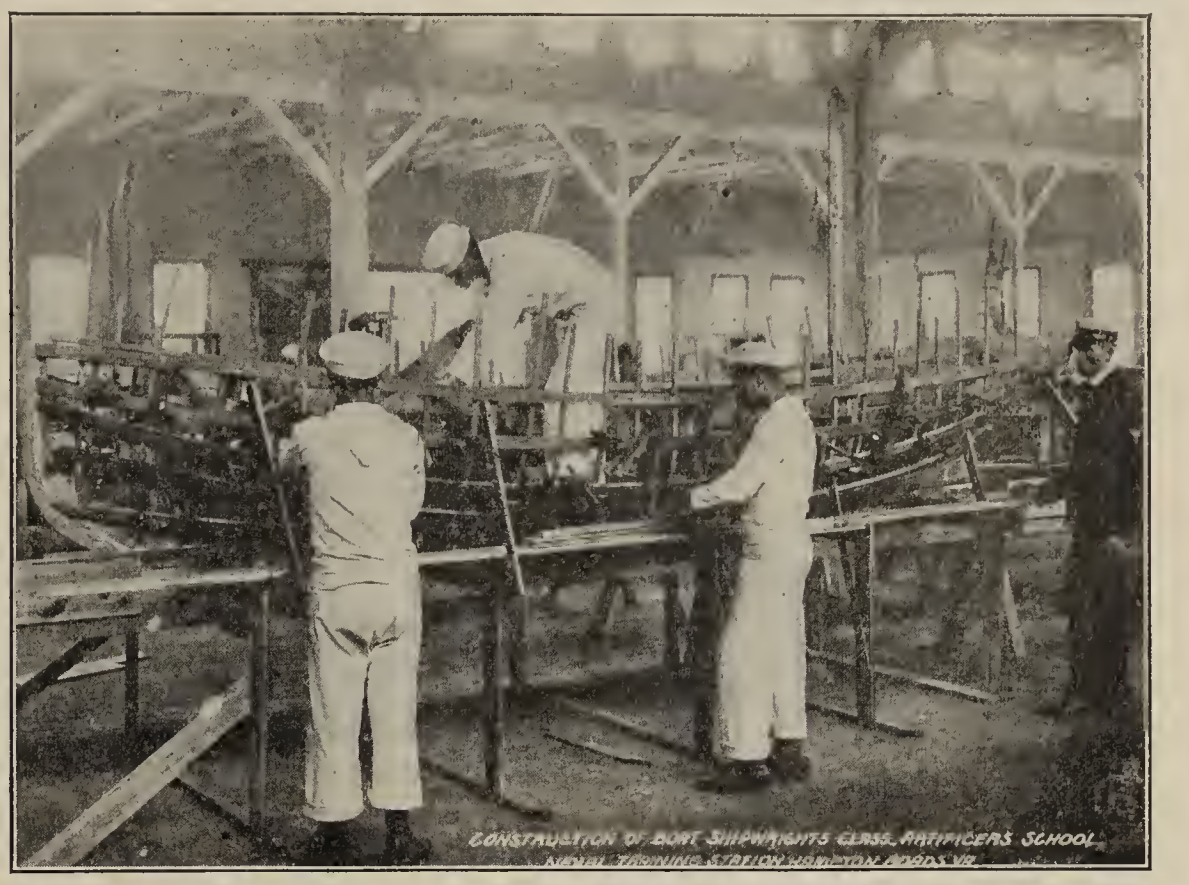
When the recruit arrives at the training station, official letters are written to his parents or next of kin—usually a formal letter from the commandant announcing his arrival, and a more personal letter from the chaplain giving his correct address for letters and urging them to write regularly to the man. Every facility and encouragement is offered to induce men to keep in regular correspondence with their homes, for this has been found to be an important factor in contentment and morale.

Preferences and Previous Training Considered

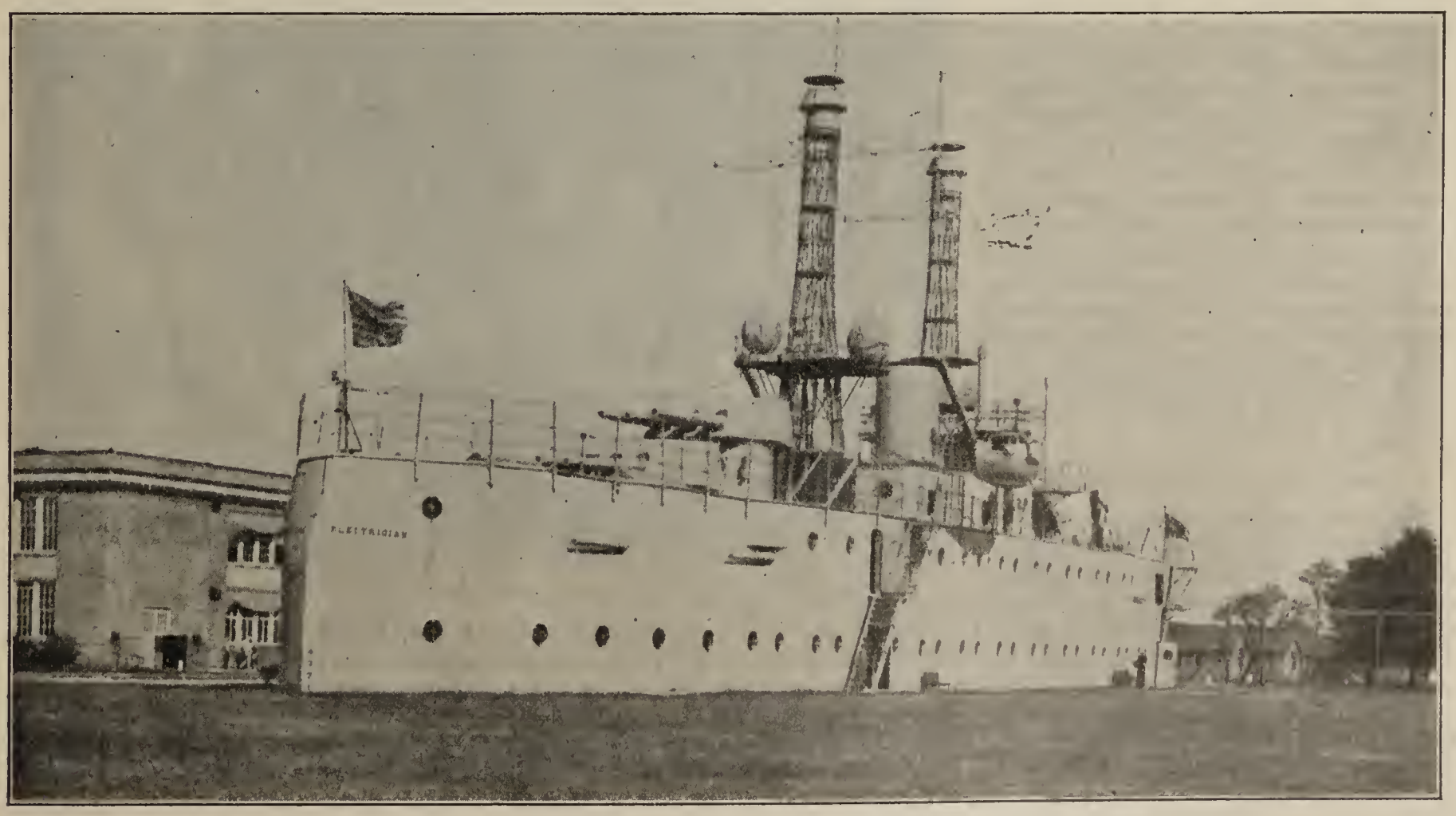
A majority of the recruits leave the training station at the end of eight weeks to continue their training aboard the ships to which they are assigned, but a large number of them are selected for vocational training in the naval trade schools maintained at these same stations. In selecting men for this additional training in the trade schools their own preference, their previous education, and vocational experience are considered.

At present every recruit received at training stations is given a general intelligence, or "general classification" test, and this is proving useful in selecting men who will profit most by intensive training in the trade schools. The "general classification test" consists of 100 questions. The recruit works against time. At the end of an hour he is graded upon the number of questions he has answered correctly. Standardized tests to determine the natural aptitude of men for mechanical trades, clerical work, and for work in radio are also carefully tried out, with results that indicate a selective value in such tests when carefully applied.

The Bureau of Navigation, which is the personnel branch of the Navy, receives and keeps on file a detailed record of the proficiency marks, advancement, and conduct of every man in the naval service. From these records a study has recently been made to determine the relationship which exists between a man's education previous to enlistment, his marks on the general classification test, and his ability to win advancement in the Navy. The records of 1,000 men, who had been given the test approximately one year prior to the analysis, were chosen at random, re-



Shipwrights' class, artificers school, Hampton Roads, Va.



"U. S. S. Electrician" fully equipped with all the modern electrical devices of an up-to-date war vessel

gardless of the type of duty they had performed during that year. All had been in the service less than 15 months. From the information contained in the individual records of these men regarding his change of status during the year subsequent to his having taken the test the information shown on the accompanying

School for pharmacist's mates, Great Lakes Training School

graph was plotted. It will be noticed that the graph shows a very pronounced relation between the marks made by these men on the tests and their ability to master a naval trade and win advancement in the service. The sharp rise in the curve of advancements for men making more than 60 per cent on this test is characteristic of all investigations made thus far. The analysis showed that 43 men in the thousand made less than 20 per cent on the test, and only 3 of these advanced during the year subsequent to their taking the test. In contrast, 43 of the thousand made more than 90 per cent on the same test, and of these 30 were advanced in that same period. It also showed that there is a very close relation between the number of years the men have been in school and the marks they make on the test. The general caliber of the men received at the training stations each month is tabulated and arranged according to the marks on their tests and their previous education. At present about 70 per cent of the men received have had eighth-grade education or better.

Naval Trades Like Civilian Trades

The underlying principles of the trades taught in Navy schools are identical with those taught by civilian schools in connection with the same trades. The naval electrician, radioman, or engineer must know the same fundamental principles of electricity, radio, or steam, as thoroughly as men following similar trades in civil life. Much of the practical work of these trades that is taught in the Navy trade schools is identical with the practical instruction in any civilian trade school. But in the Navy every effort is made to familiarize the man with the same types of equipment and the same types of jobs that he will find on board ship. In every trade school the equipment used for the instruction of the men in any particular trade is the standard equipment of the Navy ships in service.

At the radio schools, men are drilled in operation until they can "send" and "receive" at the rate of 20 words per minute. They also study the underlying principles of radio, and learn the upkeep and repair of the same type of equipment they will find on ships and at radio stations. The course for machinist's mates covers much the same ground as courses for machinists in civil life. In addition, however, every machinist who graduates from the machinist mate's school has a fundamental operating knowledge of marine engineering. He has learned how to operate steam engines, how to locate and repair their faults, and is familiar with the regulations governing the care and upkeep of all types of machinery that he will find on board ship.

A Novelty in Trade-School Construction

Probably the best example of the degree to which the Navy equips its trade schools is given in the U. S. S. *Electrician* shown in the accompanying illustration. As can be imagined, naval electrical installations are peculiar to the Navy itself. They are designed and laid out to keep the ship operating electrically during casualties in battle. The naval electrician must be familiar with this particular layout. To make him so, the Navy has built for the use of men in the electrician's school at Hampton Roads, Va., this huge wooden battleship, the U. S. S. *Electrician*. The ship is constructed to scale, and is equipped electrically the same as a modern battleship. Aboard this wooden man-of-war the Navy's embryo electricians work with the installations they will actually find at sea. The lighting circuits, the ventilating systems, the turret-training and gun-elevating gear, the gunfire control systems, and even the huge searchlights are all included. Could the equipment of any trade school in civilian life be more complete? Of course the ship is fitted with classrooms, and in these, with standard equipment, the students receive theoretical instruction in electricity.

There are schools for aviation mechanics and riggers, aviation pilots, hospital apprentices, pharmacist's mates, and coppersmiths; there are courses, too, for

Class in valve setting and engine operation, machinist's mates school, Hampton Roads, Va.

the musicians who make up the bands aboard the larger ships. The number and kind of schools in operation at any time varies with the needs of the service. At present 36 trade schools are in operation, teaching men 22 different naval trades.

The greater part of naval training is done at sea. The recruit who is sent

directly to a ship, after only eight weeks at the training station, must receive the instruction which will make him proficient in his particular trade or "rating"; the one who goes through the trade school ashore must continue under training when he goes to sea. This continuous instruction is possible because our Navy has always placed its main dependence for training in a corps of highly trained officers, capable of giving the best type of instruction to the men of their commands. The proper training of his men is one of the recognized responsibilities of every naval officer. It is one of his most important functions; for the efficient ship is the one whose men are trained to operate the guns and engines with maximum efficiency; to maintain a perfect system of visual and radio communications, and to perform effectively all the other widely varied duties which go into the upkeep and operation of a modern man-of-war. At training stations and trade schools the work of instruction is done by officers and petty officers detailed for this particular duty. At sea it is carried on by the regular officers of the ship. Even at the distant insular stations, men are under instruction and have a chance to advance themselves in the naval service.

Text-Books Prepared for Specific Needs

The lack of textbooks that exactly meet the needs of men in many of the naval trades has been a serious problem. The Bureau of Navigation is finding the solution of this problem in the Navy education study courses. Some of these courses cover general subjects, such as mathematics, English, and history, but many of them are compiled by officers in the Navy Department, to fit the exact needs of men in naval trades. They make excellent textbooks for class instruction, or for the voluntary study of ambitious men. As a rule, men can do more for the Navy, as well as for themselves, by studying subjects directly related to their regular work. The electrician who studies a course related to that trade and gets practical laboratory experience in his daily work will learn more and will advance more rapidly in his trade than the electrician who studies courses having no relation to his work. Many of the men need more work in fundamental subjects, such as mathematics, and these are usually taken at the same time as their trade courses.

Naval Service Demands Specialization

The days of the "jack of all trades and master of none," of "wooden ships and iron men," are past. The Navy of to-day is made up of a corps of trained specialists in both the commissioned and enlisted personnel. Thousands of dollars are spent annually in training these specialists. The fundamentals of Navy trades are the same as corresponding trades in civil life. If the man trained in the Navy decides to reenlist at the expiration of his enlistment, he finds advancement waiting for him as he qualifies for more important work in his trade. If he does not reenlist, he has learned the fundamentals of his trade and can readily adapt himself to the specialties of civil life. It is a pleasing commentary upon the success of Navy training that 70 per cent of our trained men are now reenlisting to take advantage of the many opportunities offered by continuous service in the Navy.

Vocational Education for Alaskan Natives

A comprehensive industrial and vocational school system for the native Eskimos and Indians of Alaska, the first in the history of this Territory, is now in the course of establishment. Through the Bureau of Education of the Interior Department plans have been completed for the inauguration and operation of three vocational schools at central points in Alaska. The sum of $50,000 will be expended for new buildings. Two of these schools are already in operation with an enrollment of several hundred Eskimo and Indian pupils. Additional schools, exclusively for industrial training, are to be established within the near future.

Expansion of the proposed industrial education of the natives is expected to be readily accomplished through an act passed by Congress before the adjournment of its recent session authorizing the Secretary of the Interior and the Secretary of War to transfer to the Bureau of Education any unoccupied Government buildings in Alaska. There are a number of abandoned military reservations that are available for school purposes, and it is expected that they will be used for the establishment of vocational schools. Practically all of them are of such size as to accommodate a large number of pupils.

One of the first of these abandoned military posts that will probably be taken over by the Bureau of Education is Fort Gibbon, located near Tanana, Alaska. This post has not been occupied by troops for some time.

During the past five years Indiana has enacted advanced educational laws covering a minimum wage for teachers, school attendance, an improved teacher retirement fund law, and the certification law which requires that all teachers must have 36 weeks of special training for school work.

Colleges Cooperate in Training Scout Leaders

Corps of Teachers Maintained by Girl Scouts Conduct Courses in Many Institutions. Students Juniors or Seniors.

GIRL-SCOUT leaders are trained in regular courses at about 90 institutions for higher education in 27 States. More than half of these courses are given by instructors under the supervision of the education department of the Girl Scouts (Inc.) and the rest by regular faculty members or by representatives of local girl-scout troops.

In the courses offered by the Girl Scouts (Inc.) the classes are conducted as far as possible in the form of scout troop meetings. Each class includes from 16 to 40 members, and these are divided into patrols of 6 or 8 students each. Reading is assigned on social, psychological, and educational topics, but most of the work consists of demonstrations of scout procedure and other practical activities. Local girl-scout troops usually cooperate with the college classes. Special emphasis is placed upon problems of leadership and troop management. Various forms of group recreation, such as quiet and active games, singing, story telling, folk dancing, etc., are included in the program. The class usually plans and carries out a hike with a girl-scout troop.

These courses are especially designed for regular students in the junior or senior year of their college work who are looking forward to volunteer work with growing girls, but they are open to girl-scout officers and to other young women interested in recreational and civic work with young people if the college approves. The courses emphasize the idea that scouting is recreational in spirit and method although educational in purpose. Each course consists of 10 or 15 meetings of an hour and a half or two hours each. The expenditure for fees and material is nominal. Whether college credit is given for the work depends upon the individual institution. For this work the education department of the Girl Scouts (Inc.) maintains a staff of four full-time and three part-time instructors under the supervision of an educational secretary.

Illinois laws require every schoolroom to have proper heat, light, ventilation, seating, and sanitary facilities. This has resulted in great improvement in one and two room buildings in the open country where county superintendents have had the leadership and courage to enforce the law. During the 10 years that the laws have been in effect 1,128 new schoolhouses have replaced old ones, and others have been remodeled to conform to the law.

Combines Class Work, Group Work, and Individual Work

Dalton Plan Permits Every Pupil to Budget His Own Time. Teacher Outlines Assignments for 20-day Periods, Aids Organization of Study, Holds Conferences, Tests Results. Pupils Encouraged to Work Together

By HELEN PARKHURST
Principal Children's University School, New York City

UNDER the Dalton plan, the pupil is given his work in the shape of a series of related jobs. The work of any job is very carefully outlined, sometimes by the teachers, often by the pupils, depending upon the kind of school. Each job corresponds to what can easily be done within a school month of 20 days. The number of jobs outlined for a school year depends upon the number of months comprising the academic year of the school using the plan. Thus, the number varies from eight to ten jobs.

The Dalton plan is applicable to any part of the school above, and beginning with the fourth grade. The fourth grade is taken as a starting point because pupils of that age and of that stage supposedly have the tool subjects sufficiently well in hand to enable them to work independently and easily.

Work Outlined 20 Days in Advance

A single job may be the working out of a single idea, or each job may be made up of a collection of correlated assignments of work. In a school where, say, five subjects compose the curriculum, if the work is to be arranged in jobs, work should be outlined in advance to cover a 20-day period, and work sheets or procedure sheets (assignments) would be made out to show a pupil how to attack each subject. Individual copies of these work sheets (assignments) would be given to each pupil.

We speak of a job as comprising a certain number of units of work. A unit of work, in quantity, approximates, or corresponds to, what would usually be assigned for a daily recitation in a subject. Twenty units of work would be outlined for each subject taught. If a grade's curriculum had five subjects, then a job would comprise 20 × 5 units, or 100 units of work. A unit of work, from the pupil's point of view, is not a set amount to be done in a certain stated amount of time, nor does a unit of history, for instance, equal a unit of music or art. Pupils take as much time as they need, out of the entire amount at their disposal, to do any given 20 units of work of an assignment.

A morning in a Daltonized school is divided into two short periods and one very long period, viz, first, an organization period lasting from 15 to 30 minutes; second, a laboratory period from 2 to 3 hours and, preferably at the close of the morning, a conference period lasting 30 or 40 minutes.

Laboratory Work to Occupy Morning Hours

The Dalton plan does not prescribe any set time for laboratory work, but it is suggested that, whenever possible, three-fourths of the morning time be made available for this purpose.

Let us say that a school sets aside 3 hours as laboratory time; then in a school month of 20 days, a pupil's laboratory time would approximate 20 × 3 hours or 60 hours. Each pupil, therefore, would have at his disposal 60 hours in which to do his 100 units of work. This 60 hours is budgeted by each pupil to serve his individual needs, and definite instruction is given as to how to budget time. If a pupil does the entire job (100 units) in less than 60 hours, he immediately proceeds with the next job. There is no waiting for slower pupils, nor are slow pupils rushed along at an accelerated rate or carried by the momentum of the class, producing inaccurate, slovenly work; nor would a slow pupil have to finish in 20 days. He may have more time whenever necessary; nor is a 20-day period supposed to coincide with a series of school or calendar months. A pupil counts "one" as his first work day, and so marks his work graph. "Two" is his second day, etc. Absent days are not counted. We go from 1 to 20 because work is set on a 20-day basis.

Job Cards Measure Progress of Work

Laboratories, or subject workshops, are established for each subject, but in the separate laboratories pupils spend only the time necesssary to accomplish an assignment of work. Each pupil has a job card to measure his progress; he can see at a glance just where he stands on the whole job. A special pupil time chart is provided for older pupils so that they can record how they, as individuals, are using their time.

The pupils remain in grades and have their grade jobs; they go from laboratory to laboratory according to their interests and needs, and without asking permission, during the laboratory time; and they are free to choose and plan within the limits of the job. These jobs depend upon a child's capacity and rank. There is but one restriction to a pupil's freedom. If he does the 20 units of history required by his job, he can not go on in the subject, history, until he has completed his 20 units of geography, his 20 units of mathematics, etc., or, in other words, until all of "Job I" is completed. Then he may proceed with Job II, unhandicapped. This is very important, because an uninstructed pupil can not wisely organize and budget time. All of a single grade assemble with an "organization advisor," the same one, at the same time each morning. Pupils report their progress, make their individual time-tables for the day, and study the problem of how to reconcile any shortages in their unit scores. A pupil carrying five subjects has a "work norm" of five units, and should do five units each day. If a pupil fails to get this norm—perhaps he is doing his most difficult subjects—he is taught to swing into an easier subject next day so that he can do more. This helps him to get ahead or to break even and thus reconcile any shortage.

Grouping Encourages Discussion and Debate

During laboratory time, pupils are encouraged to work together in grade groups according to the demand or through the medium of the assignment. If, for instance, a fourth-grade pupil enters a laboratory, he must work in that part of the room set aside for his grade, unless he was confronted with a special piece of work which can only be done by working alone. This grouping encourages discussion and debate, and gives a line of direction to conversation which might be promiscuous if the pupils had nothing in common. Before pupils leave a laboratory, they record their progress on their individual job graphs, and also on the instructor's graph, which is to be considered a class progress graph. The class progress graph shows an instructor where each individual of a class is in his work at any time.

Daily Conferences with Teacher

The last half hour of the morning (40 minutes in some schools) is designated as conference time. The pupils who met at organization time now meet again for a conference—that is, they confer together over a specified part of the job, according to a posted conference schedule. Monday a grade may meet in geography, Tuesday in history, Wednesday in English, Thursday in science, and Friday in mathe-

Portions of an address before conference on individualized instruction, held by United States Bureau of Education and University of Pennsylvania cooperating, Philadelphia, March 27, 1925.

matics. During this time, debates, reviews, reports, etc., are given—anything which relates to the subjects for which the pupils are called in conference.

These conferences, coming once a week as they do, are not considered as a time for presenting new material. They are too infrequent for that purpose. Presentations of new material are scheduled on a "presentation bulletin board," and are at the call of the teachers, who schedule special calls or classes in accordance with the progress and need of individuals or groups. These appointments are classified and posted under grade headings. They are posted in the morning before the pupils arrive, so that upon arrival each pupil makes a daily memorandum of the engagements he is to have with his instructors. He takes these interruptions into account at organization time when planning his time.

In this way a teacher may call together several individuals, or an entire class, as often as necessary, as determined by the need of a subject. Here the only restriction is that there shall be no more than two special presentation conferences scheduled for any single grade in the course of a morning and that the first notice posted shall have preference. This may make it necessary for a second instructor to change the hour of his appointment.

Whenever an entire class is called, a sign is put on the laboratory door saying, "This laboratory is closed." All others than the class called are expected to stay out. This is to avoid interruptions. When small groups are called, the laboratory remains open to capacity. To avoid crowding, a capacity limit is set for each laboratory; i. e., a number indicating capacity is posted on the door. If an instructor desires to take some grade on an excursion to a museum or industrial plant, lasting an entire morning, a notice is posted for that grade, telling the time, the meeting place, etc. The instructor puts up the closed-laboratory sign and is off with the pupils.

The plan combines class work, spontaneous group work, and individual work, but above all it is designed to give pupils a training in handling a job, to teach a pupil to manage time and to plan his work, and at each step of the way take himself and his needs into account in order to assure individual development at each point.

Bureau of Education's Latest Publications

The following publications have been issued recently by the Bureau of Education of the Department of the Interior. Orders for them should be sent to the Superintendent of Documents, Government Printing Office, Washington, D. C., accompanied by the price indicated:

Contribution of home economics to citizenship training. Proceedings of the National conference of city supervisors of home economics, Washington, April 21, 1924. Prepared by Emeline S. Whitcomb. (Bulletin, 1925, no. 3.) 10 cents.

Improvement of rural schools by standardization. Edith A. Lathrop. (Rural school leaflet, no. 32.) 10 cents.

Gives the essential detailes of standardization in 34 states, the content of the score cards for 30 states, and some achievements of standardization.

Land-grant college education, 1910 to 1920. Pt. II. The liberal arts and sciences including miscellaneous subjects and activities. Ed. by Walton C. John. (Bulletin, 1924, no. 37.) 25 cents.

Contents: 1. The liberal arts in relation to the land-grant colleges, by George F. Zook.—2. The sciences in relation to undergraduate land-grant college curricula, by Charles E. Marshall.—3. The sciences in relation to graduate work in agriculture, by A. R. Mann.—4. The sciences in relation to engineering education, by R. G. Dukes.—5. The arts and sciences in relation to home economics education, by Emeline S. Whitcomb.—6. Agricultural economics and allied subjects, by H. C. Taylor.—7. Rural sociology, by C. J. Galpin.—8. Industrial journalism, by N. A. Crawford.—9. The War Department and military training in the land-grant colleges, by C. R. Mann and Col. F. J. Morrow.—10. Military training in the land-grant colleges, by W. B. Bizzell.—11. Physical education and hygiene, by T. E. Jones.—12. Education in the negro land-grant colleges, by R. S. Wilkinson.—13. University extension in the land-grant colleges, by L. E. Reber.

Legal provisions for rural high schools. William R. Hood. (Bulletin, 1924, no. 40) 10 cents.

An opportunity for the promotion of better citizenship. 5 cents.

Pre-school child. A short reading course for pre-school study circles. (Reading course, no. 29.)

Problems in physical education. Report of a conference of State directors of physical education. J. F. Rogers. (Physical education series, no. 5) 5 cents.

Publications of the United States Bureau of Education pertaining to rural education. Florence E. Reynolds. (Rural school leaflet, no. 36) 5 cents.

Statistics of city school systems, 1921–22. Prepared under direction of Frank M. Phillips. (Bulletin, 1924, no. 34) 25 cents.

Time allotments in the elementary-school subjects. Fred C. Ayer. (City school leaflet, no. 19) 5 cents.

Contents.—1. Time distribution of subjects and grades.—2. Changing tendencies in time allotments.—3. Special adaptations in time allotments.—4. Illustrative time allotments.

—*Edith A. Wright.*

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A System for Studying Social Backgrounds

Private Organizations Cooperate With Philadelphia School Authorities to Learn Reasons for Deficiencies

EDUCATIONAL and vocational guidance has been given to more than 10,000 Philadelphia children in the past six years by counselors who work in some of the public and parochial schools and in the junior employment service of the board of public education. Some of these counselors are employed by the board, but most of them are supplied by the White–Williams Foundation, an organization which cooperates with the school authorities in studying the home backgrounds and personal characteristics of children who are deficient in lessons, behavior, health, or attendance. Other organizations, such as the Commonwealth Fund and the Philadelphia Quarterly Meeting, help to pay the salaries of these counselors. A counselor for Roman Catholic parochial schools is supplied through cooperation with a church committee.

Nine counselors investigate the problems of children who are seeking work through the junior employment service maintained by the board of public education as part of the bureau of compulsory education.

The foundation has provided a counselor in each of 10 public schools of various types selected as laboratories, including elementary schools in different sorts of neighborhoods, a special school, a trade school, a junior high school, a girls' high school, and a boys' high school. These counselors assist the teachers in finding out the causes of children's failure in lessons, behavior, or attendance, and in remedying difficulties caused by home conditions, physical defects, etc. Children of ability who are leaving school to go to work because money is urgently needed at home are granted scholarships averaging $5 a week from a fund especially for this purpose. The amount paid is usually less than the child would earn, so that a sacrifice by the family and the child is still necessary to keep the child in school. This makes it impossible for anyone to consider the payments as charity. The Red Cross helps to pay for some of these scholarships.

To encourage teachers to study the social backgrounds of their pupils, the foundation grants scholarships for a special course in social work in the schools given at the Pennsylvania School for Social Service. College credit is given for the work by the University of Pennsylvania and by Temple University. This course requires home visits and other practical work with pupils as well as attendance at lectures.

· SCHOOL LIFE ·

Issued Monthly, except July and August
By THE DEPARTMENT OF THE INTERIOR, BUREAU OF EDUCATION

Editor - - - - - - James C. Boykin

Terms: Subscription, 50 cents per year, in advance; to foreign countries in which the mailing frank of the United States is not recognized, 75 cents. *Remittance* should be made to the Superintendent of Documents, Government Printing Office, Washington, D. C.

MAY, 1925

Marked Improvement in Teacher-training

STANDARDS of teacher-preparing institutions are rapidly improving. Educational progress is in the air. Schools of every class show the effects of it. Better teachers are essential to that progress; and since the normal schools were clearly below the level of efficiency which modern ideas demand, the improvement in the normal schools within the past 20 years has been one of the outstanding facts in American education.

It is no reflection upon them to say that they must still go far before they reach the ideal condition. The findings of recent surveys bear out common knowledge of this. This reference is especially to the State surveys in Massachusetts, Pennsylvania, and Louisiana.

Normal training is essentially work of collegiate grade, whether it be given in teachers' colleges or in normal schools, and it is reasonable to expect that those institutions will bear comparison with State colleges of liberal arts of the same grade in the same localities. That the teacher-preparing institutions have not yet reached that level in the States named is the plain conclusion from the survey reports. This can not be said with equal confidence of the country as a whole, but other studies, including those described in the Year Book for 1922 of the American Association of Teachers Colleges, indicate that in many States of the Union the same general statement applies.

Using the term "normal" to apply to the four-year as well as the two-year institutions, these studies tend to show (1) that the normal students are in general of a lower economic level; (2) that the normal teachers as a class are relatively inferior in scholarship, and that their salaries are less; (3) that the normal schools are relatively deficient in physical equipment, and (4), most important of all in that it is responsible for the rest, the funds appropriated for normal schools are measurably less than those available to the State liberal arts and the agricultural colleges of corresponding States.

Two elements are sufficient to explain the difference in the economic status of normal school students, namely, the cost of attendance in normal schools is lower, perhaps not more than 60 per cent as much as in the State university in the same State; and after two years of study one is able immediately to fill a teaching position with a salary sufficient for modest needs.

General unanimity appears in relation to the other elements in which improvement is demanded in teacher-training institutions. Fewer doctors' and masters' degrees appear in the faculty lists of even the teachers' colleges than in liberal arts colleges, and it is well known that the conditions of work in the former are much less satisfactory. In this the possibilities of change for the better are distinctly favorable, and the efforts of the accrediting and standardizing organizations are bearing abundant fruit.

But after all the only power to place the work of teacher training upon the high plane which the well-being of the whole school system requires lies in the legislatures of the several States. They must supply the funds. Money and more money is needed. With enough of it there can be no doubt of the quality of the teachers that will be produced, for the weaknesses of existing agencies are as an open book. They have no fault which can not be rectified by reasonable appropriations over a reasonable time.

Geographical Uniformity in Teachers' Salaries

ADVOCATES of uniform salaries should find the realization of their ideals, save in one important particular, in England and Wales. There the principles of uniformity have recently been impressively reaffirmed. Every teacher in the land receives the same salary as every other teacher who does the same work whether he lives in a rural hamlet or a metropolitan district, making due allowance for differences in cost of living. And everyone knows to a penny what he will receive during the next six years, at least, barring only the contingency of promotion from a lower to a higher place or the like. Competition between districts for the services of desirable teachers and bickering between employer and employed are at an end. Excepting only the discrimination against women, by which they will receive only about four-fifths as much as men and their annual increments of salary will be three-fourths as great, complete unformity seems to have been achieved. This extraordinary condition had its beginning in 1921 with the adoption of the epoch-making "Burnham scales."

After the World War the conditions of teaching in England were little less than deplorable. Such antagonism had arisen between the education authorities and the teachers that strikes occurred in many localities and discontent interferred seriously with the operation of the schools nearly everywhere. In the attempt to remedy this unfortunate state of affairs the president of the national board of education, Mr. H. A. L. Fisher, constituted a central organization, called the "joint standing committee," composed of representatives of the local education authorities and of the teachers' organizations.

In a short time this committee produced a "provisional minimum scale of salaries for teachers in public elementary schools." Excellent results followed, for within a few months no teacher in England was receiving a salary less than the new scale provided for his position. A national basis for treating the salary problem thus appeared to be feasible, and the committee proceeded to work along that line. Before the end of 1920 four graduated scales had been formulated, applicable, respectively, to the conditions in the several areas from the rural to the metropolitan. Similar action was later taken in behalf of secondary-school teachers and teachers in technical and continuation schools.

It was provided that the scale to be allocated to any area should be fixed by agreement between the proper local education authority and the teachers concerned, but if such an agreement could not be reached the allocation should be determined by the joint standing committee with the approval of the president of the board of education.

In their operation the new scales carried important increase in compensation to nearly every teacher, but since 60 per cent of the salaries was borne by the national exchequer, the local authorities had little reason for complaint. The scales were effective April, 1 1921, and were to continue to March 31, 1925.

In the industrial crisis and the consequent period of national retrenchment which were beginning even at the time of the adoption of the scales, the experiment was seriously threatened, particularly by the famous "Geddes report," which demanded drastic reductions in all salary schedules. The teachers escaped by accepting a horizontal cut of 5 per cent, which was distinctly less than the Geddes committee demanded.

The education authorities were never satisfied that this cut was sufficient, and when the salaries to be paid after March 31, 1925, were discussed, the authorities insisted upon further reductions. The teachers' organizations in turn demanded return to the original scales. An impasse arose, and agreement was finally reached to refer the entire matter to the arbitration of Right

Hon. Viscount Burnham whose chairmanship of the joint standing committee had met universal approbation.

Lord Burnham's award was made public a few days before the expiration of the former scales, and the new scales are now in force and will so continue for six years. After that time they will continue from year to year, unless denounced with a year's notice either by the teachers or by the education authorities.

Although many differences of detail appear, the award follows substantially the former standard scales, with the 5 per cent reduction. Although it is provided that no teacher's salary shall be reduced by the operation of the new scales, important saving in the total cost of instruction is obtained by lengthening the time required to reach the maximum salaries and by providing that annual increments shall begin after two years of actual service, the first year being considered a probationary year.

Full uniformity is, therefore, a fixed policy in England and Wales so far as geographical and administrative features go. There is much in the general plan to commend it to Americans, but the English scale with relatively lower wages for women will find little response in a land in which women occupy a large proportion of the posts of responsibility in education.

The Modern Foreign Language Study

The Bureau of Education is cooperating with the Modern Foreign Language Study in securing statistics from the secondary schools throughout the country regarding enrollment in French, German, Italian, and Spanish, and the training and experience of foreign-language teachers in the schools. This investigation, which is carried on under the auspices of the American Council on Education, has its head office at 561 West One hundred and sixteenth Street, New York City, and is under the guidance of a committee on direction and control, consisting of 20 college and school teachers of the foreign languages and school administrators. The Study will include in its survey, not merely the secondary schools, but also the corresponding levels of modern language instruction in the colleges, where many thousands of students are engaged in the first two years of foreign-language study. It will also include a systematic investigation of the opportunities in this country for the training of teachers of foreign languages for the secondary schools. The study is planned to extend over three years and to have far-reaching influence.

Secondary Schools in the Program of International Understanding

"A LIVE newspaper is better than a stale history," Augustus O. Thomas, commissioner of education of Maine and president of the World Federation of Education Associations, said in an address before the secondary school principals recently. "The program of studies and the textbooks for high schools should indicate in definite manner how current happenings may increase a student's interest and understanding of history, geography, civics, art, music, and literature," he added. The speech in brief follows:

"Students should be taught how to study world news. They should have access to daily papers and to magazines dealing with world occurrences. They should be taught how to get the impact of world events and to interpret them—to think in world terms.

"We should teach a general world history, not missing the small nations, the manners and customs of the people, their institutions of government, and their contributions to the progress of mankind. This will include the development of art, music, literature, philosophy, invention, and discovery. Such study need not be exhaustive. No education in school can be.

"I am not opposed to the teaching of war if the emphasis is properly placed, nor would I fail to attribute to our soldiers and sailors the high quality of patriotism and bravery. War is a hang-over from old barbaric tendencies. As mankind mounts upward on his journey from the primitive to the civilized, he will discard this old weapon of destruction and accept the new weapon of law.

"A normal man is one who can solve successfully the problems which arise within him and about him. A normal education is that which will enable the individual to solve the problem he meets in life to his own satisfaction and to the security of the race. We no longer classify men by their post-office addresses but by their reach and grasp of world-wide situations.

"In casting about us in human affairs, we find many shortcomings as well as many virtues. It is the place of education to scrutinize society, business, and politics in order to ascertain the elements they lack. In order to increase human happiness, we should not only teach these elements but should make war upon undesirable qualities.

"International justice can not be taught incidentally, collaterally, nor correlatedly with the effectiveness we desire. There should be direct and purposeful teaching. This may be done through (1) the teaching of history, (2) teaching of literature, (3) teaching of world civics and international contacts, (4) the observance of world good-will day, (5) essays on the subject of world relations, and (6) direct teaching of patriotism. The rising generation should be taught that the golden rule is applicable among nations as among individuals."

Reorganization of Michigan Interscholastic Athletics

Responsibility for interscholastic athletic activities in Michigan was placed, by legislative action in 1923, upon the State superintendent of public instruction. This law made necessary the reorganization of the State athletic activities. The Michigan high-school athletic association was formed by collaboration of the superintendent of public instruction with the Michigan interscholastic athletic association and the Michigan schoolmasters' club; and a State director of interscholastic activities has been chosen. All Michigan high schools, or schools of equal grade, are eligible to membership in this association.

The association meets annually, and the vote of members is cast by the principal or superintendent, or a faculty representative authorized in writing by the principal or superintendent. The association elects a representative council composed of 10 members—6 from the public high schools, 2 teachers or directors of physical education, and 1 each from a junior and a parochial school. The State superintendent of public instruction and the director of interscholastic activities are members ex-officio. All officers of the council are elective except the director of interscholastic activities, who is appointed by the State superintendent with the approval of the council. The salary and expenses of this officer, and necessary traveling expenses of the council, within the State, are paid by the State.

The council has general control of all interscholastic activities, including discipline, with right of appeal to the director. Only actual bona fide high school students in good standing and possessing certain scholastic qualifications are allowed to compete in interscholastic contests.

Sequence in Handwork for Kindergarten and Primary Classes

Abnormal Accuracy not to be Expected in Work of Young Children. Progression and Continuity Should be Arranged to Correspond with Child's Development. Series of Reading and Language Lessons for Third Grade

By FLORENCE C. FOX
Assistant Specialist in City Schools, Bureau of Education

COLONEL PARKER was wont to warn his classes in educational psychology against the "demon of accuracy" which possesses the teacher in her classes in handwork. The art teacher in a certain school gave an exhibit of her pupils' work, and one of the children brought her mother to see the picture of a vase she had painted in water colors. At first the composition could not be found, but was finally identified by the child's name written on the margin. She refused to acknowledge it, however, protesting that it was not her picture. The teacher had "touched it up" to such an extent that it had lost all resemblance to the original.

Crude production must be accepted in this work if we wish the child to develop naturally through self-expression. Not a line can be changed nor a surface altered by the teacher's hand if we would preserve the child's integrity. The finished edifices in small building blocks which we see offered as an expression of kindergarten or first-grade free play give an erroneous impression. It is doubtful if little children are ever able to build these intricate structures without much suggestion and manipulation of materials by the teacher.

To offer the work of adult training classes as models for children's guidance is misleading.

Childish Handiwork Necessarily Crude

Any teacher who has attempted to follow these suggestions which are embodied in the finished work of the training teacher finds the child quite incapable of carrying out these projects, and his work is so crude in comparison that discouragement for teacher and pupil inevitably follow. Rather give the child an idea and let him work it through in his own untrammeled way with just enough guidance to help him over his difficulties or to assist him in solving perplexing problems. Or, better still, place a unit of work before him and his group and let the ideas emanate from each member of the class.

Provision must be made in this work for the gradual development of skill and accuracy. Little children do not acquire proficiency overnight, nor make with little hands a perfect thing throughout a day, as "Minerva sprang full-grown from the head of Jove." A long line of successes and failures mark the child's approach to successful accomplishment with ease and facility. When a kindergarten child produces a perfect product we may know it was made with much travail of spirit and with many heartaches, discouragement, and despair.

On the other hand, growth must be assured. Pupils in third grade are sometimes found using the same material in the same way they are used in the kindergarten or first grade. Perhaps the chief cause for dissatisfaction with the closer union between kindergarten and primary lies in the failure of supervisors to provide for a definite progression from one year to another. One of the great values, however, of this unification of early education is the opportunity which it affords for an extended plan of work from the fifth year to the ninth of the child's life, covering a logical sequence of materials and of difficulties in achievement.

A sequence in building materials, for instance, might include the use of large wooden blocks in the kindergarten and first grade for simple, easily constructed models; the smaller wooden and the terra-cotta blocks in first and second for more elaborate designs and symmetrical proportions; and, finally, the mechano parts and the erector in second and third for the construction of machinery and a large variety of miscellaneous models. A sequence of measurement in paper work is most important in this activity; generally speaking, measurements by folding for the kindergarten and first grade; definite measurements with the ruler, using the larger units in whole numbers for the first and second grades; and the use of smaller units in fractions for the second and third grades. We must depend upon the supervisor to arrange for this progression and continuity. She surveys the field and notes the steps to be taken from year to year in this work. She is able to plan for the child's growth and development through this period as the grade teacher can not hope to do.

Real Expression of a Child's Ideas

This paper deals especially with the project of the sand table farm as it has been worked out in specific instances by pupils in the kindergarten, in the first and second, and in the third grade. A sequence in design, in materials, in measurement, in difficulty of execution, and in development of accuracy is apparent from even a superficial comparison of the three illustrations. The first picture is a delightful representation of the simple and natural construction of paper models which we might expect to find in the kindergarten. It bears the mark of sincerity, unmistakedly. It is the real expression of a child's idea.

Building a sand-table farm in kindergarten; paper folding projects

The second picture represents a first and second grade's production of the same project, using a combination of three materials, paper, wooden splints, and clay. Several periods of the day's program are represented here; number lessons in approximately accurate measurements of the farm, the fences, and the buildings; nature study lessons on the growth of the plants in the fields; art lessons in modeling the clay animals which are in the meadow; and the painting with water colors of the buildings and fences.

Coordination with Language and Number

The third picture is a representation of the same project in the third grade. The use of number as a mode of judgment and a unit of measurement is given in detail in the reading and language lessons which were formulated by the third grade during the building process. They give also a

detailed account of the procedure from day to day in this project and of the use of materials in its construction.

Other correlations not mentioned in this account were an important part of this study in each grade. Lessons in art and music, history, literature, geography, and civics accompanied the daily work in construction. These, too, were in sequence, from the first lessons in kindergarten, adapted to the 5-year-old, through first and second grades to the more advanced curricula for the third, expanding more and more from year to year and keeping pace with the child's physical and mental progress.

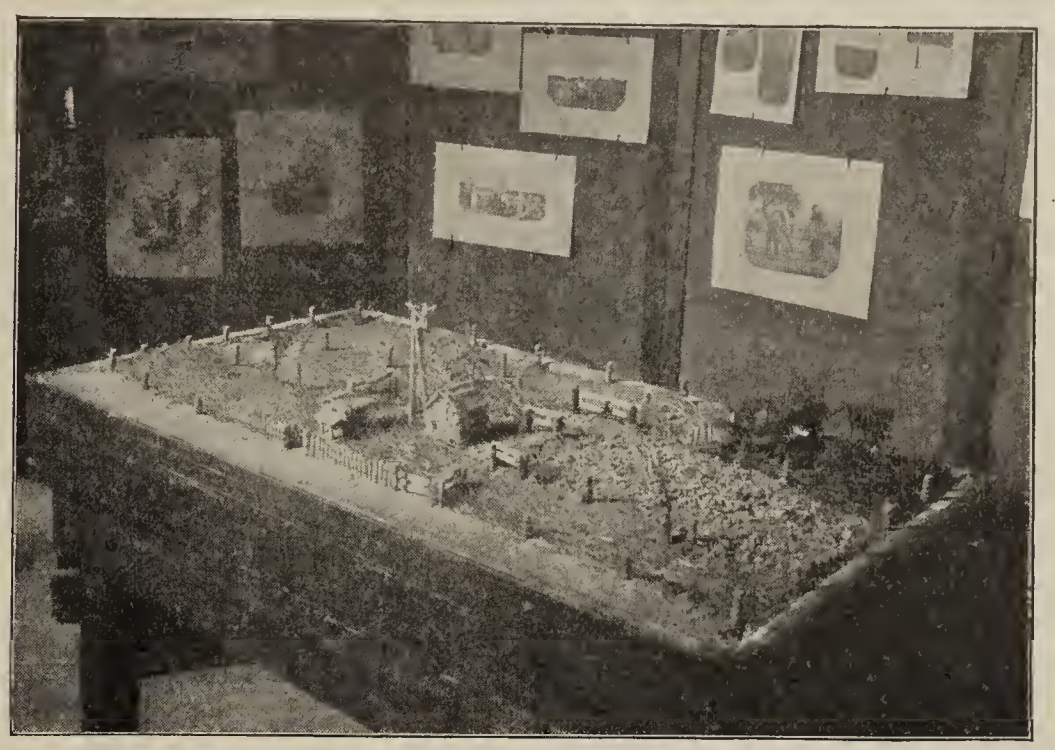
The following reading and language lessons on the sand table farm were formulated by third grade pupils from day to day as a permanent record of the work in construction and measurement. They were mimeographed and bound into books with like material growing out of their various activities.

OUR FARM

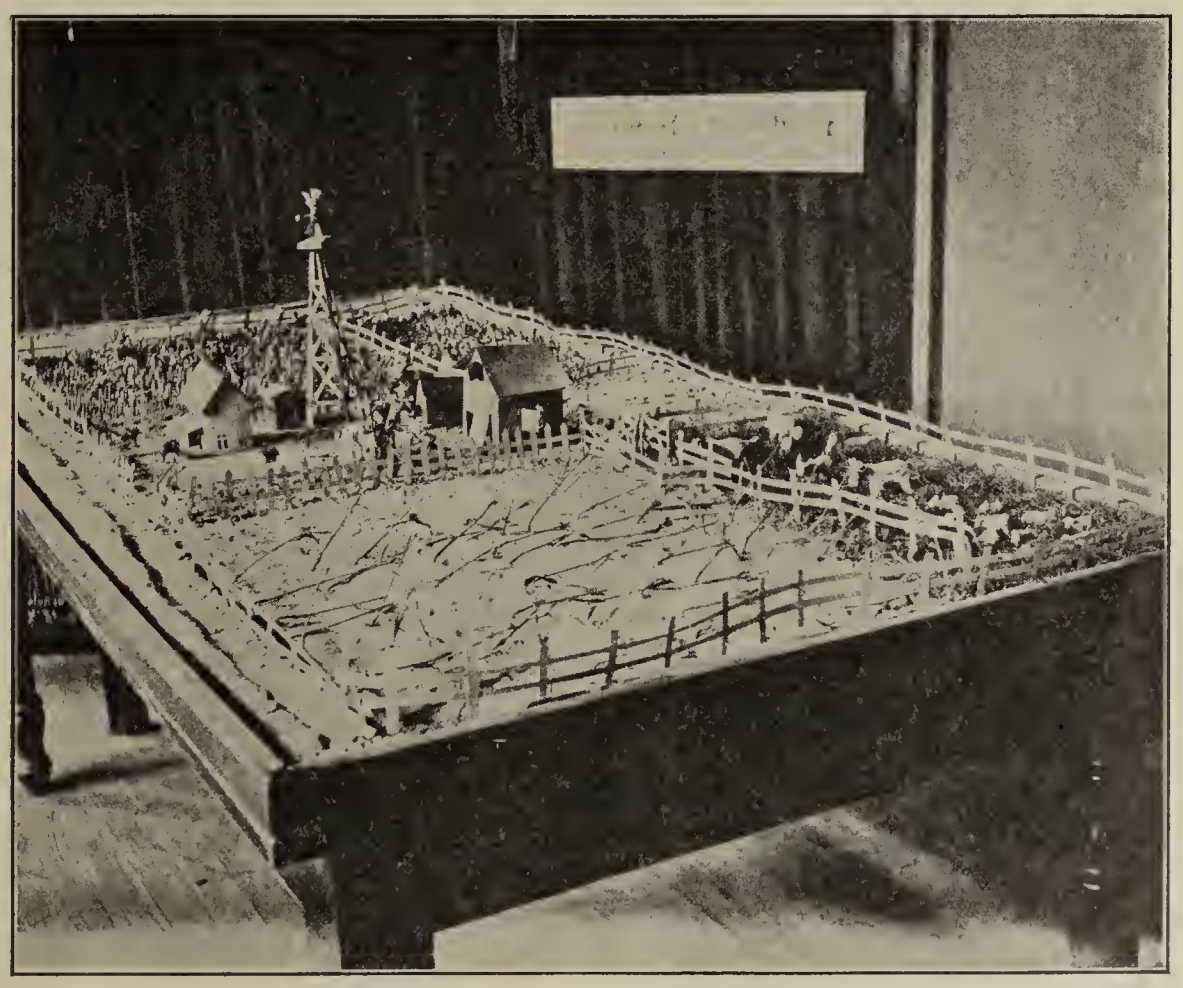
We planned to make a farm on our sand table. We are going to measure our farm in acres.

How we measured it.—We measured a rod with our rod measure, in our schoolroom. We are going to measure an acre in the park. An acre is 8 rods by 20 rods. We cut picture acres out of checked paper. They were 8 checks by 20 checks. Each picture acre had 160 little squares on its surface. We called each check 1 rod and our acre measured 8 rods by 20 rods, and its surface was 160 square rods.

How we measured an acre with our rulers.—We called one-fourth inch one rod. If an acre of land measures 8 rods by 20 rods then our picture acre will measure 2 inches by 5 inches. Then we drew acres on paper. Our sheets of paper measured 8 inches by 10 inches. We found we could draw exactly 8 acres on our sheet of paper. Now we laid our sheets of paper on the sand table. It took 11 papers to cover the sand table.



Sand-table farm, third grade; clay modeling and applied number project



Sand-table farm, first and second grades; cardboard sloyd project

How we counted the acres.—We counted 11 acres along the east end of our farm. This made one row of 11 acres. We counted these rows and found there were 8 rows; 8 by 11 acres are 88 acres. There are 88 acres in our farm.

How we divided our farm into fields.—We decided what kind of fields we should have on our farm and how many acres in each. First we took one row of acres along the south side for the road. In the middle of the south side, on the road, we took 8 acres for our farmyard. In the northwest corner is the wheat field of 12 acres. South of the wheat field is the oats field of 9 acres, and south of the oats field is the hayfield of 9 acres. In the northeast corner is the wood lot of 8 acres. West of the wood lot is the potato field of 4 acres, and west of the potato field is the orchard of 8 acres. Between the orchard and the farmyard is the garden of 4 acres. South of the wood lot and potato field is the cornfield of 12 acres. South of the cornfield is the pasture of 6 acres.

How we made a map of our farm.—We took a large sheet of checked paper. We called each check a square rod. Then we drew acres on our map. Each acre was 8 checks by 20 checks. There were 88 acres on our map. We marked these directions on our map. The upper edge is north, the lower edge is south, the right is east, and the left is west. We drew lines to mark the fields. We colored each field with our crayons.

How we fenced our farm.—We stretched cords across the farm to mark the dividing lines between the fields. Then we set our fences along these lines. We made wire fences. We set the posts 4 inches apart. They stood 1½ inches above the ground and 4½ inches below the ground. So our posts were 6 inches long. They were round wooden rods one-fourth of an inch in diameter. Wallace brought the rods from his father's shop. We stretched 3 wires from post to post. They were wound once around each post, and were one-fourth of an inch apart. We made a picket fence along the road in front of

the farmyard. The pickets were made of round wood rods about half as large as the posts. They were 1 inch long and were woven together with wire.

How we made our gates and bars.—We had two gates in front of the farmyard opening into the road. One large gate opened onto the driveway, and a small gate in front of the house. The gates were made of wooden splints one-fourth inch wide. They were wired together. The large gate was 2 inches by 1 inch and the small gate was 1 inch by 1 inch. There were bars opening into each field. Through these bars the cattle can go into the pasture, the cultivator can be driven into the cornfield, the hay wagon can be driven into the hayfield, and the reaper and harvester into the wheat field. We set posts for the bars at one corner of each field. They were 1¼ inches apart. We set smaller posts by the large ones and wired them together near the top and in the middle. Then we slipped two bars in between the posts. The bars were made of wooden splints one-fourth of an inch wide and 2 inches long.

How we made the house and barn.—We drew a rectangle 2 inches by 1½ inches on a piece of board. We cut a sheet of clay the size of this rectangle and laid it on the board for the floor of our house. Then we made bricks out of clay that were about one-fourth inch square and one-half inch long. We set one row of bricks around the edge of our floor and then put in our door and window frames. The frames were made of wooden splints one-fourth inch wide. The windows measured one-fourth inch by one-half inch and the doors one-half inch by three-fourths inch. Our barn was made like the house. It was 2½ inches by 2 inches. There was a large double door in one side. It was so large that a load of hay could be driven onto the floor of the barn. The roofs were made of sheets of clay. We built up the ends of the house and barn to form the gables. Then we laid wooden splints across the top of the house and barn to support the roofs. We bent the sheets of clay through the middle to form the peaks of the roofs. Then we laid them on the tops of the house and barn. We made a little clay porch in front of the house, with two wooden pillars to support its roof.

A library of more than 11,000 volumes is a recent gift from the late Dr. Phil Broome Brooks, of Washington, D. C., to Hampton Institute Library. The collection is strong in English, music, folklore, and contains many valuable sets of reference books, including a set of the Yale Chronicles of America. It also contains a large number of books on the Negro, of which more than 200 are by Negro authors.

English Excel Americans in Health Work

Nearly Half of All Pupils Undergo Medical Inspection. Children Found Defective Receive Medical Treatment.

By J. F. ROGERS
Chief Division of School Hygiene, Bureau of Education

OTHER countries probably have not attained the quality of health work in schools which has been achieved in a very few American cities, but some countries are doing vastly better work in the aggregate than is accomplished here. This is notably true of England, where for 17 years such work has been conducted on a National scale and as part and parcel of the school organization. Notwithstanding postwar conditions, financial restrictions on school-health activities have been kept at a minimum, for the leaders in English life are coming to see with Sir George Newman that "in the interest of economy the State can not afford to neglect such supervision."

In 1919 the Board of Education made the requirement that "it must be satisfied that provision has been made for the medical inspection of all children admitted to school" and of all children between 8 and 9 and between 12 and 13 years of age. In 1922, out of 5,180,589 children in average attendance at the elementary schools, no less than 2,386,750, or 46 per cent, were medically inspected. Medical inspection is, however, of small benefit if there are no results from its findings. Through the efforts of school nurses and many voluntary agencies 77.7 per cent of the children of London who were found defective received treatment during the year—a very high proportion.

While medical inspection is, as it should be, the basis and beginning of health work in the English schools, they have not stopped here. As the annual report of the chief medical officer of the board of education says, "It must be made clear that in addition to detecting and treating disease, school hygiene comprises something larger and more universal. Medical treatment is not its goal. Such treatment may be necessary for a million children at any given moment, but the other five million require something else, and even for the million ailing children this is not sufficient. In short, school hygiene falls short of its contribution if food, fresh air, physical exercise, and a healthy school environment are not available for every child. These four elements in its upbringing call for careful, thorough, and continued supervision if we would train it to live well, for itself and the nation. The malnourished child, the delicate and debilitated child, the dull or backward child, as well as the normal individual, needs proper provision in these respects, and unless the provision be made we must neither expect nor hope to rear a healthy race. They are simple but essential conditions, and their provision should be dependent not upon the social status, wage, or intelligence of the parent but upon the condition of the child, though the form and occasion of the provision made must inevitably be dependent upon the position, resources, and responsibility both of the parent and the community."

Handle Defective Children as Individuals

Another paragraph from one of Sir George Newman's always inspiring reports is:

"No one, I think, can study the workings of this new piece of national organization without being impressed with its far-reaching effect. There is a direct physical effect. Hundreds of thousands of children have found relief, and their feet are to-day set on the high road of recovery to health and strength. They ought, with reasonable fortune, to grow up strong men and women, the healthy parents of healthy offspring. There is also an indirect effect, not less significant. For school medical work has taught us that each defective or ailing child must be handled as an individual. A hundred children may together attend the same inspection and the same school clinic, but each of them must be treated individually. The mass of a hundred can not be treated as a mass; each must be dealt with as possessing characteristics and conditions of its own. In short, the school medical service has given a new understanding of the child as an individual, an understanding which can not fail, in the future, to affect the whole scheme of its education. We have come to see not only that there are many children unable on account of physical disability to receive reasonable benefit from the education provided, or from the usual forms of that education, but that the primary fundamental of education is physical and not intellectual, and that we can not as a rule obtain an intellectually educated child until we have secured that its habits of body, its senses, its natural functions, and its brain centers are healthy, trained, and disciplined. Reading, writing, and arithmetic are, it is true, the tools of its intellectual education; they should not, however, be taught in such a way, or under such conditions as to injure the child in the process. It is the child, and not his acquired accomplishments, which is of ultimate value to the nation. The living, unmaimed, normal, healthy child is the product we seek."

Adaptation of Individual Instruction to Small High Schools

Modified Dalton Plan Used in Bronxville, N. Y. Subject Matter Divided into "Assignments." New Assignments Given When Final Test in Old is Completed. Class Conferences and Individual Conferences with Teacher

By A. J. STODDARD
Superintendent of Schools, Bronxville, N. Y.

ACCORDING to the individual method as it is used in Bronxville, subject matter is divided into "assignments." For instance, the subject of factoring in algebra might constitute an assignment. Different parts of the assignment are given one or more unit values. A unit is the value assigned for doing a part of an assignment that requires approximately 100 minutes of study for completion by the normal pupil. As the student progresses through the assignment he is given "practice tests" which are diagnostic in nature. These tests are corrected by the student according to answer sheets that are so keyed as to indicate what he is to study if he has not fully completed the part of the assignment covered by the test. He may take several different forms of practice tests on a particular part of the assignment before he completes it, although usually he takes a succeeding test over only the part that he missed on the preceding test. If the student would be tempted to cheat in taking one of these practice tests, he soon finds that it would make no difference because the practice test is given as a teaching device anyhow.

Progress Tested During Conferences

During the time that the student is progressing through the assignment he may have one or more personal conferences with the teacher. This device of a personal conference has proved one of the most valuable in use with the method. The student seeks the conference and the teacher talks over with him his problems, difficulties, and progress. Also, the personal conference offers excellent opportunity to test the student on what he has accomplished. It affords the teacher an opportunity to give the student an appreciation for the subject that is not possible in the broadcasting class method. Religious leaders testify to the fact that the most effective and efficient work is done through personal conferences with individuals.

After the teacher and student are convinced that the student has qualified himself for the final test over the assignment, it is given to him. Just as with the practice tests, the whole or parts of the final test may have to be taken several times. Whenever the final test is passed completely, the student is given the next assignment in the subject. Under the Dalton plan a new assignment is not given a student in one subject until he has completed his monthly assignments in all subjects. In Bronxville, one subject is not made to carry any other subject, and a student will progress in one subject as rapidly as he can if he does not slight his other subjects as far as proportion of time is concerned. If he does get behind schedule in a subject he is required to give it special time at the close of the day.

Class conferences are held several times per week in each subject. These conferences are quite different from the usual class recitation. All testing, other than review, is omitted because it has been done so much more efficiently through the method outlined above. The conference offers opportunity for special reports, special discussions, oral English, and group matters that are of especial interest to the whole group and in which the whole group can participate. Also, it is often economically employed for the purpose of anticipating processes that are to be involved in future assignments. It is during these conferences that purposes are initiated and projects carried on, giving rise to social values that might be lost during the more individual work on assignments.

Freedom of Movement Permitted to Students

According to the plan in operation in Bronxville, the students pass from one laboratory (a room where a pupil studies) to another at will, the only exception to this being when a particular room is in use for a conference or is filled to capacity. A general study hall is provided to take care of students that can not be accommodated elsewhere at a particular time. A student may stay as long as he wishes in a particular laboratory with the exception that he must meet his class conference when they occur. That is, he may work all day on one subject if so inclined. Of course, the student is guided in all of these matters. Each morning, he plans his day during the first 15 minutes while in his home room with his home-room teacher. He plans his day on his "time card." This time card is open for inspection by anyone and passes through the hands of the principal and the home-room teacher twice each day, affording plenty of opportunity for guidance when needed. In no case is a student told absolutely what he must do unless he has gone far astray in his planning. Our students have shown surprising progress in their ability to plan efficiently their day's work. Whenever a student enters or leaves a laboratory, the teacher in charge of the laboratory records the time and places her initials on the card. As a student demonstrates that he can use his time efficiently and not waste it about the halls or elsewhere, he is relieved from showing his time card, but uses it for planning his daily program just the same. A large proportion of our students are granted this privilege, and practically it is eliminating discipline problems.

Discipline no Longer a Serious Problem

In fact, the individual method has reduced discipline problems to a negligible part of what they once were. The pupils are too busy to make trouble. They will tell you they have no time to waste.

It will be noted that a student is required to complete one assignment before he goes on to another—not just "pass." This causes the progress of many of the students to seem to be quite a little slower than under the class method; but in reality it is just the opposite. Because all pupils are reciting together in a class does not signify by any means that all of them are up to that point. The fact that it is necessary for a student to master his subject matter as he goes along is of the greatest importance. It is this requirement that meets with the most objection from students and their parents.

More Time Required for Some Students

Under the requirement of completion of work, a student may not always be ready for regents' or college board examinations when he or his parents think he should be. A student is certified as eligible for regents' or college board examinations in a particular subject when he has completed all of the assignments that make up that subject. While it may take many students a longer time to get ready for their particular examinations, the records they make ought, in time, to be much higher, and the mortality rate much lower. They are so accustomed to the evils of the class method that they do not see them as such, but rather look upon the attempt to correct these evils as constituting the only evil. Under the class

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Address before conference on individualized instruction, held by United States Bureau of Education and University of Pennsylvania cooperating, Philadelphia, March 27, 1925.

method, the pupil sits with the same class day by day unless he fails at the end of the semester or the year. Only a small proportion of the pupils fail, and then only when conditions are very serious. It is difficult to get parents and pupils to realize that, even though they all stay together and appear to be together, they are widely apart—far more widely apart than if some of them were to be allowed to "pass" on to the next grade while others were to fail. Under the individual method a large number of the pupils seem to be "behind," and the parents of these pupils are constantly confronted with that fact. It is a source of discomfort to them, and the issue is a daily one instead of once or twice a year. Parents and pupils must be slowly and patiently shown that when a pupil is doing the work of which he is capable at the rate of which he is capable there is no cause for complaint on the part of either parent or pupil and that it is only under such conditions that real progress is made.

Assignments Present a Difficult Problem

The direct problem that has caused most of our work and study up to date has been that of the assignment. There is still a tendency for the assignments to be too complicated and to require as a minimum for all what should be the maximum for many. In other words, our assignment should require the minimum essentials for all with enriched and extended requirements for those that are capable of doing more. We are not interested in students completing their high-school courses in less than four years, but we are attempting to get each pupil to work more nearly to his capacity.

The biggest and most interesting problem that confronts those using the individual method is the proper correlation between group work and social work, or, more specifically, the relation of drill work to projects in education. Greater progress probably will be made in the solution of this problem in the elementary grades rather than in the high-school because of greater freedom with the curriculum in those grades. However, promising strides toward its solution are being made in several subjects of the high school. From an ideal standpoint, we all agree with Doctor Kilpatrick that "education is not acquiring specified subject matter fixed in advance; it is the continuous remaking of life by acquiring subject matter as it is needed for present behavior." The practical application of this ideal in the classroom probably will come slowly with the passing of the years.

Increased Feeling of Personal Responsibility

After 14 months of use of the individual method in Bronxville, certain results are becoming evident, according to the testimony of the teachers, students, and parents. All of our students are studying harder than ever before. It is too early to tell definitely whether or not they are learning more than before, although results so far are encouraging. There is no question that our students are growing in their ability to plan their own time efficiently and in their willingness and desire to assume responsibility for their work. Our students and our teachers, because of the assignments, know more definitely where they are going than they did before. Students work constantly with their subject purposes in mind; in fact, they can not do their work unless they keep their purposes in mind constantly. Teachers plan their work more carefully than ever before and know more about what each student is accomplishing. The teachers are beginning to assume, as the measure of the effectiveness of the work, the progress that each child makes; that is, how far he goes from where he is. The question is not so much as to where he is, but as to how far he gets from there.

Not Enough Heretofore Required of Students

It is surprising to learn that there is an immense, untapped source of motivation in the acquiring of facts, knowledge, and skills if the task is clearly, definitely, and concisely set before the child in terms that he is able to understand and within the reaches of his ability to master. A great deal of our necessity for motivation of our school work has come about from the procedure by which we expected the child to learn. We have been doing too much for the child and not expecting enough of him. It is surprising how quickly he demonstrates that he is eager and willing to accept responsibility if he is asked to assume it. From the kindergarten through college, boys and girls have been told instead of being allowed to do for themselves. If the individual method contributes to the development of men and women that are able to "stand on their own feet," it will have done much in a democracy where every individual must think for himself.

Wireless apparatus in public schools for the use of parents and citizens' associations will be permitted by the New South Wales Minister for Education after successful experiments. It is expected that such a course will bring isolated country centers in touch with Sydney, and the country schools will thus become important social centers, especially in the evenings.

All discriminations on account of sex in the employment of teachers for public educational institutions are forbidden by a recent act of the New Jersey Legislature.

Czechoslovakia Leads in Training Local Historians

A recommendation that county committees for adult education arrange to train chroniclers of communities is embodied in a recent order of the Czechoslovak Ministry of Education. A second order outlines the course of study for the third class of the State Archivist School at Prague. The two provisions for local and State training of chroniclers are unique and taken together probably constitute the best organized attempt made by any nation to arrange for a proper recording of events. Czechoslovakia has set a precedent in providing, as a part of its scheme of adult education, for the serious training of chroniclers.

The first order publishes a detailed program of theoretical and practical courses; suggests as lecturers the local or some other professional archivist; and provides ways for financing the community courses. The expenses for material are to be met by the community; the personal expenses by the committee on adult education aided by a contribution from the ministry.

The course of study at the State Archivist School requires in both winter and summer semesters two hours a week in each of the subjects: Czech diplomatics, documents of Czech history, knowledge of State records, and administration of counties, cities, and patrimoniums. Church administration, and administration of the State and the States of the Empire are given 1 hour each. New age diplomatics is given three hours, making a total of 13 hours a week for each semester.—*Emanuel V. Lippert, Comenius Institut, Prague.*

Undergraduate Scholarships for Study Abroad

To increase understanding and friendship among nations through encouragement of gifted American college and university students to pursue a part of their education in the universities of other countries, a group of donors have entrusted to the American Council on Education the sum of $8,000 to provide for scholarships during the year 1925–26, each worth $1,000.

To be eligible to receive one of these scholarships a student, either man or woman, must be not less than eighteen years of age, must have been in residence for a period of two academic years at an American institution approved by the American Council on Education, and must expect to return to his American college to take his degree. There is no limitation concerning the countries or universities in which students may study nor as to the field of study.

Adapting Schools to Individual Differences

"WIDESPREAD measurement of children's achievement and of their native intelligence has brought into bold relief the wide differences that exist among individuals," declared Carleton W. Washburne, superintendent of schools, Winnetka, Ill., in an address before the National Society for the Study of Education. "In the face of these differences," he added, "the absurdity of expecting all the children in a class to achieve the same degree of knowledge and skill from the same assignment, with the same time allotment, has become evident. Consequently, there has been a general movement toward adapting schools and school methods to the individual differences among children."

The interest in this movement and the necessity for some drastic modification in the traditional procedure is the justification for the twenty-fourth yearbook of this society. A number of experiments in individual instruction have been carried out in public schools in various parts of the country. These vary all the way from coaching laggards, or dividing children into ability groups, to much individual self-instruction.

The schools which have gone the farthest in individualizing their work have contributed the most to our statistical knowledge of individual instruction. Sufficient data justify the following conclusions:

1. Ability grouping is only a half-way step and does not fully solve the problem of adjusting schools to individual differences.

2. Individual work does save time, especially for the brighter children and those children who would normally be repeaters.

3. In Winnetka, individual work results in devoting an unusually large amount of time to group and creative activities.

4. The tendency of individual instruction does not seem to be so much toward getting children through school at an early age, as toward using the saved time for broader and deeper education.

5. Individual promotions appear definitely to decrease retardation and corresponding overageness.

6. Individual work increases efficiency in the tool subjects.

7. There is no evidence that individual work costs more than class work, the meager data available tending to indicate that it does not affect costs one way or the other.

8. Individual work does not appear to place an undue burden upon the teacher.

9. Individual work in the elementary schools does not result in inability to do class work efficiently in high school.

A safe general conclusion from the various descriptions of experiments, discussions, and statistical data would seem to be that it is practicable, without any serious compensating losses, to adapt public-school work to the individual differences that exist among children.

Individualizing Instruction

"THE MOVEMENT for the greater individualization of instruction must and will spread," said Prof. William H. Kilpatrick, of Teachers College, Columbia University, before the National Society for the Study of Education. "But we shall always retain class work and continue, I believe, to give it first place. Certain subjects, as geography and history, are best learned in connection with group discussions, while joint enterprises give an opportunity for character training not otherwise to be got.

"The Dalton plan is attractive as one line of possible educational procedure, but as a total program, no. We can not accept it. The main objection to the Dalton plan, however, is, curiously enough, not so much what is new about it as what it holds in common with the more customary procedure. Both assume that education mainly and properly consists of learning certain prearranged subject matter for examination purposes. But I wish," said Doctor Kilpatrick, "to dissent emphatically from this position. Education must essentially be a continual and continuous making over of life to ever higher and richer levels. And learning is good and desirable exactly as on the one hand it makes over life at the time of learning and on the other gives simultaneously promise for continuing the process.

"The Winnetka plan is more striking. It agrees with the Dalton plan in providing individualized instruction, but differs in giving about half the time to group work as a necessary part of a properly rounded school program. Winnetka surpasses Dalton in trying to put the individual work more fully upon a self-directive and self-testing basis. But the Winnetka plan is open," according to Doctor Kilpatrick, "to two serious objections. It carries its mechanized work too far, including some subject matter that can not properly be mechanized. And it unduly separates the individual learning from its place of application. To remove fact and skills from their natural setting situation is to lessen their felt meaning and so to lessen the probability that they will be applied when needed. Moreover such learning tends to break life into separate compartments, a practice almost sure to be morally hurtful.

"Let Winnetka give first place to its admirable group work, and fit to this its individualized instruction so that each child may drill himself as the need shall come. With this program Winnetka can face the world."

Single Responsible Board Advocated for City Schools

Only one board should be responsible for the financial control of the schools, and that is the school board, recently declared W. S. Deffenbaugh, of the United States Bureau of Education. He said further:

"The courts have repeatedly decided that education is a State and not a municipal function. All authorities on school administration advocate a board of education independent of municipal control. Committees that have made school surveys in cities where the estimates of the boards of education may be revised by city officials have recommended that the boards of education be made fiscally independent. It has been found that fiscally independent boards of education are not extravagant, the per capita cost being practically the same under independent as under dependent school boards, and that upon the whole the schools in cities having independent boards are more efficient. All the evidence is in favor of the independent board."

Interschool Athletics Stimulate Academic Study

In order to be eligible for participation in New York interscholastic activities, a candidate must have passed at least nine school credit hours in the preceding semester, according to a new ruling of the State public high school athletic association; and in order to represent a school, a passing grade must be maintained in at least 14 hours of work.

Los Angeles School Board Maintains Sixteen Day Nurseries

To Care for Young Children of Working Mothers, and Thus to Permit Older Children to Attend School. Babes Under Nine Months Old Not Received. Cooperation with Kindergarten. Small Fees Required of Parents. Careful Attention to Diet and Sanitation. Instruction in Child Care to Mothers and Older Children

By ETTA PROCTOR FLAGG
City Supervisor of Home Economics, Los Angeles, Calif.

DAY NURSERIES under the city board of education of Los Angeles are past the experimental stage. There are now 16 city day nurseries, and several more schools are asking to have them established immediately.

These day nurseries, as far as possible, cooperate with the kindergarten and, in a number of the schools, the kindergarten and the nursery are adjoining. This makes an ideal situation for cooperation between the two departments. New buildings that are erected in localities where there is most need for nurseries are making provision for them.

Day nurseries are an outgrowth of compulsory education. In many of the poor and foreign districts boys and girls are kept at home to take care of younger children while the mothers, and in some cases the fathers who had to take the place of both father and mother, worked. At first these younger children were brought into the regular classroom, but this was very unsatisfactory and day nurseries proved a suitable solution of the problem.

Establishment Due to Private Initiative

At first the nurseries were maintained by the parent-teacher associations, but in 1917 the parent-teacher associations ceased paying the nurses and other expenses, and the entire responsibility for the nurseries was taken over by the city board of education. Thus the nurseries became an integral part of the Los Angeles city school department.

The day nurseries have become a source of real help to many working mothers. Not only do these mothers know that their young children are well cared for while they are at work, but through the nurse they receive many helpful suggestions on the proper care and feeding of their children. This is especially true in the foreign districts, and we are finding that these nurseries are proving one very effectual means of Americanization as well as an additional bond between home and school.

Most nurseries keep open eight hours each day, the children being taken home by the parents or older brothers or sisters in the evenings. Our aim is not to relieve parents of the responsibility of their children, but to aid these parents to care for the children more efficiently.

The financial condition of the family is considered when children are received. Unless in dire poverty, each child pays a small fee in order that parents may not feel themselves objects of charity. It is a prime aim of our department to destroy the spirit of mendicancy where it exists in parents and to foster self-reliance and self-respect.

The money paid is expended for the food served the children and for incidental expenses, including laundry. Three meals are served daily. Breakfast at 9 o'clock, a wholesome hot dinner at noon with a simple dessert, and another light meal at 3.30 p. m. Each child has a plentiful supply of milk. Balanced menus suitable for the different ages, receive careful consideration from our dietetics department.

Rest period after noon lunch

Children are admitted to the nursery by the principal of the school, in the same way that children are admitted into the kindergarten. The nursery proper admits children from 9 months to kindergarten age. Only in emergency cases are children under 9 months admitted; otherwise, many mothers would be tempted to wean their babies too soon, in order that they might go to work. If a baby under 9 months is taken, its food is prepared according to a prescription from the clinic doctor, and the weight carefully taken at least once a month.

No child is admitted unless clean and pronounced in good health by the school nurse. The day nursery children are under the supervision of the school nurses, the school doctor, and the city health department.

The district home teacher investigates all cases and only those are admitted who in her judgment are worthy. Larger children are allowed to share instruction, entertainment, and protection of the day nursery until some one is at home to care for them.

The nurse is always an English-speaking woman of good character who has had experience with children, preferably a woman who has had nursery or kindergarten training or both. These nurses live in their own homes. Their day consists of eight hours—in most places from 8.30 a. m. to 4.30 p. m. In some districts, however, the nurseries are open from 7 a. m. to 6.40 p. m. to meet the working conditions better. In these nurseries the nurses work by relays, so that no nurse is on duty longer than eight hours per day. Each nursery building is kept by the janitor of the school, as any other room is kept.

A daily register is kept in each nursery giving attendance, diet served, number of

baths, medical aid, the amount of daily fees, and the name of the child with addresses of residence and place of employment of parents. This report is rendered to the home economics office once a month.

The nursery rooms are light, clean, bright, and cheery, with plenty of fresh air and sunshine. Americanization and patriotism are taught from the beginning. All children salute the flag of the United States once every day, even though they are too young to repeat the pledge.

Much attention is given to the formation of regular habits. All meals come at the same time each day. Careful consideration is given to the children's rest period directly after the noon meal. Each child has a cot upon which he takes a nap for an hour or more. Beds are provided for the small babies. The rooms are properly ventilated and heated, and quiet prevails so that each child has a rest, and almost without exception a nap when he gets accustomed to the regular time.

Notices are sent to the parents urging the continuation of regular meals and sleep while the children are home Saturday and Sunday.

The closest attention is given to these children's morals and manners. They are always under the supervision of a matron whether in the yard at play, in the sleeping room, or while eating.

The children play in the yard after their morning lunch and again when the afternoon nap is over, except when the weather is rainy or stormy; then their play is conducted on the porches or indoors, with plenty of fresh air.

Americanization classes take advantage of this department. While their little ones are cared for in the nursery the mothers receive instruction.

Groups of large girls in the foreign classes, especially those who have small brothers and sisters in attendance, are brought into the nursery for special instruction in the care of the small children and preparation of their food and clothing, also in story telling and games.

From time to time the city fire department inspects the nurseries. The nursery children have fire drills at the same time the school is drilled. The pupils of the highest grade in the school go to the nursery and each carries a baby to safety. At first some of the babies resent this procedure, but after a few drills they consider it "a lark."

High-school attendance in Indiana increased 55.95 per cent during the past 5 years. Increase in the elementary grades was 14.91 per cent, according to statistics compiled by the State department of public instruction of Indiana.

Pupils of Almeda School, Baltimore, discussing school activities with the principal

This School a Factor in Neighborhood Development

Auxiliary pupil activities play a large part in the administration of Almeda School, Baltimore. That school is in the heart of the industrial district of the city, and the majority of the population are of foreign birth. Much social work in the neighborhood is necessary, but great care is exercised to avoid overdoing it, for that might defeat its purpose.

The school is rapidly becoming a community center. The school nurses have made a thorough study of the environment and direct the work with confidence and success. The people are learning that privileges carry responsibilities and are taking an active part in community affairs. In the school itself the pupils are organized in many extra school activities, and take great delight in them. These activities include: Boys' club, girls' club, junior safety council, junior Red Cross, dramatics, safety guards, junior traffic squad, current events clubs, readers' clubs. The accompanying illustration shows a group of pupils in consultation with the principal, Milton L. Regus, about some of these activities.

The gymnasium of the school is constantly used by the physical education teacher. In the afternoons and evenings classes are held for young people employed during the day. This is used, too, as an opportunity of encouraging attendance at evening schools.

Cooperation for Weekday Religious Instruction

The Board of Education of Wilmington, N. C., has adapted the time schedule of the New Hanover High School to give opportunity for religious instruction to students from 9 to 9.50 on Wednesday mornings. Upon written request of parents, the students are permitted to attend classes in religious education, which are conducted under the direction of a board of religious education appointed by the ministerial association. Each denomination or faith prescribes its own course of study and its own instructors, principally from the clergy. The several groups meet at designated places, usually in churches near by, and the students are organized by high-school classes. The rules are as nearly as practicable the same as govern school class procedure.

More than 50 per cent of the total high-school enrollment is enrolled in classes for religious education. The attendance and interest on the part of students and teachers promise success. The plan is now operating for the first half year. Methodists, Baptists, Presbyterians, Episcopalians, Lutherans, Catholics, and Hebrews are participating.—*W. A. Graham, Superintendent of Schools.*

Educational Ratings Promote Higher Standards

Every county in Virginia in 1923–24 received a general educational rating of 50 or higher, with 100 as the standard of excellence. According to announcement of the State department of education, when the plan of ratings was inaugurated, in 1919–20, 23 counties received less than 50; in 1922–23, the number under 50 was reduced to 3, and in 1923–24, no counties were so rated. Fifty-eight counties were rated above 70 per cent.

New Books In Education

By JOHN D. WOLCOTT

Librarian Bureau of Education

BEACH, WALTER GREENWOOD. An introduction to sociology and social problems. Boston, New York [etc.] Houghton Mifflin company [1925] xiv, 369 p. 8°.

The social sciences are receiving constantly increasing attention as subjects of study in our schools and colleges. A single introductory course to all the social sciences is also growing in popularity in these institutions. The author has prepared this book in the belief that sociology is perhaps the best approach to all the social sciences. His text is designed throughout to meet the needs of introductory college classes. The book presents in simple and concrete fashion the elements of sociological theory illustrated by social problems. The scope of the subject matter is comprehensive, including essential contributions to the study of society and its problems of economics, political science, psychology, ethics, and education. The social aspects of education are the subject of one chapter.

COX, PHILIP W. L. Curriculum-adjustment in the secondary school. Philadelphia [etc.] J. B. Lippincott company [1925] viii, 306 p. tables, diagrs. 12°. (Lippincott's educational guides, ed. by W. F. Russell.)

Part I of this book deals with the purposes and problems of secondary education, and with the factors that complicate the problem at this time. Part II discusses the procedure and results of scientific method in the field of curriculum-making. Part III presents a series of sixteen guiding principles for the adjustment of the secondary curriculum. Each principle is explained and justified, and then further interpreted through its application to school curriculum problems; first, as regards present practice in secondary schools, and second, as suggesting what schools can do to bring their practice into conformity with the principle. The object is to aid promoters of a sounder secondary curriculum, by supplying them with principles based on philosophy, psychology, and a comprehensive knowledge of contemporary life.

EBY, FREDERICK. The development of education in Texas. With an introduction by William Seneca Sutton. New York, The Macmillan company, 1925. xv, 354 p. 8°.

The progress of education in Texas affords an especially striking subject for the historian, because, as the author of this record says, in no other State has the struggle of such diverse traditions and ideals been so prolonged and bitter. The history of the Texan school system will therefore appeal strongly to students of educational development, both in Texas and elsewhere. This volume details the story from the earliest historical sources of the educational system of Texas to the present day, and analyzes the causes of the various phases of development.

KELLY, FREDERICK J. The American arts college; a limited survey, with the aid of a subvention from the Commonwealth fund of New York. New York, The Macmillan company, 1925. xii, 198 p. tables, forms. 12°.

The survey here reported is a study of actual aims, conditions, and educational practice in a selected group of typical colleges of liberal arts. The colleges upon which the inquiry was concentrated number about twelve representative institutions, including State universities, endowed universities and colleges, and one city university. In addition to the data collected from these institutions, information from many other colleges and universities was also used by the investigator. Considering that the time of only one person was available for a few months for the study, the field chosen has been covered very comprehensively. The various statements of aims of the colleges of arts and sciences, and the criticisms of these statements, are first compared, and on this basis a new statement of aims is formulated by the author. Deans of many other colleges than the twelve mentioned, and a list of representative high school principals, were also called upon for their reactions concerning the aims of colleges. Information for the entire study was gathered from representative students and alumni as well as from faculty members. The other topics taken up are college courses and curricula, educational and vocational guidance of students, college methods of teaching, measuring the achievements of college students, and extra-curricula life of the college. The final chapter gives a general summary and conclusions on the topics investigated, and suggests allied subjects for needed research. Dr. Samuel P. Capen contributes an introduction to the volume.

MARTIN, G. CURRIE. The adult school movement; its origin and development. London, National adult school union, 1924. xviii, 435 p. front. (port.) plates. 12°.

A history of adult schools in England, with a description of their present status and a forecast of their future development, is here given. Sir Michael E. Sadler contributes an introduction, in which he commends the volume. He says that the adult schools described are the nearest English parallels to the people's high schools of Denmark.

METCALF, MARGARET F. Motivated primary activities for rural teachers. Chicago, Beckley-Cardy company[1925] 143 p. front., illus. 12°.

Prof. M. V. O'Shea, in the introductory note, says that this book should contribute toward making the teaching in rural schools both more interesting to young pupils and more valuable to them in the intellectual development. The author has undertaken to guide and inspire rural teachers to an intelligent appreciation of child nature and the things children like to do.

RICCIARDI, NICHOLAS. The boy and his future. New York, London, D. Appleton and company, 1925. xvii, 119 p. 12°.

The author, who is commissioner of vocational education of California, offers in this book aid and guidance to parents in one of their most difficult problems, the preparation of a boy for the time when he must launch out in life for himself. The book gives the necessary information for equipping the boy for the place in life for which he is best fitted. Dr. Robert J. Leonard, of Teachers College, Columbia University, says in the preface that study clubs of parents and teachers will find fruitful material in this volume; and best of all, boys themselves will find suggestive questions and discussions which will direct their thinking and stimulate their ambitions.

ROBERTS, S. C. Manual arts; educational and vocational. Boston, R. G. Badger, The Gorham press[1924] 277 p. front., illus. 8°.

The writer of this book has been an observer of the teaching and practice of manual arts since the introduction of the Russian system, and his purpose is to set forth a type of practice growing out of long observation and experience, and which he believes to be in harmony with current educational theory, and which at the same time includes valuable vocational training.

SMITH, NILA BANTON. One hundred ways of teaching silent reading. For all grades. Yonkers-on-Hudson, N. Y., World book company, 1925. x, 149 p. 8°.

This manual offers the teacher 100 ways of providing individual, diversified, and well-organized practice in silent reading.

SMITH, RICHARD M. From infancy to childhood. The child from two to six years. Boston, The Atlantic monthly press[1925] ix, 105 p. 12°.

The author here presents a sequel to his earlier work entitled "The baby's first two years," to aid parents in guiding the health and habits of children during the years from two to six.

SOWERS, JOHN IRVING. The boy and his vocation. Peoria, Ill., The Manual arts press[1925] 198 p. illus. 8°.

The matter of vocational and life guidance, according to the experience of the author of this volume, needs to be inspirational and stimulating as well as didactic. The boy needs to be given vision and helpful ideals about such common things as work, character, thrift, health, and citizenship, and to be awakened to the necessity of a training that will fit him not only for a vocation but for all the obligations of life. The object of these pages has been to express these things to the boy in an intelligible and usable form. The material is most suitable for use in regular class work in the eighth and ninth grades.

WEEKS, ARLAND D. Psychology for child training. New York, London, D. Appleton and company, 1925. xi, 312 p. 12°.

Parents will find this volume designed to aid them in bringing up their children in the best possible manner, according to the approved principles of psychology. It describes the native tendencies of childhood, accounts for the typical behavior of childhood, and offers practical suggestions for training in the light of such knowledge. The first chapters deal principally with instincts, after which an historical review of methods of child training is given. The latter part of the book deals directly with problems of the development of the child and his adjustment to environment.

WINSLOW, LEON LOYAL. Organization and teaching of art; a program for art education in the schools. Baltimore, Warwick & York, inc., 1925. 147 p. 8°.

The author of this book is director of art education in the public schools of Baltimore. Assuming that all teachers of drawing and allied subjects should possess at least an appreciative knowledge of the entire field of art education, he presents a practical working program of instruction for the elementary and secondary school in both fine and industrial arts.

A demonstration of preschool parent training will be conducted in Georgia through the State Parent-Teacher Association. The Laura Spellman Rockefeller memorial fund has made a grant of $4,000 a year for three years to be used for this purpose.

Trend of College Entrance Requirements

IN THE EARLIER COLLEGE DAYS entrance was obtained only by passing examinations in the various subjects required. At the present time no fewer than 10 different methods of admission to college are in use in the various colleges of the United States. All colleges will admit on examination, and all but a very few will admit on certificate. Neither method has proved entirely satisfactory, and two new methods have recently appeared which bid fair to develop into the most important methods of the future. The first of these methods is the plan initiated at Harvard in 1911, and the second is the psychological examination plan initiated at Columbia in 1919. As a part of each method a complete set of data concerning the applicant—his record, aspirations, interests, etc.—as well as special recommendations are required. The results of the use of these new types of admission methods have indicated that each has a high selective reliability, when the subsequent records of the students are considered.

There is a very definite movement to select from the field of candidates only those who are considered the "best risks." The method most commonly used is to take only those who are in the upper part of the high-school graduating class, those who have made better than passing marks, etc. Eleven per cent of the colleges now use some such procedure as against one per cent in 1913. This field promises the most significant developments in the articulation of high school and college during the next few years.

Enrollment in liberal-arts colleges has increased more than 500 per cent since 1890. The resources of the colleges have also increased greatly but not in proportion to the number of students. The result is that colleges are crowded and are beginning to limit the size of entering classes. A number of methods are used to select applicants, among which such elements as interests, abilities, capacities, preparations, intellectual records, ambitions, and the like are receiving most attention. Limitation promises to become the rule rather than the exception within a very few years.

—*HARRY CHARLES McKOWN*
In Bureau of Education Bulletin, 1924, No. 35

Optimism in Education

WHATEVER may be the weakness in our American system of education, there is sincere ground for the belief that our people will find their way to a system of schools that will make for good citizenship and promote a high quality of human life.

The reason for this expectation lies in the deeply rooted faith of Americans in education. None of us may know precisely the type of school best suited for the training of a democracy. We may be in doubt as to the studies that will most directly develop sound thinking. We may have exaggerated notions of the time and the money that ought to be spent in special forms of education. But, back of all our uncertainty, there lies deep in the conscience of the American people the conviction that in education lies the hope of the future. No people more sincerely believe in public education than Americans. For the education of their children they are ready to make great sacrifices, and if for a generation or two they offer up this devotion at the altar of a mistaken ideal, nevertheless the devotion is sincere.

In time this spirit will go far to help the people themselves to find their way to a conception of education that shall be disciplinary yet generous; whose fruitage will be the development of those forms of schools that make for sound training and for true culture. If one could not believe this, his anticipations for the future of democracy would be dark. But no one can come closely in contact with the schools of English-speaking North America, in the United States and the Dominion of Canada, without a firm conviction that the inherent desire for education and the sound common sense of this people will in time find their way to a system of schools which will serve for the development both of intelligence and of character. The widespread discontents touching the weaknesses and the mistakes of the past years are themselves indicative of a sound attitude. Slowly, but none the less surely, we will as a people turn our faces toward an ideal of education which rests upon simplicity, sincerity, and thoroughness. To face in this direction is the beginning of true progress.

—*HENRY SMITH PRITCHETT.*

SCHOOL LIFE

Volume X
Number 10

June
1925

DEMONSTRATION OF LIFE-SAVING METHODS AT A MAINE SUMMER CAMP

Published Monthly [except July and August] by the Department of the Interior
Bureau of Education Washington, D. C.

GOVERNMENT PRINTING OFFICE

CONTENTS

A BRIEF LIST of the publications of the Bureau of Education which are of especial value to ELEMENTARY SCHOOL TEACHERS has recently been prepared, and it may be obtained without charge upon application to the Commissioner of Education, Washington, D. C. A few of the documents may be had gratuitously, but the majority of them should be purchased at nominal cost from the Superintendent of Documents, Government Printing Office, Washington, D. C. The list comprises 37 titles, including a great variety of subjects. The following are examples: Diagnosis and treatment of young school failures; Major projects in elementary schools; List of books for a teacher's professional library; Suggestions on art education for elementary schools; Lessons in civics for the six elementary grades; Training in courtesy; Games and other devices for improving pupils' English; Program of education in accident prevention; Declaration of Independence (fac simile); Constitution of the United States.

SCHOOL LIFE is an official organ of the Department of the Interior, Bureau of Education. It is published monthly except in July and August. The subscription price, 50 cents a year, should be sent to the Superintendent of Documents, Government Printing Office, Washington, D. C., and not to the Bureau of Education. Single copies are sold at 5 cents each. For postage to countries which do not recognize the mailing frank of the United States, add 25 cents a year.

SCHOOL LIFE

Published Monthly, except July and August, by the Department of the Interior, Bureau of Education
Secretary of the Interior, HUBERT WORK - - - - - *Commissioner of Education,* JOHN JAMES TIGERT

VOL. X WASHINGTON, D. C., JUNE, 1925 No. 10

Education the Resultant of Many Forces Acting in Divers Ways

Most Important Agencies for Educating the Youth are the Family, the School, the Church, the Press, the Motion Picture, and Sundry Organizations. Many Persons Profit as Much from Recreational Activities as from Formal Instruction. Motion Pictures Exert Powerful Influence Upon Ethical and Aesthetic Standards. Newspapers Unduly Emphasize Exceptional Occurrences. Chief Responsibility for Education Rests with Family

By WALTER M. W. SPLAWN, *President University of Texas*

TRAINING of the youth has always been regarded as fundamental. In every race and age, in every degree of civilization, in every clime, the young have been educated according to the habits of living and the ideals of the particular group. In primitive conditions the family assumed most of the responsibility for training the young. In the more advanced stages of civilization the family has delegated to various agencies much of the work of training or teaching. One of the earliest of these, developed through family cooperation, was the church. The church in time came to maintain a school or schools. We now speak of the home, the church, and the school as three great socializing agencies.

Press the Most Important Supplementary Agency

Not all the training of youth is now done by these three, however. As important as they are, other supplementary agencies have appeared and are appearing. Notable among them is the press. Of more recent appearance, but of far-reaching influence, is the moving-picture show. Then there are miscellaneous agencies, some of more importance than others, such as Boy Scouts, Camp Fire Girls, and divers local associations and arrangements for play and recreation. For our purposes we may mention as six of the most important agencies for educating the youth: First, the family; second, the school; third, the church; fourth, the press; fifth, the moving picture; and sixth, a miscellaneous assortment of organizations.

Address before National Congress of Parents and Teachers, Austin, Tex.

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Let us now consider these in reverse order from that just mentioned. First, we shall think of the miscellaneous activities. We do not always regard a recreational club or activity as having educational value, yet a great many children and young people profit more from some of these activities than they do from the formal discipline of the older agencies. One reason for this, perhaps, is that there is a certain spontaneity, a chance for initiative, opportunity for self-expression, that is too often lacking where requirements have been standardized and where the teaching and activities are largely controlled by tradition and convention. These miscellaneous activities may be graded from the voluntary gangs of small boys up to a summer camp under expert and competent supervision. Miscellaneous activities, such as athletic clubs, and boys' and girls' clubs, are usually organized for recreational purposes, yet a by-product may be, and frequently is, very valuable training. That is to say, certain important qualities of character are sometimes stressed and developed. Especially is this true among such organizations as the Boy Scouts. There may be a chance to learn something useful or something that will at least afford wholesome pleasure.

Activities of Leisure Hours Becoming Complex

With the increased leisure of the American people, these activities are growing in numbers and complexity. Parents would do well to look into them, study them, and appraise them because they consume, first and last, many of the waking hours of children, even from the tender years of six or eight until manhood. Then, too, some of these activities are good and others are bad.

Appeal of Moving Pictures is Universal

Second, we are justified in singling out the moving picture from other commercialized forms of entertainment because of the universality of the appeal made and because of the tens of millions of people who patronize the moving picture theater with more or less regularity. The moving picture makes the appeal through the eye. It has the power to stir the imagination as the printed page would do only in the exceptional and gifted. The moving picture is having a profound influence upon the ethical and aesthetic standards of the American people. The moving picture does and will contribute largely, either to breaking down the old-fashioned and time-honored moral code, or to strengthening that code which has been accepted as a matter of course among civilized people even from before the time of Moses. If children and young people, plastic and sensitive to suggestion, follow with absorbed interest hour after hour and week after week the stories that are thrown upon the screen, it is inevitable that their characters will be affected by what they look upon. A greater truth was never spoken than that which Tennyson put into the mouth of old Ulysses, when he made him say, "I am a part of all that I have met."

Aesthetic standards, too, are tremendously influenced by the motion picture. Whether the American people to-morrow will love the beautiful or tolerate the ugly will, in some measure, be determined by the pictures of to-day. The motion picture is designed to entertain. It

usually presents a story, too frequently of the sensational variety, often absurd in plot. Yet the picture companies are beginning to make some little appeal to thoughtful members of the community and to advertise that they will furnish close-up views of significant occurrences. They sometimes undertake to get out informational films, and some pictures even aspire to deal with social and political problems. While the purpose of the moving picture is to entertain, an important by-product is education, and particularly is this important in view of the influence that looking at pictures will have upon moral standards and upon aesthetic ideals.

Newspapers Furnish Entertainment as By-Product

The newspaper is supposed to bring to us an account of the happenings of the day. Originally, it was for the dissemination of information, a chronicle, a record of current events, a faithful account of the doings of important people, of decisions of governments, of the undertakings of great enterprises, and a record of the extraordinary. People take a great deal of interest in what is out of the ordinary. They are rather curious about the unusual; consequently, the editors of papers have come to playup, as we say, the exceptional, the sensational, those occurrences not typical, but so unusual as to have the power to attract and hold attention. Though not its original conception, the newspaper has come to furnish entertainment as a by-product. Along with news, it brings entertainment in joke columns, comic strips, poetry, doggerel, cross-word puzzles, and fiction. Unfortunately, the fiction is not always labeled as such, but stories purporting to convey information are frequently doctored by the ingenious reporter more with the view to entertaining than to informing.

Press More Influential than Classics

The newspaper and the popular magazine have great influence upon the character of the language spoken, upon the development or the deterioration of the mother tongue. The reading of the King James version of the Bible and of Shakespeare's plays has had great influence upon the standards and usages in the reading and speaking of English. The newspaper and the magazine now exert much greater influence than the classics because every day, or several times a day, the newspaper is read while too often the classics are neglected. Slangy stories, sensational narratives filled with colloquialisms, provincialisms, and inaccuracies of speech are perused again and again by old and young while the dust settles undistrubed upon books, the reading of which inspires, ennobles, and enriches.

The newspaper comes to us with its roaring headlines, with its screaming announcement of some trivial incident; again and again during the day it thrusts itself upon our attention. We scan its columns of miscellaneous, unorganized information, and lack of information and efforts at amusement. The make-up, the methods, the policies, the character of the average newspaper of our day make for restlessness, for carelessness as to accuracy, and for lack of confidence in the representations of others. The newspaper brings much of good and some of evil every day to bear upon the individual. It is a powerful instrument in the education of the youth, though never designed as such.

Church a Strong Factor in Education

We think of the church as the institution particularly interested in fostering religion. The church, however, incidentally performs much of the service of educating the youth. In fact, the average church organization maintains a school for a part of each Sunday and seeks to bring all of its members into that school and formally teach them the religious literature, the doctrines, the practices, and the ideals of that denomination. Much of our ethical instruction is left to these weekly church schools which we have come to foster as Sunday schools. Much of the preaching we hear is didactic. Ministers frequently try to give information and to provoke thought, to stimulate inquiry, to mold opinion. The church, however, has found the problems of religious teaching so all-absorbing that it has committed to the schools other branches of formal discipline.

Some people think of the schools as the sole agencies of education, yet, as we have seen, they, while the most important, constitute only one group of such agencies. The parents of America are profoundly interested in our schools and our public-school system. From the age of 7 until 21, or even older, the child is, during the most of the day, in school. The teacher and fellow students have much more of his time than do the parents. Naturally, they will have much influence in molding the ideals and the character, as well as developing the mind. So important is the work of the school that we can not expend too much effort in improving its methods and in adapting its services to the years and capacities of the individual.

Family Still Most Important Socializing Agency

But, after all, the family is still the most important of these socializing agencies. While the family has delegated to these various agencies much of the work of training which it originally undertook, yet the child is more largely influenced by the training or the absence of training in the home than by the influence of any other single institution or agency. With all the aid of specialists in the school room and in the pulpit, with all the help of the press, the moving picture, and many varieties of miscellaneous organizations and activities, the chief responsibility of the education of the youth rests with the family. For the family, by its requirements and standards, will have most to say as to the quality of the service rendered by these supplementary agencies called into being to assist the family.

The most powerful member of the family in the training of the youth is the mother. Since she stays within the house to carry on her work, she is naturally with the children when they are young. She sees them more frequently and has larger opportunity to serve them, to guide them. Her personality and her character will inevitably have most to do with their development.

University Controls Appointment of Secondary Teachers

Veto power in the appointment of teachers of accredited secondary schools is reserved to Melbourne (Victoria) University. Such teachers must have adequate academic preparation and professional training as well. The "schools board" of the university suggests courses for the secondary schools and prescribes subject matter for examinations. A staff of highly trained specialists is employed as secondary inspectors by the Dominion department of education, and they work in cooperation with the university authorities. Appointments to these positions are made upon the recommendation of the schools board of the university.

A demonstration school to be conducted in connection with the summer session of West Virginia University during nine weeks of the coming summer will illustrate the Dalton plan. It will be organized and conducted under the leadership of Ernest Jackman, principal of the high school of Dalton, Mass. This was the first secondary school to attempt the plan and it gave to that mode of procedure the name which characterizes it.

Traveling expenses in excess of $15 incurred by students of the State in going from their homes to the university and return are paid from the State treasury of Montana.

Phenomenal Growth of Instruction in Swimming and Watermanship

Aquatic Teams of Schools and Colleges Rank With Basketball Teams. Swimming a Feature of Summer Camps, Playgrounds, and Social Clubs. Many Cities Provide Free Bathing Beaches or Municipal Pools. United States Soldiers Trained to Swim with Complete Equipment. American Red Cross Most Potent Single Force for Promoting Water Safety. No One Best Method of Instruction

By ELBRIDGE COLBY

Captain of Infantry, United States Army

UNDOUBTEDLY one of the most striking adventures in American pedagogy during the first quarter of the twentieth century has been the phenomenal growth of instruction in swimming and watermanship. Whether this has been due to the increasingly artificial modes of our modern urban life, and the consequent necessity of developing means of exercising, or to the phenomenal emulation-producing performances of Charles M. Daniels, Norman Ross, and John Weissmuller, or to the current tendency in academic circles to teach new tricks—it is not possible to say. Let it suffice to remark that swimming has increased to a tremendous degree. Pools are built in high schools. Playgrounds contain swimming facilities. Many colleges include ability at swimming as a prerequisite for a degree. Country clubs are not considered complete without tanks. At the colleges, aquatic teams take rank with basketball and hockey teams. In military posts, it has become increasingly emphasized that mobility across water is an essential to a moving body of fighting men—a fact ably proven by the experiences of the Fifth and Eighty-ninth Divisions at the Meuse River in 1918. At the summer training camps for civilians instruction in swimming is given as a matter of course. In a single city of average size, a single swimming installation accommodated an average of 2,755 persons a day for the four months of the hot season.

Arc from head to heels. Basic position in American racing stroke

Swimming Now a Nation-Wide Sport

Let the details pass. The days when swimming was used only for heroic exploits, like those of Beowulf, or for amorous adventures, like those of Leander, are gone. Swimming has become a nation-wide sport, and consequently two very important problems have arisen: The problem of developing a suitable technique for teaching swimming and the problem of training leaders and instructors in water safety.

Leading in the campaign for water safety and in the instruction of the general public in this is the American Red Cross, that semigovernmental agency which ministers to the dangers and ills of suffering humanity. Scrutinizing the tremendous casualty lists resulting from drowning, the officials of the Red Cross deemed it a proper function of their institution to apply their peace-time energies to this work. So for something more than a decade experts have gone forth who have given instruction and followed by stringent tests. In local Red Cross chapters special agents have been appointed who have promoted community action. A list of qualified life savers was created, and later supplementary examiners were authorized to give instruction and to give tests in the name of the national organization. By a decentralization of actual organization and a dissemination of correct principles and methods of water rescue, the Red Cross was able to multiply its instruction. With due deference to the signal successes attained by the United States Volunteer Life Saving Corps, notably those units in and about New York City and Providence, R. I., and to the notable work done in the name of the World Life-Saving Alliance, it is still possible to say that the American Red Cross has been the most powerful single force for the promotion of water safety.

A modern out door swimming pool

Delegation of Authority Responsible for Success

A very large part of the recent success of the Red Cross has been due to its increasing willingness to delegate its instructional and qualifying authority to persons seriously interested in water-safety work and honestly responsible for the progress of instruction in local communities. By such delegation of authority to "examiners" the few traveling field representatives have been able to devote the major part of their time to general surveys of the field, to checking up technique, and to spreading knowledge of new methods.

A very significant contribution toward the accomplishment of the Red Cross work has been the system of "institutes" held annually in mid-June under the auspices of the life-saving corps. At various boys' or girls' summer camps, the Red Cross has held preseason camps

Teaching the crawl stroke first

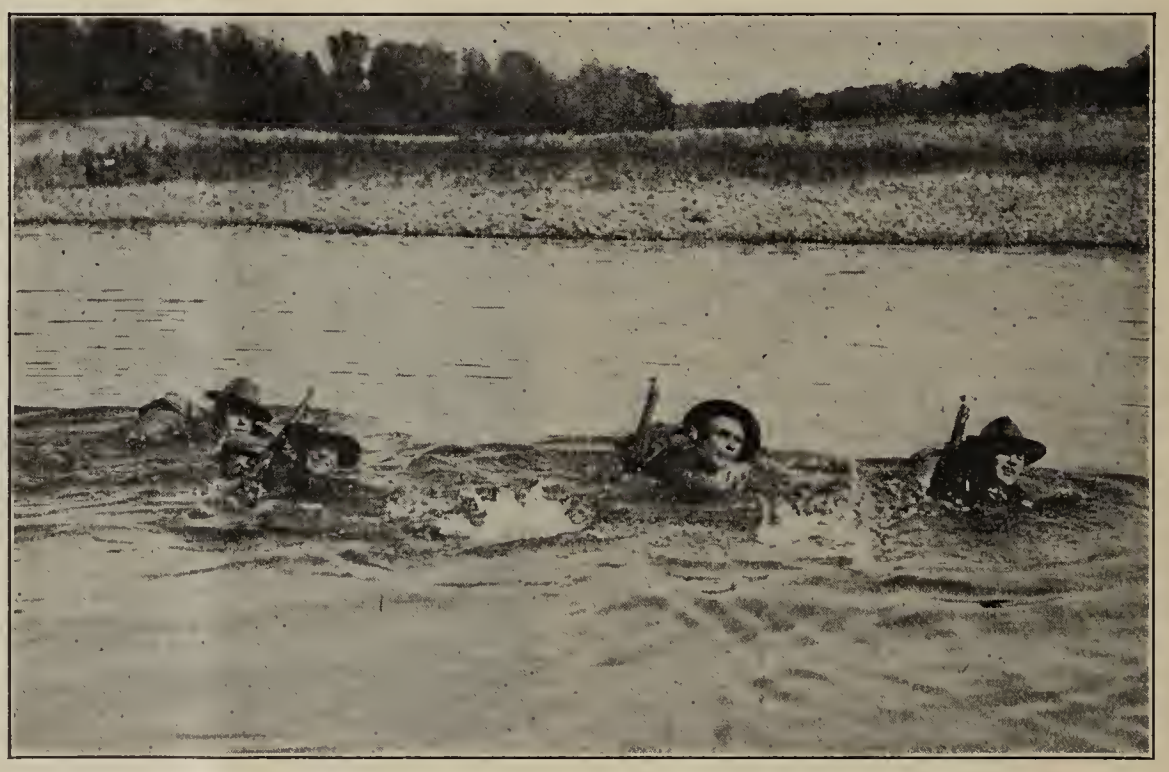
of its own, devoted to intensive 7 or 10 day instruction in water safety. To these camps come, as volunteer members of the "faculty," certain specially invited experts who give freely of their time; and young men and young women also come who are destined to become water-front directors at boys' camps, or counsellors at girls' camps, or instructors in physical training, or volunteer swimming teachers or life guards at scout camps. The type of students is of high grade; the majority of them are college people. In late June they put in seven strenuous days, jumping from one bathing suit to another, it seems, to fit themselves for aquatic responsibilities in the July and August camps of the regular recreational type. So favorably is this work of the Red Cross looked upon by the associated summer camps that the officials are able to secure camp sites for their pre-season courses by voluntary, gratuitous donations. So popular is this work that the "institute" camps are increasing in number from year to year. And as they increase, knowledge of watermanship and the habits of water safety are disseminated more and more widely.

Red Cross Camps Numerously Attended

To these camps, under a special invitation, and in view of the very special relationship existing between the Red Cross and the Army, come officers and enlisted men of the Regular Army; to learn the approved technique and insure proper precautions at the swimming pools and places maintained by the Army at its posts, camps, and stations. To these camps come also young and old, the spry and the sedate, the active instructors and the advisory executives—all ready to be indoctrinated and to secure the best advice on their work.

It is not just to say that no systematic instruction in swimming is given in this country. In Chicago, New York, Boston, and Springfield are institutions of pedagogical learning that produce swimming instructors. Yet it is perfectly just to say that instruction in swimming is more heterogeneous and less uniformly organized than any other kind of instruction. Indeed, the varieties of method in teaching people to swim are multitudinous. "Use no artificial aids" demands one authority. "Use this or that one" answers a rival. "Teach the breast stroke first" says Mr. Sullivan of Princeton. "Do not teach the breast stroke at all" says the famous Mr. Lou Handley, of New York. "Teach the dog-paddle first" announces another authority. "Learning swimming is individualistic" declares Mr. Barnes from the west. And so — on — and on. All are agreed that the old system—hurl him overboard and let him sink or swim—is now improper; but that is the only agreement; and it may be pointed out that if that method were adopted there would be no need of swimming instructors, so the instructors naturally look upon it with disfavor.

It is proper to say, therefore, that swimming instruction is as yet in a heterogenous state; and the reasons for it are several. In the first place, we have been experimenting with this type of pedagogy only 25 years or so. Then we are teaching one of the most difficult things in the world, teaching what Thorndike would call "form" and "execution" in a process that can never become secondary; it must always be the result of conscious effort, and can never slip into the remoteness of automatic responses like typing by "touch system" on a standard keyboard. In teaching swimming the instructor is confronted more vitally with the problem of teaching confidence and with elemental instincts attempting to vitiate his work.



Soldiers in full field equipment swimming a river

Must Overcome Natural Reactions

Man is not naturally amphibian. If forced into the water against his will, he revolts by nature. The problem is a problem in vitiating basic reactions—how to avoid the rigidity of fear and acquire the relaxation of easy grace. Many a man has produced his own pet scheme, and the texts on swimming will show many pets. For the various uses of swimming there are many strokes. But for the beginner there is but one problem, the problem of counteracting an automatic almost reflex action of the muscles,

and of slowing the action to a cadence of rhythm and grace. In the Army the breast stroke is preferred because it is the stroke most easily swum with full field equipment, and in competitive circles the "crawl" is the one most generally swum, because it is the most efficient for a man with a silk racing suit. In the Red Cross, they emphasize the side stroke and the "reverse scissor" kick. There you have it.

I feel that swimming instruction has progressed and that American waterfront recreation is becoming increasingly popular and increasingly safe. But I can not feel that systematic study has yet produced any conclusive body of doctrine on the topic, soundly based on psychological laws and proved by widely gathered experimentations. The professional schools of pedagogy have experts working on the topic—or if they have not they ought to have. A scrutiny of the psychology of teaching swimming would not be nearly so academic as a scrutiny of teaching spelling or arithmetic, nor probably so universally used. Yet I somehow feel that such a scrutiny would be eminently more interesting because more concerned with innate prejudices, mental aversions, and general human traits, rather than with mere brain manipulation. I feel that the study has but just begun.

Native Americans Form Parent-Teacher Associations

Sioux Indian women wearing shawls and moccasins and carrying papooses on their backs have organized a parent-teacher association in a small town in North Dakota. Indian men were equally interested and joined the association, and the list of members includes Mr. and Mrs. White Eagle; Mr. and Mrs. Little Bird; Mrs. Two Bear; Mrs. Rain-in-the-Face; Mrs. Grey Bull, and Mr. and Mrs. Bear Face.

Of the 50 people attending this meeting the majority were Indians, and some of them stated that they left their washing and other necessary duties in order to attend. All of them understood English when it was spoken slowly in simple words, but not all of them could speak it. The Indians had active part in the election of officers and took particular pains to ascertain their duties.

This is the first Indian parent-teacher association in full membership with the National Congress of Parents and Teachers. It was organized as a part of the North Dakota extension project, now supported and carried on by this national organization in cooperation with the North Dakota Department of Public Instruction.—*Ellen C. Lombard.*

Notes of the Indianapolis Meeting of the National Education Association

Sixty Third Annual Convention of the Organization, June 28 to July 3, inclusive, Expected to Attract More than 10,000 Teachers. Best Features of Former Meetings Will be Continued and Others Will be Added

PROCEEDINGS of the National Education Association's general sessions at Cadle Tabernacle, Indianapolis, will be broadcast from Indianapolis station WFBM, and may be enjoyed by great numbers of persons over a large area. The arrangements for this service are expected to be more complete than for any previous meeting of the association.

A few features of the Washington meeting of 1924 are to be continued, notably the vesper service Sunday afternoon held on the north steps of the monument, and addressed by President Aley, of Butler College, and President Bryan, of the University of Indiana. Hundreds of teachers will remember the impressive vesper service held on the east steps of the Capitol Building at Washington last summer and look forward to a similar experience in Indianapolis. Another precedent set last year, that of permitting free afternoons for sightseeing, is apparently to be followed again on July 1, when literary and historic shrines in and near Indianapolis are to be visited. Arrangements will be made by the local committee.

Teachers' Chorus Will Participate

Those who attended the Cincinnati meeting of the department of superintendence and heard the Indianapolis teachers' chorus will be glad to know that the chorus will again appear at the Tuesday evening, June 30, meeting, which will be designated as Indiana night. Among the speakers of note scheduled are Governor Jackson, former Senator Albert Beveridge, and Meredith Nicholson.

The convention proper begins Monday morning with discussions on educational progress in the first quarter century as a general theme. The Monday evening meeting closes with the president's keynote speech on "The educational outlook at the end of the first quarter of the twentieth century."

Among the nonprofessional speakers of note at the convention are Col. J. C. Drain, commander of the American Legion, and Glenn Frank, editor of the Century, who has accepted the presidency of the University of Wisconsin.

A good deal of time during the convention will be devoted to reports of committees and their discussion. Among the most important of those reporting are the committee on teacher participation in the determination of policies, Fred M. Hunter, of Oakland, chairman; committee on American education week, Thomas E. Johnson, State superintendent, Lansing, Mich., chairman; work of teachers' organizations, Olive M. Jones, chairman; moral education, Supt. William Davidson, of Pittsburgh, chairman; and legislative commission, George D. Strayer, Teachers College, Columbia University, chairman.

The general theme of "Interpreting schools to the public" will receive considerable attention on the program. The subject will be discussed from the point of view of interpretation of the State program, Superintentent Abercrombie, of Alabama; interpreting the city program, Superintendent Maddox, of St. Louis; interpreting the rural school program to the people, County Supt. Lillia Johnson, of Wisconsin. Other speakers on this large general theme are: Joy E. Morgan, discussing the responsibilities of educational journalism in interpreting the schools to the public; functions of teachers' organizations in interpreting the schools to the public, Helen Victoria Dobbs, University of Missouri, and Glenn Frank, editor of the Century, on responsibilities of the press.

Community singing and State songs, the latter of which were so enjoyable a feature at the Washington meeting, will be featured again this year, opening practically all meetings. The Sunday evening meeting will be devoted to music by the Tabernacle Church choir and an address, "The faith of the American people in education," by Dr. John J. Tigert, United States Commissioner of Education.

Fourth-year girls who have done exceptional work in grammar, punctuation, and composition are giving their time outside of school hours to coach a class of 15 girls who have been unable to perform the required assignments in the English department of Eastern High School, Baltimore, Md. This work is entirely voluntary on the part of both the pupils, who are in this way making up their work, and of the pupil-teachers who are helping them.

All junior high schools in Baltimore have equipment for visual education, and the material is kept up to date as far as possible.

Study of the Classics in England, France, and Germany

Comprehensive Report Issued by American Classical League. Classical Studies Have Long Held Dominant Position in Secondary Education. University Privileges Now Available to Persons Without Full Classical Training

By JAMES F. ABEL
Assistant Specialist in Foreign Education Systems, Bureau of Education

STRUGGLES between classical and modern education that have developed for the past 30 years in France, England, and Germany; reforms and changes that have been effected in programs and methods of teaching in the secondary schools of these three countries; and the present position which the classical languages occupy in their schemes of education are told in part 3 of the report recently issued by the American Classical League. Illustrated with a wealth of pertinent quotation from official documents and the writings of prominent educators and laymen and giving in many cases the exact outlines of examinations, courses, and curricula, the report presents a picture of what one must believe is and has been the prevailing opinion both for and against the educational value of a study of the classics. It is more historical and general and much less statistical in its nature than part 1 of the report, reviewed in SCHOOL LIFE for December, 1924, which gives the status of the classics in the schools of the United States. Some of the findings of the new report are summarized in the following paragraphs.

Classics Have Firm Hold in England

In the three countries the classics are still strong, and long held the dominant position in secondary education; modern languages and science came into the curricula slowly; and it is only comparatively recently that secondary-school graduates offering the latter courses were granted university privileges equal to those offering classical training. The trend toward modernization in France and Germany is fairly easily traced, for the educational systems are highly centralized. Sketching it for England is more difficult because that country has had an organized national system of secondary education for only about 20 years; secondary education was not well defined, and the classics had so firm a hold in public opinion that their value was not questioned so strongly as it was in France and Germany.

The demand in France for scientific courses preparing for industry and agriculture began in 1829, but efforts toward a more elastic secondary curriculum made little headway until a commission on education was appointed in 1898 to examine the status of secondary education. Acting in conformity with the recommendations of the committee the Minister of Education by decree of May 31, 1902, established the classical and modern courses of seven years each side by side, both leading to the baccalaureate. Each course was divided into cycles of four and three years, respectively. The first cycle allowed a choice of two sections, one with Latin, the other emphasizing French and science. In the second cycle the student could select one out of four sections: (A) Latin and Greek; (B) Latin with modern languages; (C) Latin with sciences; and (D) modern languages with sciences. This plan was followed until 1923.

French Increasingly Favor Modern Branches

Of the 7,780 students that presented themselves at the July examination in 1904 for the first part of the baccalaureate, 43 per cent were from the A, 15½ per cent from the B, 28½ per cent from the C, and 13 per cent from the D section. For 19,261 students so presenting themselves in 1922, the figures were, respectively, 14 per cent, 31 per cent, 28 per cent, and 27 per cent. In 18 years the Latin-modern language and the modern language-science sections had practically doubled in proportion and gained greatly in absolute numbers. The Latin-science section had held its own relatively, while the Latin-Greek section had declined both absolutely and relatively.

War-time questioning of the value of the secondary education given French youth resulted in a decree of May 3, 1923, by which the President gave effect to a reform that was in many ways a reversion to compulsory classical education. All pupils were required to pursue the same course for the first four years, Latin being compulsory throughout that time and Greek for the last two years of it. For the following two years students have a choice between a classical and a modern course. In the former Latin is continued as compulsory, Greek as optional; in the latter the classical languages are replaced by French and a second modern language. So much opposition arose to the plan of requiring Latin of all secondary pupils that a later decree of August, 1924, permits the substitution of four hours of French, one hour of natural science and one hour of a modern language for the six hours of Latin in each of the first two years. This is considered a temporary arrangement and the plan is to revise the entire secondary school curriculum but not to return to the scheme of 1902.

German Movement Began in 1890

In Germany a conference of 1890 brought about the programs of 1892 in which the time given to Latin and Greek was decreased and that to German, history, science, and drawing increased. A second conference held in 1900 was followed by a decree accepting the gymnasium, real-gymnasium, and Oberrealschule "as of equal value for general intellectual training and supplementary work is only to be demanded in so far as several studies and professions may require special preparatory studies." Moreover, reform schools of the Frankfort type, in which the classics come after instead of along with three years' careful study of the mother tongue and one modern foreign language, have spread throughout Prussia and to some extent the rest of Germany. At present it seems that "the secondary school system will be more flexible and more accessible than before the war and with more opportunities for transfer from one course to another; the cosmopolitan school, excluding vocational and technical courses, will be the common type, within which the classical studies will be retained, and though begun later than has been the German tradition, will be no less efficient as a result of the many reform proposals emanating from within the classical group itself."

Cambridge and Oxford Influence Secondary Study

In the rather decentralized system of secondary education of England the place of the classics is fixed partly by the regulations for secondary schools issued by the board of education and is much influenced by the scholarship examinations for Cambridge, Oxford, and other universities and by the nature of the external examinations to which most of the secondary schools subject their pupils. The status of the classics has been a matter of study and report by (1) the committee on curricula of the classical association, 1907; (2) by a council for humanistic studies in 1917; (3) it was taken up as one of the reconstruction problems by the Ministry of Reconstruction in 1919; and (4) it finally underwent a thoroughgoing investigation at the hands of a committee appointed by the Prime Minis-

ter, the report of which was published in 1921. That committee recognizes that two ideals of education have emphasized social divisions and antogonisms that should be reconciled and believes, "The solution should be on the one hand to secure that Greek or Latin or both are assigned a substantial position in the general education of pupils in secondary schools, and on the other hand that full opportunity is given to selected pupils everywhere to carry out their study of them to the highest point of which their capacity will admit." Secondary education in England will probably continue to be a general rather than vocational training.

Brazilian State Offers Subsidies for Private Instruction

Private primary, secondary, and professional schools in the State of Rio Grande do Norte, Brazil, by decree of the governor, are granted a subvention under certain terms as to attendance and efficiency. In a communication to the State Department, Fred C. Eastin, jr., vice consul at Pernambuco, writes that in order to be eligible for this aid a school must be registered with the State department of education, which also approves the teachers, appoints five free pupils, and inspects the schools at stated times. Full information must be given in regard to the denomination of the school, nationality of the responsible person, the number of pupils, and curriculum. The school must be housed in suitable buildings, be in session at least six months during the year, and offer courses in geography, the mother tongue, and Brazilian history.

Good Salaries Attract Good Teachers to Nevada

Salaries of teachers in Nevada average $1,449 a year, which is considerably above the average for the United States. An excellent class of teachers has been attracted to the State in consequence, according to a recent statement of the deputy superintendent of public instruction. He states that 97.6 per cent of the teachers have had at least as much education as that implied by graduation from a four-year high school, and only 15 teachers in the entire State have not had at least six weeks of normal school or college training. Certificates to teach in the high schools of the State require graduation from standard four-year normal schools or colleges, together with the required professional training.

Johns Hopkins Reorganization Necessarily Postponed

Under Plans Proposed by President Goodnow the University's Work Would be Confined Wholly to Advanced Students

PLANS for the reorganization of Johns Hopkins University, proposed by President Frank J. Goodnow, can not be put into effect until the fall of 1930, according to an announcement of future policy just issued by President Goodnow. The relations of the university with the State of Maryland are such that the proposed changes will require action by the assembly of the State, and the assembly will next be in session in January, 1927. A four-year course of undergraduate instruction must be provided for students who enter in 1925 and 1926, and the period of transition to the new plan of organization must extend at least four years after the latter date. The essential features of President Goodnow's plan stated by himself are as follows:

"The university would cease to provide elementary collegiate instruction. By 'elementary' instruction is meant those courses ordinarily given during the first two years of the American college.

"The university would confine itself to advanced work in certain special fields, in which it has the necessary equipment in the way of laboratories, libraries, or collections. By 'advanced work' is meant work done by students who come to the university properly prepared and with the desire to devote themselves to some definite branch of knowledge.

"The conditions requisite for admission to these advanced courses would be formulated by the professors in charge of each particular subject. It may be said in general that a student who has been graduated from a junior college or who has completed two years at a standard college might expect to be admitted.

"The only degrees to be conferred by the philosophical faculty would be master of arts, for which three years residence would be required ordinarily, and doctor of philosophy, for which at least one additional year would be requisite. In the formal statement of the requirements for these degrees the emphasis would be placed on proficiency and achievement rather than on years of residence.

"The plan inevitably would result in the ultimate withdrawal of the university from those activities which are not distinctly connected with advanced work.

"Changes would be made in the school of engineering so that in effect engineering would be considered as on the same basis as medicine, hygiene, and subjects such as physics, chemistry, and biology.

"Under the conditions already outlined it is clear that such features as modern college life as 'organized athletics,' college activities,' etc., would not assume the same importance as at present."

Newark, N. J., Provides Well for Unfortunate Children

Special provision for crippled children was made by the public-school system of Newark, N. J., following a severe epidemic of infantile paralysis. A building adapted to their needs and equipped for vocational work, will soon take the place of the temporary quarters now occupied. The children are transported between home and school in busses owned by the board of education. Each bus has a woman attendant to care for the children. The Kiwanis Club supplies funds for a daily lunch for the neediest children. Progress of the pupils varies. Some advance very rapidly; several who were over age when admitted made four grades in a year and a half.

Schools for the blind also are operated, and with encouraging success, by the school system. Two girls, totally blind, have been graduated from the high school with remarkable records. The mentally defective, too, are looked after, and classes for them have increased from 26 to 32 during the past two years.

AN active, spirited, intelligent body of laborers in every department of industry is an essential condition of a high state of national prosperity. But such a condition can never coexist with general ignorance. For it is not nature alone that makes the man. The living spark can be first kindled only by schools. It is the school that quickens curious thought, fills the mind with principles of science, and starts the inventive and creative powers into action. Therefore I say, push your schools to the highest possible limit of perfection. Spare no pains, count no expense. Let every talent, every type of genius in every child be watched and nurtured by the State, as by a mother watching for the signs of promise in her son. Rely upon it that the State which would find the readiest road to wealth must regard it as among the very first of her duties, to develop the productive genius and energy of her people. No waste that society can suffer will, in the end, prove so expensive as the waste of talent and creative skill.—*Thomas H. Burrowes*

National Congress of Parents and Teachers Holds Convention in Austin, Tex.

Total Membership of Organization Rapidly Approaching the Million Mark. Greater Efficiency and Improved Organization Plainly Apparent. Relations with Colleges and Universities to be Extended. Resolutions Cover Wide Field

By ELLEN C. LOMBARD
Junior Specialist in Home Education, Bureau of Education

GROWTH in cohesion has been the outstanding feature of the year's development of the National Congress of Parents and Teachers, stated Mrs. A. H. Reeve, president of the Congress at the annual convention in Austin, Tex., April 27–May 2. The parent teacher associations of Arkansas and Hawaii have become branches of the national organization, and the total membership has reached nearly 900,000 persons. Forty-two States were represented by delegates to the convention, and advance in organization and efficiency was manifest throughout the proceedings.

Gaining Hold in Higher Institutions

A new department was inaugurated by the convention in the creation of a committee on parent-teacher associations for colleges and universities. This work has already gained some impetus in Leland Stanford University, Ohio State University, and Agricultural and Mechanical College of Texas.

Three new bureaus were instituted to increase the effectiveness of certain work previously initiated, namely, the bureau of program service, the bureau of child development, and the bureau of country life.

Sensational publicity in relation to athletics was deprecated in the report submitted to the congress by the committee on physical education. The committee urged emphasis upon sport for the enjoyment that is in it rather than for school competition; upon frolics rather than athletic meets; and upon corrective physical education rather than upon the major athletic games.

To Develop Home-Study Circles

Mental hygiene received a share of attention, and it was recommended that parent-teacher associations foster the development of health-study circles.

Appreciation of the helpfulness of parent-teacher organizations was expressed without reservation by State Superintendent S. M. N. Marrs, who declared that "the Texas department of education could not do its work if it were not for the 40,000 parent-teacher association members in the State."

Saving the time of the children by having their defects cared for before they enter school, and health work to follow up sick children were stressed by Willis A. Sutton, superintendent of schools of Atlanta. This was the subject in several of the sessions of the convention, and it was often repeated that when children lose a year of school a year has gone out of their lives.

At the high-school round-table discussion, character development was declared the paramount aim of all teaching. The elimination of high-school fraternities was advocated, and parents were urged to keep in close and sympathetic touch with the activities of their children during the difficult high-school age. In discussing character training Dr. Henry Neumann, of the Ethical Culture School, New York City, held that character is a matter of outlook of life, that a child's home associations and his contacts with other children determine whether his training will function in character building.

Supreme Effort to Eradicate Illiteracy

The congress in its resolutions pledged itself to a supreme effort to wipe out illiteracy before 1930. It indorsed the program of vocational education under the Smith-Hughes Act and demanded that the unjust discrimination of the distribution of funds under the act be corrected; urged the suppression of recreation and literature injurious to the morals of the youth of the Nation; indorsed the campaigns now in progress in the States in this direction, and pledged the organization to lend aid to personal, family, and community recreational life; proposed a survey of the expenditures of students in colleges and universities; recommended teaching of thrift in the schools, and urged affiliated organizations to try to check extravagance in all its forms; demanded the removal of the blockage system in the distribution of moving pictures and the reduction of prices of good films; protested against the commercial rodeo; recommended the establishment of home-education cottages in connection with home-economics courses in schools, colleges, and universities; reaffirmed the support by the organization of legislation for a department of education; advocated Federal aid for physical education, the child labor amendment, prohibition, and peace.

Italian School of Cameo Cutting and Allied Arts

A prominent feature of the policy of all public education in Italy is that it must be cheap and easily obtainable. The free public school as it is known in the United States does not exist, but the fees charged by the schools and universities are so small as to render them available for everyone. One of the most interesting of the schools is the Royal School of Cameo Cutting and Allied Arts, situated in Torre del Greco. This school, started in 1878, is open to any Italian boy or girl who has completed a certain amount of elementary school work. It is primarily a state undertaking and is to a large extent supported by state aid.

Under the instruction of its director, Signor Enrico Taverna, and a staff of professional cameo cutters, the children are taught to design and execute some of the finest cameos produced in Italy. From the sale of these the school derives a large part of its income. The remainder is paid partly by the state and partly by the township of Torre del Greco. A considerable part of the proceeds of the sales goes to the student himself, the school retaining only about 25 per cent. Professor Taverna estimates the income of the school from this source at about 20,000 lire ($1,000) a year.

In addition to the work with shell cameo, a great deal is done with coral, generally in high relief, and with ivory. Both of these materials lend themselves very well to the same sort of treatment as cameo and are worked with equal skill.—*Homer M. Byington, United States Consul, Naples, Italy.*

Maine Requires Many One-Teacher Schools

During the past year 193 small rural schools in Maine were consolidated, and the two and three-teacher school is now common. About 25 junior high schools have been organized in small towns. Most of the State, however, is forest, with widely scattered settlements, and because of these conditions it will be necessary to continue indefinitely a large number of one-teacher schools. About $400,000 was spent last year for transportation of pupils. With better paid and better trained teachers and more satisfactory buildings, equipment and transportation, the rural schools are improving. A course of study fitted to the needs of these schools is now in preparation.

The "kiddie band," composed of kindergarten pupils of Austin, Tex.

Kindergarten Bands Feature Parent-Teacher Congress

No trained musician who visits an American kindergarten conducted in the approved methods could fear for the future of music in the country, nor have any doubt that his place will be ably filled when the present generation reaches maturity. Definite musical training is regularly given to kindergarten children, and no kindergarten is complete without its "band."

During the National Congress of Parents and Teachers, which met in Austin, Tex., April 27 to May 2, the combined kindergarten bands of the city performed for the delegates attending the congress. These little people gave four numbers on one of the programs and were very cordially received. This was the first appearance of the combined bands, although the individual bands of the various schools had played in public on several occasions.

The development of the band through the study of rhythm is only one of the features of the kindergarten curriculum, but it is one of the most enjoyable to the children and it provides a foundation for the work in the regular music classes of the grades above the kindergarten.

The work in Austin is developed as follows: First through "listening lessons," in which the children listen to music either of the phonograph or piano with the idea of learning to identify simple themes. They are then taught to clap to the rhythm of the music, and following this comes skipping, running, and marching to music. Rubber balls are supplied which are bounced to the rhythm of the music. This is followed by the clapping and rubbing of wooden blocks, and finally the beating of the drum is introduced, which is later used in connection with the marching.

Very gradually the introduction of other simple musical instruments is made, one at a time. Steel triangles, reeds, sandpaper blocks, wooden blocks and sticks of varying sizes and lengths, and even small xylophones are used, and in addition sometimes miniature wind instruments, such as small flutes. All of the children are given an opportunity to use these various instruments and the work of forming them into an organized whole is very gradual. The children are then led to play together and thus a band is formed.

As they work together the need for a director is felt. Some child whose sense of rhythm is unusually sensitive and accurate is asked to direct the band. This work of directing the whole group is not confined to any one pupil, however, and many of the children are developed into leaders in this way. After the children have learned to play in a group themes are introduced which are played by single instruments, while other instruments remain quiet. Finally, simple solo work is brought in. The development of a kindergarten band is really the outcome of a full term's work and can not successfully be done hurriedly.

Although these bands always arouse much applause and enthusiasm and well-trained children are apparently unconscious of their audience and seem to enjoy playing, yet school authorities and friends of childhood feel that there should be very few public appearances, as it is more or less of a strain on children of kindergarten age.

Correspondence courses in any study that will be likely to be of value in the service or after discharge are offered to the men of the United States Marine Corps. The lessons may be sent to any place in which a marine is stationed. Late reports show an enrollment of 8,181 students in the Marine Corps Institute and 1,870 graduates to date. These courses have proved to many men, as an ex-marine puts it, "a start on the road to success."

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Fire Insurance Eliminated from Cincinnati's Budget

Cincinnati possesses a permanent endowment fund for school fire insurance amounting to approximately $350,000. This has been growing since 1913, when the board of education began to carry its own fire insurance. To repair damage caused by fire, each year $25,000 has been heretofore set aside, about the sum that would have been paid for premiums for fire insurance. The city has had few fire losses, and the fund, with interest added, has grown steadily. It is invested in Cincinnati school bonds, and the annual interest now amounts to about $20,000. The school budget for 1925 makes no provision, therefore, for fire insurance. Cincinnati's success is due in large part to well-constructed school buildings, to the elimination as far as possible of fire hazards near school property, and to keeping fire-fighting apparatus always accessible in schools.

Improved Financial Condition of Ecuador Schools

The Minister of Education of Ecuador has issued a circular to the directors of studies of the various Provinces, calling attention to the appropriations for primary instruction in the present budget, which he stated contemplated the increase of various schools and of the personnel of the teachers in those already existing. He also stated that there will be an increase in the salaries in some of the schools, and that in the future the payment of salaries will be made with the strictest punctuality.

The director of the department of education has canceled the contracts with certain Hungarian professors, the reason given being lack of funds under the new budget.—*William Morse, United States vice consul at Guayaquil, Ecuador.*

· SCHOOL LIFE ·

Issued Monthly, except July and August
By THE DEPARTMENT OF THE INTERIOR, BUREAU OF EDUCATION

Editor - - - - - - James C. Boykin

Terms: Subscription, 50 cents per year, in advance; to foreign countries in which the mailing frank of the United States is not recognized, 75 cents. *Remittance* should be made to the Superintendent of Documents, Government Printing Office, Washington, D. C.

JUNE, 1925

Classical Knowledge A Precious Possession

HOWEVER it might affect others, men of advancing years whose college days lay in the eighties or earlier, when a total of at least four years of Latin was the rule for all college students, must have a feeling of profound regret when they read the latter-day attacks upon the study of the classics. Sorrow rather than indignation is their reaction; with sympathy for those of the coming generation who lose the enjoyments that come from classical study and from classical reading which in a great measure is its concomitant. And this is said without intention of advancing the claim that classical study is the only avenue to cultural appreciation, and without advocating the classics for all students regardless of their native ability or their chief interests in life.

Values in mental development, transfer of training, and psychological processes generally are of little moment to one who values his Latin for what it has given to him. He little realizes, or cares, what has taken place in his own brain. He does realize, however, that new windows of his soul were opened by the superb diction of Cicero, the inspiring lines of Virgil, and the lovely cadences of Horace; and that he has craved for more.

The statement has been made that students of Latin do not afterward read English translations of Latin authors which they did not study. Who can believe it? Certainly not the men whose habits of thought are now in view. They know that the studious among their classmates have never ceased to enjoy classical reading, and that the less attentive were also attracted to it. Even the tabooed "pony" is a tremendous incentive, for it is the custom rather than the exception for men to read the forbidden translation far in advance of the lessons of the day. And in later life, though perhaps not the next day, other translations are read with avidity.

Similarly, long after the period of formal instruction is ended the urge which Latin gives to the study of languages continues to be felt. By all except its strongest opponents Latin is conceded to be an excellent, if not the best, preparation for the study of modern languages. In itself that fact stimulates the inclination to take up French, Spanish, and German. The prosperity of private teachers of modern languages is the best evidence of this. Assuredly the previous study of Latin is not the only stimulus or motive for the study of other languages, but it is one of them.

Do not minimize that personal satisfaction in the knowledge of the classics which comes from the feeling of solidarity and pride that one feels in his contact with scholarly references. All of literature is full of classic allusion. The professions bristle with Latin names. The sciences are largely built upon Latin and Greek terminology. Names of useful inventions and of proprietary remedies frequently embody classic words. Not only is about half the English language derived from the Latin, but classic phrases, words, and references are about us everywhere. And in every one of them the classic student meets an old friend. He recognizes them with feelings of satisfaction. He feels that he is able to use such terms when he chooses, and he is at home in that atmosphere. He is conscious that he is an educated man, and he finds exhilaration in the consciousness. No one who has pursued modern branches only can experience that sensation to such a degree.

It is not essential that one should ever have been able to prepare a Latin oration or to compose a Greek ode. He may have made no effort to maintain his youthful facilty in translation, and he may fail ignobly if put to the test of rendering in English the Latin mottoes on the State coats of arms, for example. Nevertheless, familiarity with Latin once thoroughly acquired remains permanently, even though it may be dimmed by the flight of time. Through all of life it is a precious possession.

A National and an International Convention

A FRUITFUL VACATION this year is in store for the teachers whose plans lead them to either of the two meetings which are outstanding features in the year's program of educational events. Those who can attend both are fortunate indeed.

The regular meeting of the National Education Association is always an experience of worth, and the meeting this year at Indianapolis is said to promise more than usual interest. That statement is always to be expected, but it is certain that the program prepared by President Newlon justifies favorable predictions.

The National Education Association is growing remarkably in numbers and in influence. Its hold upon the rank and file of American teachers is secure and its place is steadily enlarging. Its meetings become more valuable from year to year as the resources of the Association increase and as professional training becomes more widely diffused.

In the conduct of the meetings constant improvement appears. No good idea is lost and new ones are frequently applied. Long practice has made of the permanent officers of the Association a group of adepts in handling big meetings, and the fresh blood which the annual elections bring into the management of the organization is a guaranty against falling into ruts.

Some of the happy precedents set in the Washington meeting of 1924 will be followed at Indianapolis, and may become regular features of the meetings for a few years to come at least. Conspicuous among them are the Sunday afternoon vesper service, the singing of State songs, and the practice of holding the important meetings in the mornings and evenings, leaving some at least of the afternoons free for sightseeing, for visits to historic shrines, and for social intercourse. All three ideas proved very popular last year.

Held at Edinburgh July 20–28 and largely under European influences, the World Federation of Education Associations will not work according to a program in the good American fashion. Its "agenda" will, however, answer the purpose admirably. Distinguished speakers from many countries will discuss educational topics in their international aspects. Cooperation between peoples, the amity of nations, as produced by education, will be stressed in the general proceedings. An American, Dr. Augustus O. Thomas, is president of the federation, and America will be represented by a strong delegation. Many other Americans will attend as alternates, as participating delegates, or as auditors. And all will benefit by the interchange of ideas which always occurs at such gatherings.

City School Costs Continue to Increase

The average per capita cost of current expenses in city schools with a population of 100,000 or more for the year 1923–24 was greater by $7.28 than that of 1921–22, according to Statistical Circular No. 4 just issued by the Department of the Interior, Bureau of Education. In cities with a population of from 30,000 to 100,000 an increase of $2.75 in the same item was reported. In cities of from 10,000 to 30,000 the increase was only $0.18, and in cities of from 5,000 to 10,000 it was $13.26.

Low Salaries Cause Paraguayan Teachers to Strike

A general strike of teachers in the public schools is in effect throughout the Republic of Paraguay. In 1921 provision was made for the augmentation of teachers' salaries on a basis of 25 per cent a year to be effective the 1st of January of each year until a definite limit which has never been determined was reached. Since 1922 no salaries have been increased and they range to-day from $3 to $16.50, United States currency, per month, which the teachers maintain is inadequate to meet their expenditures. The strike has taken place while Congress is not in session, the President is not empowered to act, and the opening of the next school year is very near. The teachers, therefore, have been subjected to severe critieism by one faction, who claim that they have taken an unfair advantage in the selection of the moment to strike. Another faction is in entire sympathy with them. As Congress does not convene until April 1 the opening of the schools, which is scheduled for March 9, has been indefinitely postponed.—*H. C. Moses, United States vice consul at Asuncion, Paraguay, in report to Secretary of State dated March 6, 1925.*

Tenant Farming not Conducive to Education

That children of parents who own their farms remain longer in school than the children of tenant farmers is shown by a recent survey in Jefferson County, Ga. In the first four grades of the school, children of tenant farmers compose 55.5 per cent of the enrollment. After that they begin to drop out, and the enrollment of children of tenant farmers in the fifth grade is only 35.5 per cent of the whole number. During the four years of high school, children of farm-owning parents make up 82.4 per cent of the student body. The enrollment of children of tenant farmers decreases from 33 per cent in the eighth grade to 3 per cent in the eleventh or last grade.

During the past five years North Carolina has spent $35,537,403 in the construction of new school buildings or additions having five or more standard classrooms. Of these, 647 were for white and 77 for colored children. The average cost per city classroom was $8,274 for white and $4,381 for colored pupils. The average cost per rural schoolroom was $3,831 for white and $1,742 for colored pupils.

Forty Schools Represented in Physical Training Conference

Phenomenal Growth of Interest in Subject. Two Schools for Preparing Teachers Forty Years Ago; About 100 Now, Relation Between Physical and Mental Shown by Laboratory Methods

A NOTABLE conference was that of the institutions giving a professional training in physieal education, proposed and arranged by the division of hygiene and physical education of the Interior Department, Bureau of Education, and held in Washington May 7 and 8.

Three groups of schools were represented: The special school, such as the Chicago School of Physical Education and the Boston School of Physical Education; the colleges and universities giving major courses; and the State normal schools which give special training for teachers of this subject.

The phenomenal growth of interest in physical education and the corresponding development of schools both in number and in adequacy of training was summed up by the Commissioner of Education in his address to the conference. He said:

"Forty years ago there were only two schools preparing teachers of physical education and less than 30 years ago the president of the National Association for Physical Education in his presidential address did not hesitate to say that the half dozen schools of this kind hardly deserved to exist. The special schools have increased in number and have vastly improved in quality, and, not long after that address was made, the doors of Oberlin College and Columbia University were opened to students who wished to prepare themselves as teachers, and now the number of institutions giving such training has reached over half a hundred. This growth is phenomenal in the custom of education, and it reflects, of course, a wide interest in the subject of physical education.

Inertia in Education Still Persists

"The present movement holds fast by a number of roots and an important one is modern psychology which has pointed out through laboratory methods the close relation of the physical and mental; there is much inertia in education, however, and we are still imbued with the old ascetic idea that there is an antagonism between body and mind or that there is little relationship between the two.

"The war afforded a strong boost to physical training and practically all the 33 State laws on this subject were passed during or since 1914. We are intrenched by these laws; but mere laws are only an intrenchment. They can be invaded, evaded, or revoked on occasion if they are not backed up by something or somebody who can make them appear worth keeping on the statutes and worth carrying out in spirit and to the letter.

"You have made great advance, but it devolves upon the workers in the field of physical education and especially upon the training schools for these workers to hold the ground won and to carry forward a work which is really just begun; for physical education has never had a real trial. The very fact that we use the words physical education shows that it is still a thing not yet assimilated with education in the mind of the general educator. Some time we shall have only the word education, of which physical education will be so well recognized as an essential that it will hardly need to be considered by a separate name. When that day dawns, depends in large measure on the physical educators themselves."

There are now about one hundred schools giving courses of from two to four years in the professional training of teachers of physical education, and a half dozen are offering postgraduate work leading to the degrees of master of arts or doctor of philosophy. Forty of these schools, including two on the Pacific coast and one in Texas, were represented at this meeting.

Among the important matters discussed at this conference, was that of a survey and classification of schools to be carried out by a commission composed of general educators as well as specialists in cooperation with the United States Bureau of Education.

Salary Increases Tend to Hold Rural Teachers

Great difficulty is experienced in holding teachers in the 1,487 one-teacher schools of Manitoba. The provincial department of education announced last year that thereafter it would grant 15 cents per day for the second year's service in such schools by the same teacher and 25 cents per day for the subsequent years. Five hundred and forty teachers qualified for the increase in the current year, and it is expected that the number will reach 1,000 next year.—*Lucius H. Johnson, American vice consul, Winnipeg, Canada, in report dated March 28, 1925.*

A Kindergarten-Primary School Project Involving Handwork

Imaginary Journey Utilized for Elementary Instruction in Number, History, Highway Safety, Natural History, Geography, and Nutrition. Motives for Handwork Stand Out Significantly. Correlation with Art and Training in Responsibility

By FLORENCE C. FOX
Assistant Specialist in City Schools, Bureau of Education

THIS PROJECT was worked out by a class of kindergarten-primary pupils in the St. Agnes School, Alexandria, Va., by Mrs. Hazel Douglas. It has many values, perhaps the greatest being the use that is made of the handwork which has been prepared during the number periods.

The project points the way to the possibilities of freer work for little children in primary grades. The use of numbers is one of its greatest values. The motives for handwork stand out significantly throughout the exercise, and the correlation of art with nature study is one of its greatest assets. The opportunity for giving children the training they especially need by placing them in responsible positions, as conductor on the street car or in charge of the fruit stand and the checking counter, is used by the teacher throughout the entire lesson. Responsibility and resourcefulness are developed and initiative encouraged. As material for reading and language lessons, the exercise has many possibilities. It should be used from day to day as a basis for all the subjects of study in the daily program.

A TRIP TO THE ZOO

Counting money and making change.—The street car which carried the pupils to the zoo was formed by lines of chairs, four in a row, arranged by the class. The pupil-conductor passed along the middle of the car and collected the fares of paper money made by the pupils. Often he and the passengers were obliged to make change, and much adding and subtracting of numbers were involved in these transactions. After the trip was over the conductor, with the help of some of the passengers, made a report on the cost of the trip by adding up the pieces of money collected by the conductor, as the sum total, and then adding by fives to find the number of passengers.

Points of interest on the way.—One of the duties of the conductor was to call attention to the historical landmarks within view as they came to Washington. Lee's home at Arlington, the Washington Monument, and the Lincoln Memorial were mentioned, but evidently no very definite observations had been made of these memorials on previous trips. A pertinent suggestion was made by the teacher that the pupils try to locate them on their next trip to Washington.

Highway safety was another lesson woven into this interesting project. When the car stopped at the entrance to the Zoo a wide thoroughfare had to be

A lesson in highway safety was included in the "trip to the zoo"

crossed. The teacher had secured a toy street-traffic sign which was placed in the middle of the street and manipulated by one of the pupils acting as traffic officer.

Collecting fares and making change on the street car

While the teacher and some of the larger children personated automobiles by whizzing up and down the street, the pupils worked out a safe transit for themselves by carefully obeying the traffic officer's signals.

Buying fruit and checking lunches.—Arrived at the Zoo the children bought their fruit at the fruit stand and checked their lunches—those they had brought to school in the morning—at the lunch counter. Paying for the fruit and checking lunches at 3 cents each required further exercise in the process of making change. The checks which they received for their lunches had been numbered by the children and were carried in their purses, also made by the pupils, until lunch time.

Study of animals.—The children with the teacher made a tour of the Zoo and inspected the animals. These were cut-out pictures representing most of the animals at the Zoo in Washington and were pinned along the walls of the schoolroom. The form and color of these animals, their habits and habitats were the principal points discussed.

Health lessons on food and recreation.—While the children ate their lunches, still at the Zoo, they talked about foods and the kinds they liked best, which led to adroit suggestions from the teacher regarding what were suitable foods for a lunch at school, on an excursion, or for a luncheon at home.

Games.—After the lunch was eaten the children played a vigorous game of ball, and then were given a choice of rides on the various recreational amusements offered at the Zoo. They chose a boat ride. The chairs were arranged and with imaginary oars they rowed back and forth across the lake until it was time to go home.

By cooperation with Melbourne University, two years' work in engineering and related subjects may be taken in technical schools in certain cities of Victoria. Great care is taken to preserve the standards of the university, which has a voice in the selection of teachers and in the preparation of courses of study in the technical schools.

Bureau of Education's Latest Publications

The following publications have been issued recently by the Bureau of Education of the Department of the Interior. Orders for them should be sent to the Superintendent of Documents, Government Printing Office, Washington, D. C., accompanied by the price indicated:

High school education of the farm population in selected states. E. E. Windes. (Bulletin, 1925, no. 6.) 5 cents.

Contains: 1. Comparative extent to which farm and nonfarm groups receive secondary education.—2. Persistence in high school.—3. Comparative intelligence of farm and nonfarm children as determined by group tests of mental ability.—4. Relation of enrollment and persistence to quality of education provided for the farm population.—5. Relation of high-school enrollment to profitable employment of farm boys of high-school age.—6. Relation of population distribution to high-school enrollment.—7. Race or nativity of farmers and other factors in relation to participation in secondary education by the farm population.

How the kindergarten educates. Luella A. Palmer and Mary G. Waite. (Kindergarten circular, no. 18.) 5 cents.

Kindergarten legislation. Nina C. Vandewalker. (Bulletin, 1925, no. 7.) 5 cents.

Per capita costs in city schools, 1923–24. (Statistical circular, no. 4.) 5 cents.

Uses of intelligence and achievement tests in 215 cities. W. S. Deffenbaugh. (City school leaflet, no. 20.) 5 cents.

Visual education and the St. Louis school museum. Carl G. Rathmann. (Bulletin, 1924, no. 39.)

—*Edith A. Wright.*

"Welcome hall" for parents and visitors is one of the special features of plans for new junior high schools in Chicago.

Studying animals at the zoo

Siamese Students Becoming Numerous in America

Tide Began to Turn from Europe During World War. Educated Siamese Gradually Supplanting Foreign Advisers

By CHARLES H. ALBRECHT
American Consul at Bangkok

RAMA VI, King of Siam, is an Oxford graduate. He and most of his brothers were sent to Europe for education at a comparatively early age after a period under private tutors of foreign nationality in Siam. The same is true of a large number of the Siamese princes and other persons of position and influence in governmental circles. The late King and his father both realized the importance to Siam of having foreign trained and educated Siamese for the important governmental positions, and this policy is still being followed. The overwhelming majority of these Siamese educated abroad have occupied positions with the Government upon their return, in many cases of great importance and influence.

The larger part of these students have been educated in Great Britain, but considerable numbers have gone to other European countries, notably France and Germany.

During the war Siamese students began to come in some numbers to the United States, including both new students and persons who had previously studied in some European country. This movement has continued up to the present time. Siamese who have studied in the United States invariably return home with praise for the treatment received in the United States and admiration and friendship for America. Among the prominent Siamese who have been educated in the United States are H. R. H. Prince Mahidol, the brother of the King, a graduate of Harvard University; H. S. H. Prince Chalart, the assistant director general of the Royal Siamese Railways; and a son of the Minister of the Interior, one of the most influential persons in Siam.

Recently an association of Siamese students in the United States and an association of American university alumni in Siam have been formed with the idea of extending interest in the educational and other institutions of the United States in Siam.

As foreign-trained Siamese become available, they are gradually supplanting the many European advisers in the various branches of the Siamese Government when the contracts of the latter expire.

Official report to Secretary of State.

A group of high-school students in Baltimore and one in California have exchanged their notebooks, pictures, and maps of some distinctive industry in their respective States.

Buying fruit and checking lunches "at the zoo." (*See page 193.*)

Best Medium for Bringing Home and School Together

The kindergarten should work not only through individual teachers, but with organized power and purpose. The best medium of all for the kindergarten to work with is the parent-teacher association. If there is none, the kindergarten should take a leading part in stimulating a desire for its immediate organization. Where it already exists, the kindergarten should keep very close to it, acting as interpreter between the home and the more formal departments of the school. In Detroit a weekly class in child care is held at the Merrill-Palmer School, and is attended by representatives of parent-teacher associations and of federated clubs, who take the message back to their various organizations.

It would be well if kindergarten teachers also were enrolled in such a class. The parent-teacher association is the best medium, because it is the only organization which brings together in the interests of childhood the two institutions committed to the service of childhood—the home and the school—and for the sake of that service has over and over again demonstrated that parents and teachers can work together, that men and women can work together, that people of opposing creeds, nations, races, color, in the face of lifelong prejudices and ignorances, can effectively work together.—*Elizabeth Cleveland, before Cincinnati Meeting of International Kindergarten Union.*

Work Begun in New Jewish University

Beginnings of a Hebrew University have been inaugurated in Jerusalem. Lord Balfour performed the opening ceremony. Work in some of the departments has already begun. An institute of Jewish studies was formally opened in December, 1924, and the session began with lectures on philology, the Talmud, and Palestine research. Research work is conducted in the microbiological institute, and a chemical institute is in operation. The library is said to contain 72,000 volumes. The university is primarily for Jews and the official language will be Hebrew, but members of any race and any creed will be accepted.

A group of 38 students of Detroit Teachers' College, accompanied by an instructor, spent the spring vacation seeing the sights of Washington, Philadelphia, New York, Baltimore, and Gettysburg.

Teachers May Conserve the Eyesight of School Children

Essential that High Standards of Illumination be Maintained. Eye-strain Causes Serious Physical Difficulties, and Teachers Should Know Common Symptoms. Watchfulness Will Often Overcome Deficiencies in Equipment

By WINIFRED HATHAWAY
Secretary National Committee for the Prevention of Blindness

EXAMINATIONS of thousands of school children, extending over many years, have shown that a considerable proportion suffer from defects of vision, the result many times of continued use of the eyes in close work under unhygienic conditions. It is well established that defective vision is often progressive and is therefore found to a greater extent among older children.

It is conceded that, in general, children with defective vision may be not only retarded in their progress in school work, but may enter upon their life work seriously handicapped. The severe requirements imposed upon children's eyes by modern educational methods create need for the best of working conditions. Among these conditions lighting is of primary importance. Improper or inadequate lighting causes eyestrain, often resulting in functional disorders, nearsightedness and other defects of the eyes to which the immature eyes of children are especially susceptible.

Bodily Activities Depend Upon Healthy Eyes

It is essential, therefore, that schools maintain a high standard of illumination both natural and artificial. The sense of sight is the most valuable and precious of all the senses. It is the sense the individual can least afford to do without. Its maintenance in good condition is of vital importance. This sense is closely bound up with the general condition of the body. If the organs of sight are functioning properly, the whole of the bodily activities are stimulated. On the other hand, anything wrong with the eyesight is apt to affect unfavorably the general health and morale of the individual. The importance of using the eyes under proper conditions, of not overstraining them, is so great that it can scarcely be exaggerated.

Eyestrain is a term used to cover a group of symptoms dependent upon fatigue of certain muscles of the eyes. The evidences of eyestrain are not always easily recognized, but the teacher should acquaint herself with at least the more common symptoms: (1) Pain in and around the eyes or headache usually aggravated by use of the eyes for close work and in some cases present only after near use. (2) Fatigue and discomfort upon use of the eyes for near work. This shows itself by inability to continue such work for more than a short period at a time without the occurrence of dimness of vision and confusion of the lines of print, pain in the eyes, headache, drowsiness, overflow of tears, a strong sensitiveness to light, congestion, and an irritable condition of the lids accompanied by itching and burning sensations. (3) Vertigo. (4) Symptoms such as nausea, twitching of the facial muscles, and possibly neurotic conditions.

Indifference Not Due to Ignorance

The teacher can be a factor in the conservation of the eyesight of her scholars exactly in proportion to the interest she takes in the subject. If she cares, she can help a great deal; if she does not care, she does nothing. Indifference on the part of many teachers is due primarily not to ignorance, but to the fact that their attention has not been sufficiently directed to this particular feature of hygiene as an important factor in the care they exercise over their young charges.

In the modern school, the teacher has been educated to a sense of responsibility as to the physical well-being of her pupils. She realizes the importance of ventilation, and (unless the school is equipped with an artificial ventilating system) sees that the windows are occasionally thrown open for brief periods. She knows the value of intervals of rest and play between working hours. She is aware of the danger of cold draughts of air, and carefully guards her children against the liability to take colds. She lives in an atmosphere of hygienic conditions for school children—periodic examinations by the school physician, a regularly employed visiting nurse, a constantly maintained dental clinic, extra milk diet for underweight children, etc. But for some not easily explained reason, the proper protection and care of the eye generally have been neglected. This appeal is made to the teacher to include a solicitous care of the eyes of her pupils in the attention which she devotes to their welfare.

The ability to teach is proportional to the extent with which the teacher can succeed in putting herself into the mental condition of the pupil. The more vividly the teacher realizes the extent of knowledge, or the depth of ignorance, of the pupil, the more successfully can she impart the needful instruction. In a general way, this same quality of sympathetic insight, this same ability mentally to put oneself into the place of another, is needed by the teacher who is at all times anxious to have each child use its eyes under the best attainable conditions. As she surveys the classroom, mentally placing herself in the place of scholar after scholar, she can quickly pick out those who may be seated where they have insufficient light, or those who are liable to have a glaring light in their eyes.

The Remedy

Granted that the teacher is properly alive to the importance of seeing that her pupils are using their eyes under hygienic conditions, the question arises, What can the teacher do? How can she establish and maintain these conditions throughout the school session?

In the first place, the teacher should clearly realize that she must do her best with the lighting equipment which she finds in the schoolroom. It is true she may request the school authorities to furnish better equipment, and if the existing equipment is improper she certainly should do so. Many items, such as window shades, color of walls and ceiling, location of blackboards with reference to windows, or the artificial lighting equipment can, if incorrect, be remedied without great expense and the teacher is justified in repeatedly urging her school authorities to provide the proper equipment. But a failure to secure better equipment does not relieve the teacher from the duty of doing the best she can under the conditions as they exist. Conditions are rarely so bad that the teacher, with thought and care, can not be of great help in protecting the eyes of her pupils. The following suggestions are offered as an aid in this good work.

Correct Intensity and Direction

Two lighting conditions affect the proper and healthful functioning of the eye. These are the intensity of the light and the direction or distribution of the light. The intensity of the light on the desk (the paper, book, or slate) must be sufficient or the eye is strained, and too much light must not be permitted directly to enter the eye, or vision is interfered with and the eye is injured.

With natural lighting, under which the greater part of school work is done, as the light usually comes from windows located

in one side wall of the school room, there is danger of some of the pupils suffering from each of these conditions. Those seated on the side of the room farthest from the windows may get too little light, while those seated nearest to the windows are liable to experience glare from too much sky space shining directly into their eyes. The problem of the teacher then is to adjust the window shades so as to relieve both of these conditions. Frequently this can not be done to complete satisfaction, but an intelligent compromise is better than complete indifference and neglect.

The scholars should be encouraged to complain if they do not see clearly, or if too much light glares into their eyes. Sometimes a case for the school doctor is thus revealed. The teacher should question any scholar personally, if she suspects that his lighting conditions are not good at that time.

Natural lighting is very variable; it will not do to adjust the shades in the morning and then assume that they will do for the day. On some days they may need frequent adjustment; on others, very little. On dark days, a portion of the artificial lighting system may be needed in order to give those pupils who are seated on the dark side of the room enough light to work with, only those lights on that side of the room being turned on.

The modern school desk is not rigidly attached to the floor. This type may be turned slightly away from the window, and glare in the eyes of those children seated near the windows may be thus reduced or prevented.

When school work is done wholly by artificial light, there is not much adjustment or change of conditions which the teacher can do. If the lamps do not give sufficient light, she should complain to the school authorities and keep it up until a new lighting system has been installed. If the lamps shine objectionably into the eyes of the pupils she should likewise complain, but in this case she may gain temporary relief by experimenting with paper shades (being careful to avoid danger of fire). Paper treated so as to be noncombustible may easily be obtained.

All the scholars are required frequently to look at the blackboard. The teacher should be sure that no glare is in the eyes of any of them when they are in this position. Reflection of the light of windows or lamps from the polished surfaces of blackboards or desk tops or from glazed or shiny paper is harmful to the eyes. Dull finishes should be used.

A Code of Lighting School Buildings giving full details on school lighting was prepared under the joint sponsorship of the Illuminating Engineering Society and the American Society of Architects. It is published by the Illuminating Engineering Society, 29 West Thirty-ninth Street, New York. Since this code was somewhat technical, a subcommittee was appointed to prepare a nontechnical bulletin based on the code, "School lighting as a factor in conserving sight." This is published, by permission, by the Eyesight Conservation Council of America, Times Building, Times Square, New York. A brief outline of the code was also prepared by the subcommittee, "Lighting the schoolroom." It is published, by permission, by the National Committee for the Prevention of Blindness, 130 East Twenty-second Street, New York.

Advantages of Foreign Study for Costa Ricans

Twenty scholarships for scientific training in foreign countries for Costa Rican students are provided in a law passed August 6, 1924, according to a report of Roy Y. Davis, American Minister at San Jose.

A student qualifying for the scholarship must be a native-born Costa Rican, between the ages of 17 and 21 years, whose financial resources do not permit him to acquire a profession. He must be recommended by his professors and must hold the degree of "bachelor" or "normal master," and must agree to serve the Government for four years after the conclusion of his studies. He must present authenticated annual reports as to his progress and must maintain good conduct while abroad. Hitherto scholarships have sometimes been granted by special laws, but no fixed requisites or duties have been required.

Claims Precedence in Pharmaceutical Instruction

Wisconsin University has decided to lengthen its course in pharmacy from two to three years. This is in conformity with the recommendation of the American Conference of Pharmaceutical Faculties, in which 34 leading universities hold membership. The university will continue its regular 4-year course, leading to the degree of bachelor of science. The pharmacy department of the university, established in 1892, was the first to offer graduate work. Wisconsin University claims to have the first and only pharmaceutical experiment station in the country.

Entire Country Joins Legion's Essay Contest

Middle West, South, and far West are represented by the winners of national honors in the annual essay contest conducted by the National Americanism Commission of the American Legion. More than 200,000 school children in all parts of the country submitted essays on the subject, "Why Communism is a menace to Americanism."

The first national prize of $750 was won by Robert Krumholtz, of Springfield, Ohio. To John S. Miller, jr., of Portsmouth, Va., now a student at Virginia Military Institute, went the second prize of $500. Miss Grace Nichols, of Healdsburg, Calif., won third place and with it a prize of $250. The awards are to be used toward the higher education of the winners.

The subject for the essay contest for 1925, according to Garland W. Powell, director of the National Americanism Commission, under whose direction the contest is conducted, is "Why has the American Legion, an organization of veterans of the World War, dedicated itself, first of all, 'to uphold and defend the Constitution of the United States of America'?"

Chilean Professors Retire After 30 Years' Service

Exemption from duties with a pension "equal to the income they may enjoy" is obligatory for professors of secondary, commercial, and special instruction in the public schools of Chile who have completed 30 years of service and have reached the age of 55. The Government may for very special reasons authorize these employees to continue performing their duties for five years more. This is provided in degree law No. 337, promulgated March 12, 1925, and officially reported to the State Department by William Miller Collier, United States ambassador at Santiago.

More Teachers Required for Philippine Service

Open competitive examinations for teachers and supervisors in the Philippine service are announced by the United States Civil Service Commission. Salaries range from 3,000 to 4,000 pesos. A peso is equivalent to about 50 cents in United States currency.

Competitors will be rated on their physical fitness, education, training, and experience; and applications, until further notice, will be rated as received. Full information and application blanks may be obtained from the United States Civil Service Commission, Washington, D. C., or the secretary of the board of United States civil-service examiners at the post office or customhouse in any city.

Los Angeles Boys Study Scientific and Economic Phases of the Home

Demand for the Interesting Instruction Which Girls Have. Course Inaugurated with Credit Toward Graduation. Boys Enjoy Serving Meals and Visiting Hotel Kitchens. Etiquette, Correct Dress, Care of Clothing, and Principles of Interior Decoration Receive Attention. Responsibilities of Parenthood and Care of Children Appeal Especially to Some Students.

By ESSIE L. ELLIOTT
Head of Home Economics Department Manual Arts High School, Los Angeles, Calif.

"WHY may we not have a class in home economics and learn some of the interesting things that girls do?" This question was asked so often and so earnestly by boys of the Manual Arts High School, Los Angeles, Calif., that the instructors were obliged to take notice of it. They were willing enough to do so, but many practical problems arose which had to be settled first. Among them were: What should be the name of the course? What credit, if any, could be given? What should be the content or subject matter? From what sources should the classes be recruited? Should it be a one-period or two-period subject?

All these questions and many others were discussed at length, and finally the decision was reached to meet the wishes of the boys. It was decided not to allow food-preparation to predominate in the course, because (1) the schedule does not permit a double period and the students find it hard to take elective subjects which require two periods; and (2) a graduation credit would be more fairly earned if the work corresponds to subjects like economics, history and English in difficulty and amount of outside preparation.

Credit Allowed Toward Graduation

The course outlined below was presented to the principal. It was agreed that boys of junior and senior standing might enroll from any course in the school provided they had a free elective. They would receive one credit toward graduation. Some boys were willing to work without credit, but some were not, and it seemed best to give the credit and hold them strictly to assignments.

It was tacitly understood also that the "drawing cards" were to be the serving of a few meals during the term, one lesson in food preparation each week, and a trip through the Biltmore kitchens, where the chef would demonstrate the carving of a turkey, drawing of fowls, making fancy and plain rolls, etc.

A suitable name has never been given. For scheduling "Home economics for boys" has been retained. Evidently "Camp cookery" was not suitable because little, if any of that is taught. "Nutrition" does not suit, though the course is based on the fundamentals of proper nutrition. One boy wrote on his program "Nut class." The last class said they preferred "Dietetics."

Appropriate Name Hard to Find

Some one suggested the "Science of living"; another, "Scientific and economic phases of the home." These really tell the story better but are not so usable in making a program. After all, the rest of the faculty seldom understand the aims and ideals of the true home economics teaching and still think in terms of "cooking and sewing," so what does it matter if the nomenclature does not suit provided the subject matter has high up-to-date standards?

A brief outline of the course as given the past semesters is as follows:

I. Nutrition (three periods each week).

(*a*) A study of the food principles including their uses in the body, their chemical composition, sources in daily food, etc.

(*b*) The physiology of the digestive tract.

(*c*) Metabolism, assimilation, absorption.

(*d*) The needs of various members of the family.

A lesson in table service and etiquette

(*e*) Influence of age, sex, climate, activity, and occupation on food requirements.

(*f*) A study of diet fads—their faults and merits.

(*g*) A study of, and recommendations for, bettering the food habits in cafeterias, school lunch lines and at home.

(*h*) The making of charts and graphs.

(*i*) Personal projects. A diet experiment on self or some member of the family or on some animal.

II. Food preparation (one period each week).

Lessons designed to make possible the preparation of wholesome breakfasts, luncheons, and dinners.

Meat dishes, egg cookery, vegetables, salads and salad dressings, quick breads,

Preparing the first luncheon

yeast bread, cakes, pies, confections of fruit.

III. Special topics (one period each week). Talks given by boys themselves after much research and study. A paper is then written on each subject by all those in the class.

1. Etiquette for all occasions—school, street, parties (formal and informal), theaters, movies, traveling.

2. Correct dress for all occasions—school, street, parties (formal and informal), theaters, movies, traveling.

3. Choice and care of clothing. How to choose material suitable for the business suit, the outing or sport garments, evening wear, dinners, weddings, etc. Mending, cleaning, pressing, removing spots. The proper choice of accessories—ties, hats, caps, gloves, shoes, handkerchiefs.

4. Principles of interior decorating.

(*a*) The relation of furnishings to comfort.

(*b*) The psychology of color—its meaning and the proper use.

(*c*) A study of line, balance, rhythm, and the application to the choice of wall paper, hangings, bric-a-brac, etc.

(*d*) The proper placement of furnishings.

(*e*) The need for simplicity, combined with comfort and attractiveness.

(*f*) A study of the full significance of the axiom by William Morris, "Have nothing in your home which you do not know to be useful or believe to be beautiful."

5. The finances of a home.

(*a*) Banking methods, savings accounts, checking accounts.

(*b*) The home on a partnership basis. Discussion of "doling" method; allowance plan; joint account between husband and wife.

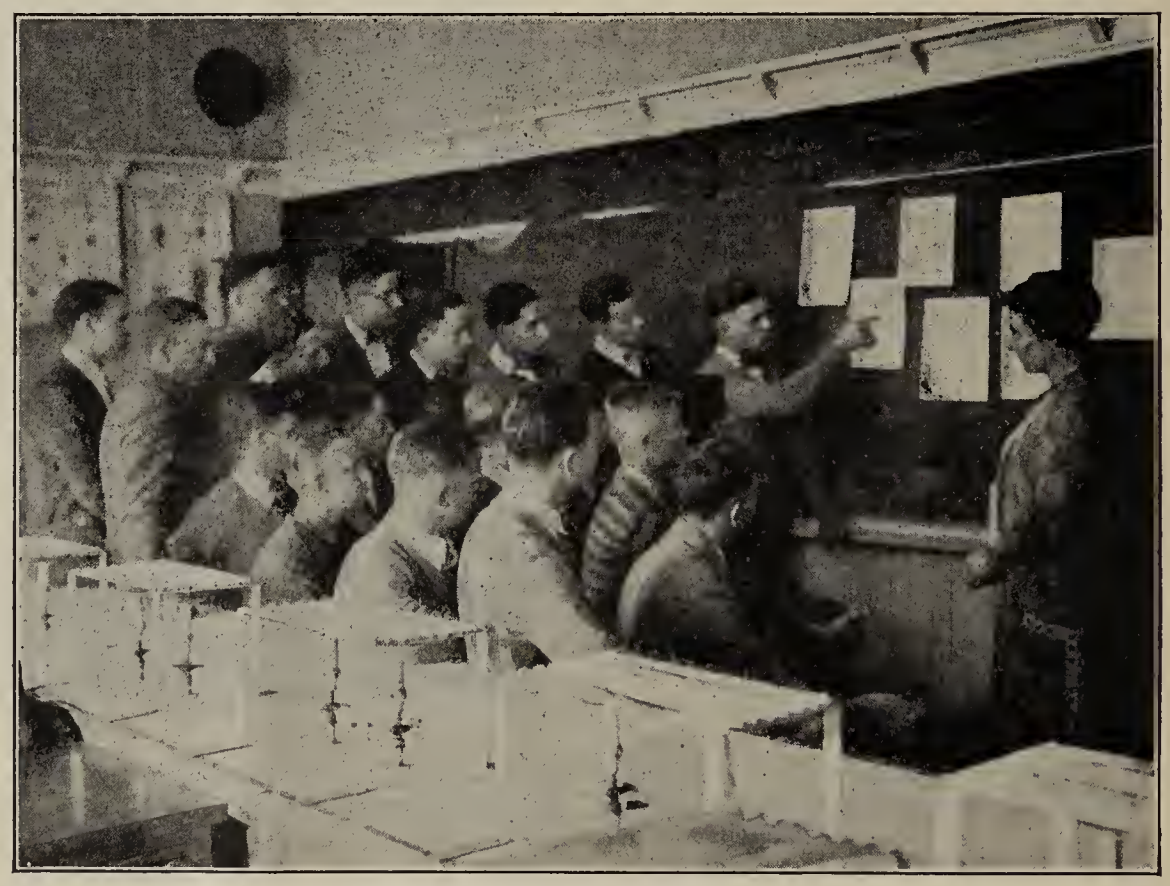
(*c*) Wills; joint tenancy; legal points a man should know to safeguard his home.

6. Care and training of children.

(*a*) The responsibilities of parenthood.

(*b*) Viewpoints of each member of the class on child training.

(*c*) Child nurture and care from infancy to manhood.



Studying nutrition charts made by the boys

(*d*) The moral education of the child to-day.

7. First aid. A review of the essential knowledge of first aid as given in the Boy Scout Manual. Demonstrations and practice with bandages, tourniquets, treatment of cuts and bruises, resuscitation, etc.

References Used

Home Economics Education, organization and Administration.

Vocational Education Bulletin No. 28. (Each boy has a copy.)

Dietetics for High Schools. Willard and Gillett.

Food Facts. Winchell. Lippincott Co.

The Newer Knowledge of Nutrition. E. V. McCollum.

Practical Dietetics. Pattee.

Feeding the Family. Rose.

Marketing and Homework Manual. Donham Little Brown & Co.

Etiquette. Post.

Manners and Conduct in School and out. Allyn & Bacon.

Principles of Interior Decoration. Bernard Jakway.

Color. Weinberg.

Boy Scout Manual.

Any good physiology.

Magazines: Hygeia, Journal of Home Economics, the House Beautiful.

Comments on the Outline Presented

It takes careful planning and guarding against interruptions and wasted time to carry out such a program satisfactorily in single periods of 45 minutes each. This means a maximum of 100 lessons. We all know how this number is lessened by vacations, delays at beginnings, and commencement at the end of term.

Many of the boys have escaped the physiology and biology classes, and even the terms protein, carbohydrates, etc., which are so familiar to most girls, must be learned as new.

With the use of Vocational Education

Bulletin 28, charts or graphs are made of about 50 of the most frequently used foods to determine the highest in percentage of protein, fat, carbohydrates, ash, and water. Though somewhat tedious, this method is most effective in familiarizing them with relative food values.

Laboratory experiments on starch digestion and protein, sugar tests, etc., are easily performed and useful as concrete material.

Some of the personal projects or experiments carried on are: (1) Raising weight so as to make football or track team; (2) reducing weight of self; (3) reducing weight of a member of the family; (4) improving the eating habits of a younger sister or brother; (5) clearing one's own complexion of acne and other eruptions; (6) feeding isolated or restricted diets to rats, guinea pigs, and chickens to test the efficacy of milk, vitamines, or the objection to tea and coffee.

Making chemical tests of foods

About 15 actual cooking lessons are given during the term, but they, with the etiquette lessons, are the big advertisements for the course. After the term is finished, however, the boys stress the good obtained from the nutrition phase and look upon the rest of the course with a true perspective.

Enrollment in Class is Doubled

They volunteered to do some "advertising" to get others into the class the next semester. They even wanted to know how they could help to see that the course was made compulsory for every boy in school. Evidently their advertising methods were successful, for the enrollment for the term opening as this is mailed for publication is 30—double that of any previous class, which means, of course, that the class will have to be divided or some other adjustment made.

In order to have honest opinions, members have been asked to state, without signatures, their criticisms of the course as given during the past semester and as outlined above. Some of them are interesting and significant:

"I have taken much history, language, and science—all of which taught me to think and prepare for the future. This course has not only taught me to think and to be systematic but it has also helped me for living to-day. It should be a part of every boy's education."

"The class discussions have tended to raise our moral standards and have taught us the proper respect and treatment of girls."

"Through our talks on parenthood we now realize the effect of bad habits on later life."

"While I was in training for football my knowledge of nutrition helped me to increase my weight to normal so that I was a more valuable man to the squad."

"My face has been cleared of a bad case of acne and I have been freed from embarrassment. Only by knowing why certain foods and habits were right or wrong was this possible. Every boy should have this knowledge."

"The one thing I hope never to forget is our study of the training and care of children. It is essential to every newly married couple. If all boys could study what we have, in the way we have, it would mean a better generation of people."

"This course has helped me in public speaking."

"I am pleased that we made a study of etiquette for I now feel more at ease everywhere I go."

Library Lending Methods Applied to Museum

"Taking a museum to school" has for 12 years found an active expression in the lending department of the Newark, (N. J.) Museum. Born and raised in a public library building, this museum has adopted many of the ways of the modern library. This has been all the easier as its director, John Cotton Dana, is also city librarian, and a great believer in meeting the public more than half way.

The lending department of the Museum, although open to the general public, is used almost entirely by the schools. Its collections number more than 5,000 objects, classified under 28 heads, of which the most important are life and customs, geographical, dolls in costume, and industrial process charts. Science and nature study are also well represented. Descriptive and illustrated matter accompanies most of the exhibits, which are made up according to requests and delivered to the schools three times a week—about 1,500 objects a month. During 1924 more than 500 teachers in 50 out of 70 public schools used this department. The museum's collections thus came under the eyes and hands of more than 30,000 children, most of them between the ages of 9 and 12, and representing a dozen different races. Often, requests for some particular type of material—such as Indian, Chinese, Eskimo, colonial, industrial charts, and models—can not be filled for weeks, because of long waiting lists.

Special exhibits are made up for churches, parochial and private schools, department stores, clubs, out-of-town libraries and museums. Borrowing has been made as simple as in the library, and most of the objects may be kept for one month, with privilege of renewal.

Attention to Eyesight Is Showing Results

Visual imperfections of school children in Cleveland, Ohio, have been notably reduced. In 1910, one child in every 3,708 had to learn to read with his fingers; in 1924, one in 4,367. This improvement is due principally to legislation requiring prompt attention to inflammation of the eyes of newborn infants, to providing classes for partially and entirely blind children, the increase of sight-saving classes for those unable to see well enough to keep up with the regular school work, and by cooperation with parents and physicians for local treatment and fitting of glasses when needed.

New Books In Education

By JOHN D. WOLCOTT
Librarian Bureau of Education

AMERICAN CLASSICAL LEAGUE. The classical investigation, conducted by the advisory committee of the American classical league. Part three. The classics in England, France, and Germany. Princeton, Princeton university press, 1925. [vi] 203 p. 12°.

Dr. I. L. Kandel, of Teachers college, Columbia university, has prepared this part of the classical investigation, regarding the study and teaching of Greek and Latin in England, France, and Germany. Dr. Kandel's fuller studies have been supplemented by special observation of recent conditions in England and France made by Dr. A. F. West, president of the American classical league. The report reviews the situation in these countries for the last 30 years or more, including the changes which have occurred since the World war. In France, the plan of 1923 is still in effect, but has been modified by authorizing an alternative to the classical requirements. The results of the study show that our classical teaching must be made and kept thoroughly humanistic in spirit, and not mechanical, if it is to exert its best influenee.

AVENT, JOSEPH EMORY. The summer sessions in state teachers' colleges as a factor in the professional education of teachers. [Richmond, Va., The William Byrd press, inc., 1925] 393 p. tables, forms, diagrs. 8°.

A study made under the auspices of the Teachers college committee of the National council of education, National edueation association, by the associate professor of educational psychology, University of Tennessee. The book describes the organization and administration of the summer sessions, and discusses the means of professional education of teachers in the summer sessions of state teachers' colleges. It takes up further the staffs of instruction, and the students attending, functions and relations of the summer session, and ends with conelusions and suggestions.

COOLIDGE, CALVIN. America's need for education, and other educational addresses. Boston, New York [etc.] Houghton Mifflin company [1925] viii, 87 p. 12°. (Riverside educational monographs, ed. by H. Suzzallo.)

America has developed a social and political philosophy of its own, which includes a recognition of the fundamental and permeating social power of education to a degree which is admitted by no other country. The principles of this American social philosophy are expressed in President Coolidge's educational addresses and papers. The address on America's need for education, which gives the title to this collection, was delivered before the National education association at Washington, D. C., July 4, 1924. The hook also contains three other addresses as follows: The needs of education (1922), Thought the master of things (1921), The things that are unseen (1923). Papers included comprise a proclamation for American education week, 1924; a letter to the mayor of Boston, 1919, concerning teachers' salaries; a letter on the inauguration of President Olds of Amherst college, 1924. Outlines of these addresses and papers conclude the volume.

CURTIS, CARLTON C. A guide to the trees. New York, Greenberg, publisher, inc., 1925. 208 p. illus. 12°.

An appreciation of the value of our native trees, and the ability to identify them, will influence people to conserve our American flora, now so often threatened with destruction. To aid in acquiring this knowledge, this book briefly describes every variety of tree in the area from Tennessee west to Kansas and thence north to the Arctic cirele. It also contains a short key by means of which any tree may he readily classified. The author is a professor of botany in Columbia university, New York city.

KIRSCH, FELIX M. The Catholic teacher's companion; a book of self-help and guidance. With a preface by Cardinal Dougherty and an introduction by George Johnson. New York [etc.] Benziger brothers, 1924. xxx, 747 p. front. 12°.

The various parts of this book deal with the character and calling of the teacher, moral and religious education, intellectual education, and school management. While especially intended for the religious teachers of the Catholic Church, it contains much material which will appeal to teachers in general. The author aims to aid Christian teachers to keep themselves fit for their vocation, culturally, professionally, and spiritually, and to realize that these three elements are, after all, but one. The important subject of the teaeher's reading is handled in one chapter.

NATIONAL ASSOCIATION OF SECONDARY-SCHOOL PRINCIPALS. Ninth yearbook, 1925, ed. by H. V. Church, secretary. Cicero, Ill., Pub. by the association, 1925. cviii, 209 p. 8°.

Among the papers contained in this volume are the following: A program of guidance for secondary schools, by Jesse B. Davis. The function of the secondary schools in the program of international understanding, by A. O. Thomas. Current problems of administration in high schools, by C. H. Judd. The curriculum and the seven objectives of secondary education, by C. O. Davis. What becomes of high school principals? by T. H. Briggs. Recent developments in the junior high-school field, by J. M. Glass. A directory of members precedes the papers.

NATIONAL EDUCATION ASSOCIATION. COMMITTEE ON SCHOOLHOUSE PLANNING AND CONSTRUCTION. Report. Washington, D. C., National education association, 1925. 164 p. charts (partly fold.) 8° (Frank Irving Cooper, chairman.)

Edueators and school administrators have combined with architects and engineers, and with representatives of the National Fire Protection Association, to produce this report, which covers its field comprehensively. It deals with the steps in planning and constructing a school building, determination of the sehedule of rooms, choice of the general plan, capacity of instruction rooms, and of library and study halls, detecting waste in the plan, State regulations, illumination, safety to life, specifications, estimating cost, and planning gymnasiums and their accessories. The pages on the illumination requirements of school buildings are contributed by Prof. Frank N. Freeman, of the University of Chicago. He proves experimentally that with 5-foot candles as a standard of illumination, unfavorable conditions may combine to make the lighting in certain parts of a schoolroom very unsatisfactory, and suggests six possible methods of solving this difficulty.

The problem child in school. Narratives from case records of visiting teachers, by Mary B. Sayles; with a description of the purpose and scope of visiting teacher work, by Howard W. Nudd. New York, Joint committee on methods of preventing delinquency, 1925. 287 p. 8°.

These narratives of school experience of exceptional children are grouped under the common types of parental attitudes, feelings of inferiority, diverse issues, questions of honesty, and sex problems. A general interpretation of the particular type involved is prefixed to each group of individual narratives. The book shows what the visiting teacher can accomplish in seeuring cooperation between home and school, and in adapting school methods to individual problem eases.

SARGENT, PORTER. A handbook of American private schools; an annual survey. Ninth ed., 1924–25. Boston, Mass. Porter Sargent [1924] 1047 p. illus. 8°.

Besides the directory of schools, this annual contains the usual review of the school year, and sections on internationalizing education, education in Europe, and recent educational books.

SMITH, DAVID EUGENE. History of mathematics. Vol. I–II. Boston, New York [etc.] Ginn and company [1923–25] 2 v. illus., diagrs., facsims. 8°.

The first volume of this work presents a general survey of the progress of elementary mathematics arranged by chronological periods with reference to racial and geographical conditions. The second volume, which has just appeared, deals with special topics of elementary mathematics.

———. The progress of algebra in the last quarter of a century. Boston, New York [etc.] Ginn and company [1925] v, 86 p. diagrs., facsims. 8°.

Some striking evidences of progress in the purpose of school algebra since the beginning of the present century are presented in the initial pages of this book. The writer goes on to show what progress has been made during the same period in the topics and teaching of algebra, and in perfecting the algebra textbook. An appendix contains illustrations which give a visual picture of the development of textbooks in algebra from 1900 to 1925, and also in some cases from the days of the early printed books.

WAYMAN, AGNES R. Education through physical education; its organization and administration for girls and women. Philadelphia and New York, Lea & Febiger, 1925. 356 p. tables, diagrs., forms. 8°.

This book represents entirely a woman's point of view in physical education; it makes its appeal to girls and women. It deals with the organization and administration of physical education and with the subject as a whole, rather than with the details of technique.

WOHLFARTH, JULIA H. Self-help methods of teaching English; a guide and ally for teachers of elementary English. Yonkers-on-Hudson, N.Y., World book company, 1925. viii, 294 p. illus. 8°

The purpose of this book is to help grade teachers of English, with or without a knowledge of psychology, immediately to improve their instruetion in oral and written composition by using simple and thoroughly tested methods applicable anywhere under present conditions.

WASHINGTON : GOVERNMENT PRINTING OFFICE : 1925

SHORTENING THE ELEMENTARY COURSE

THE AMERICAN SCHOOL lags behind the European school in the rate at which it accomplishes its work. Nor does it appear that the American plan yields a greater depth of culture than does the shorter regimen of France, Germany, Holland, and the Scandinavian countries. In making this statement we are not unmindful of the dual character of the European school system. We know that an early decision must be made by parents, a decision in virtue of which the child either goes into the secondary schools and is on the road to the university, or must be content with the elementary school only. But in this country we do not recognize that even a portion of the population is entitled to a more rapid, as well as a more thorough, introduction to the cultural heritage of the race.

The American concept of education at its best contemplates a considerable amount of secondary schooling for every child. It is, therefore, incumbent upon us to study the extent to which this objective may be attained for a greater number of pupils and at a reasonable expenditure of time.

Teaching in the elementary schools is better now than it used to be. It has been stated, and we believe correctly, that in progressive school systems pupils now learn to read as well by the end of their third school year as many of the pupils of 40 or 50 years ago learned to read in the entire school course. This early superiority should have important bearing on the amount of work pupils can cover in grades subsequent to the third.

Other improvements in teaching have either arrived or are imminent. We predict that within the next few years there will be as remarkable development in the teaching of arithmetic as there has been in the teaching of reading.

Hitherto we have made each increment in effectiveness be a so-called enrichment of the course of study—an enrichment in virtue of which secondary school subjects were brought down into the lower grades. All this, however, has failed to save time. The problem of whether the children of to-day and of the imminent future are not entitled to a return in timesaving, a return which will permit them to assume economic independence and to take their station in society at a time when biologically they are fitted to do so, is worthy of consideration. Why should civilization continue to play the desperate game of prolonging the period of dependence, the period which Fiske calls the period of infancy?

—Abstract of an editorial in Educational Research Bulletin
B. R. Buckingham, editor.

Satisfactions and Compensations of University Teaching

A UNIVERSITY stands or falls by the quality of its staff, for while genius can make shift with poor equipment, the finest equipment can not make up for a lack of inspiration in the teaching and investigation. A university's most important duty is therefore to select the best men and women available as its teachers, and having got them, to provide conditions of service under which they can give the university the best that is in them. * * *

The principal motive which leads men and women to adopt university teaching as a career is obviously not a desire for great material prosperity. They enter upon the profession of their choice in the knowledge that, however great the eminence they may attain in it, they can not hope to make a fortune or to secure such incomes as fall to the leaders of the other learned professions and are relatively common in business. Their object is in fact a certain kind of life, lived in a society of intellectual workers with interests and aims similar to their own, and devoted to the teaching of students and the advancement of knowledge. But just as such a life renounces the shining prizes of wealth, so it demands, if it is to be properly lived, a certain amount of what Aristotle called "external goods"—an income which guards the pursuit of intellectual interests against continuous distraction by sordid cares, ample facilities for undertaking original work, and such leisure as will serve to keep the mind fresh and active.

Universities, in their capacity of employers, know that they need not go to an absolutely open market for their teachers, and that indeed the appeal of very large salaries would be mainly to a type of mind which is not inherently suited to the academic life; but at the same time they must realize that, if their service is to retain its attractions even for the type by temperament inclined to it, the modest advantages which it professes to offer must actually be forthcoming. If the profession of university teaching was generally found not only to give a small money income but also to be seriously lacking in compensating advantages, the effect upon the flow of candidates into it would be disastrous.

—Report of University Grants Committee (Great Britain), 1923–24.