DEPARTMENT OF THE INTERIOR
BUREAU OF EDUCATION

BULLETIN, 1917, No. 15

STUDIES IN HIGHER EDUCATION IN IRELAND AND WALES

WITH SUGGESTIONS FOR UNIVERSITIES AND COLLEGES IN THE UNITED STATES

BY

GEORGE EDWIN MacLEAN

FORMERLY PRESIDENT OF THE STATE UNIVERSITY OF IOWA

WASHINGTON
GOVERNMENT PRINTING OFFICE
1917

ADDITIONAL COPIES
OF THIS PUBLICATION MAY BE PROCURED FROM
THE SUPERINTENDENT OF DOCUMENTS
GOVERNMENT PRINTING OFFICE
WASHINGTON, D. C.
AT
15 CENTS PER COPY

CONTENTS.

LETTER OF TRANSMITTAL.

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,
Washington, March 10, 1917.

SIR: Because the changes in tendencies and ideals in higher education in Great Britain and the consequent changes in the curriculum and the details of administration in colleges and universities within the last few years contained so much of general interest for higher education in the United States, in 1913 I commissioned Dr. George Edwin MacLean, formerly president of the State University of Iowa, to make a careful first-hand study of the newer features of these institutions and to prepare a report on them for this bureau. This study was made by Dr. MacLean, with the generous cooperation of university and college officials, between 1913 and 1915. The report thus includes an account of progress until the beginning of the present war. I recommend that this report be published as bulletins of the Bureau of Education under the titles Studies in Higher Education in England and Scotland and Studies in Higher Education in Ireland and Wales.

Respectfully submitted.

P. P. CLAXTON,
Commissioner.

The SECRETARY OF THE INTERIOR.

STUDIES IN HIGHER EDUCATION IN IRELAND AND WALES.

INTRODUCTION.

This study represents an endeavor to point out facts and tendnecies in higher education in Ireland and Wales by which American universities and colleges may profit. It complements similar studies in England and Scotland,[1] and presupposes familiarity with the principal features and terminology of these studies.

The compiler of the bulletin visited some 20 institutions[2] of like type with those in England and Scotland and for the most part modeled after them. Similar historical, religious, and political forces have been at work in them. In all of these institutions religion begat the beginnings and ecclesiastical zeal has asserted itself. Royal commissions and acts of Parliament have successively played no small part. The influences of the industrial age and of imperialism have been much less than in England and Scotland. The strength of nationalism has been much greater, and consequently the aspiration for a national *system* of education, crowned by a State-aided university, has been stronger. Notable differences may be attributed to the predominance of Celtic blood, traditions of a pre-Saxon culture, political domination by what was long considered a foreign power, comparative isolation due to geographical position, and the limitation of industry largely to agriculture and mining.

Contrary to the common saying that educational movements proceed from above downward, in both Ireland and Wales the establishment of lower school systems has prepared the way for founding the universities. In both the State has largely supplanted voluntary schools with its own. The clannish character of the Celt, much less

[1] Studies in Higher Education in England and Scotland, with Suggestions for Universities and colleges in the United States. Bulletin, 1917, No. 16.

[2] University of Dublin (Trinity College); National University of Ireland (University College, Cork; University College, Galway; University College, Dublin); The Queen's University of Belfast; Department of Agriculture and Technical Instruction for Ireland; Albert Agricultural College, Glasnevin; Royal College of Science for Ireland, Dublin; National Museum, Dublin; National Library, Dublin; Plunkett House, Dublin (headquarters of the Irish Agricultural Organisation Society, and Cooperative Reference Library); Alexandra College and School, Dublin; Tyrone House, Dublin (Commission of National Education in Ireland); Royal Belfast Academical Institution; Municipal Technical Institute, Belfast; University of Wales (University College of Wales, Aberystwyth; University College of North Wales, Bangor; University College of South Wales and Monmouthshire, Cardiff); National Library of Wales, Aberystwyth; National Museum of Wales, Cardiff.

individualistic than that of the Anglo-Saxon, the poverty of the countries, and the purposes of the English Government to Anglicize them, have resulted in State systems of education. It is largely true that in the earlier times "the aim was to denationalize the country and to wean it from its language and from its religion."[1] The administrators of the national systems of education at different times have had various aims. "One powerful influence wished the work of education to subserve the purpose of proselytism; another wished it to secularize; another to Anglicize."[2]

Recently the outcome of the above conditions has been the leadership of Ireland and Wales in State educational experiments, in agricultural and technical education, and in emphasizing the ethical side of education in forming character. In the two countries education is in a most interesting transitional stage. Besides the effects of the war, one must reckon with the direct and indirect influences of the act for the disestablishment of the Anglican Church in Wales, and of the home-rule act in Ireland, the operation of both of which is suspended for the period of the war. The disendowment portion of the Welsh act provides for a certain distribution of funds for educational purposes in museums and libraries. The Irish home-rule act is silent as regards education, except for the provision that schools shall be maintained, and shall be free from any discrimination against pupils on account of denominational prejudice. Guaranties are also given against the diminution of endowments and funds of Trinity College, Dublin, and Queen's University, Belfast. The Irish Parliament will therefore have a free hand to coordinate the National Commissioners of Education, who manage the elementary schools, and the "Intermediate Board," who examine, inspect, and subsidize secondary schools; and to coordinate into the national system the National University. Steps in this direction are not unlikely. For many years "coordination" has been a catchword in Ireland as in all the world, and the National University is one illustration of it.

In Wales the treasury, the board of education, and their advisory committees for years have been urging more coordination, and the Royal Commission on the University of Wales, just appointed, is expected to further it. There is also agitation with reference to the relations of the Central Welsh board to the national system.

In short, Ireland and Wales educationally, though not without enchanting traditions of ancient glories antedating those of English and Scotch lore, are young, plastic, and in a formative period.

[1] Starkie, W. J. M., Resident Commissioner of National Education, Ireland. "Address, British Association, Belfast, 1902."

[2] Gill, T. P., Sec. of the Dept. of Agr and Tech. Instruction for Ireland. "Address, British Association, Dublin, 1908."

PART I. IRELAND.

CHAPTER I. THE DUBLIN UNIVERSITY—TRINITY COLLEGE.

The University of Dublin represents in Ireland the same type of university as Oxford and Cambridge in England, with a commingling of the Scotch type. As Durham is a modern, so is Dublin an ancient variant of the former type, particularly of Cambridge, in its Puritan period, from which its first four provosts came. The charter, contrary to the usual order, refers to "Cambridge or Oxford," and the Cambridge terminology as in the use of the word "Commencement" prevails to the present day.

From the beginning Dublin has been a persistent variant as a "single-college" university from the Oxford and Cambridge type. In March, 1591–92, Queen Elizabeth granted a charter or letters patent incorporating a college—"the Mother of an University" (unum Collegium Mater Universitatis)—under the style and title of "The College of the Holy and Undivided Trinity, near Dublin, founded by Queen Elizabeth."[1]

Trinity College is an anomaly in English history of a college that has exercised all the functions of a university. It is plain that the charter, in accordance with the example of Cambridge and Oxford, anticipated that other colleges would be founded, and these incorporated with Trinity College would make her the "mother of an university." Indeed, attempts to do so have been made, but in the earlier days new houses were called halls, not colleges, and they were not sufficiently endowed or encouraged to become colleges. In modern times the endeavors to persuade Trinity College to become the nucleus of a federal university of Ireland or of Dublin have failed.

The first statutes of this combination in a single institution of a university and a college were copied from the university statutes of Cambridge, while the real government and life were those of a college only. The practically inseparable university and college were ruled by the college provost and fellows, who elected university officers. Two of the first fellows, a Dublin schoolmaster and his assistant, were

[1] For history of the college, cf. Mahaffy, J. P., "An Epoch in Irish History" (T. Fisher Unwin, 1906); "The Book of Trinity College, Dublin, 1591–1891;" "Trinity College, Dublin," by W. MacNeile Dixon (College Series).

Scotch university men, pupils of Andrew Melville, the Protestant Scotch university reformer. The incongruity from a Cambridge point of view of a university and a college in one was little felt at that time. In Scotland the central university governed without complications from undeveloped colleges; on the other hand, in Cambridge and Oxford, highly developed colleges were arrogating university functions. In this particular Trinity College stands as an intermediary between Oxford and Cambridge and the American colonial colleges. The latter exercised the university function of conferring degrees. They have maintained the original college organization with slight modifications to the present day. At Harvard from early times the name "college" or "university" was used indiscriminately. The contradistinction[1] between the college and the university was not clearly made until in the last quarter of the nineteenth century when, for example, the title "Yale University" was adopted in connection with Yale College.

Trinity College also is a variant from Oxford and Cambridge in that it did not, like them, grow from a gathering of scholars about masters but was deliberately planted by church and state; and has suffered from the interference of each. The purpose of the founders was not simply to spread learning but to strengthen the Established Irish (Protestant Episcopal) Church and to Anglicize the Irish nation.

In a land of wealth, Oxford and Cambridge and their colleges were guilds of scholars, springing from a love of learning, and not planted for purposes of propaganda. For four centuries they secured privileges from church and state, and attained an autonomy that the imposition of statutes in the times of Queen Elizabeth and Archbishop Laud could not extinguish.

Dublin, starting as a creature of church and state, had a long struggle to attain a degree of autonomy to which she since has clung tenaciously. In a sense her initial privileges impeded her. She had a monopoly of higher education in Ireland, making her unpopular with a majority of the population, and an internal government in the hands of a provost and a few fellows—a close corporation, designed for efficiency in a small college but becoming an autocratic oligarchy in a large university and breeding discord.

The spirit of the monopoly may be gathered from a reason for the founding of "Trinity" given in the preamble of Elizabeth's charter and letters patent. She wished a college in Ireland for the instruction of her people there, "because many became infected with Popery in foreign universities."[2] In the eighteenth century it was unlaw-

[1] Cf. U. S. Bureau of Education. Bulletin, 1918, No. 4, Chap. IX.
[2] Cf. Mahaffy, *supra*, p. 1.

ful for an Irish Roman Catholic to go abroad to study or to be taught by Roman Catholics at home. At the same time Trinity statutes required all students to take an oath denying the temporal supremacy of the Pope in these dominions, and made attendance upon the Episcopal services in the college chapel compulsory. Lecky says, however, in practice Roman Catholic and Nonconformist students were sometimes excused from attendance at chapel. One could not proceed to a degree who had not taken the "oath of supremacy" and made a declaration against transubstantiation. But the subscription to the "thirty-nine articles," then necessary for admission to the English universities, was not required.

Another variation of "Trinity" from Oxford and Cambridge was due to the fact that the city of Dublin was among its founders, having presented it a site. The idea of a national university at the capital of a country and of municipal support was abroad. Edinburgh had just been founded as the "Town's College." Gresham College (founded 1548) was anticipatory of a University of London.

In the sphere of university reform and progress in many ways Dublin has preceded the older universities, due perhaps to the exigencies of Irish agitation. As a semistate institution the university was able to effect changes in its statutes by means of royal letters. In 1794 a royal letter in accordance with the Roman Catholic relief act of the preceding year admitted Roman Catholics and dissenters to all privileges of study and of graduation and to sizarships, but scholars and fellows remained under the old restrictions. In 1840 a royal letter abolished celibacy as a condition for a fellowship.

Parallel with the movements for university reform and the appointments of royal commissions in England from 1851 onward, several commissions sat upon Dublin. In the main, they did not find need for such radical changes as the commissions recommended in England; one commission assigns the reason, "numerous improvements of an important character having been from time to time introduced by the authorities of the college." The problems of reform were not complicated by the multiplicity of colleges as in Oxford and Cambridge.

Dublin has been a leader in many of the features now characteristic of the new or modern universities. At an early date it enforced a matriculation examination and conducted genuine examinations under its own teachers and not by external examiners. The curriculum was widened at a much earlier date than in its sister universities. It was the first university in the Kingdom to establish chairs of modern languages. It was the first in the world probably to give instruction in Irish, and it has been reintroduced into its curriculum. King James was urgent that the college should fulfill its main purpose to train Irish and Anglo-Irish students to teach the people the reformed

religion in their native tongue. The Greek and Latin classics never had the supremacy they had and still have at Oxford. Compulsory Greek was abolished in 1900.

At Oxford and Cambridge four academical years of residence had become about the only qualification for a B. A. degree in the eighteenth century. At Dublin the examinations gave a meaning beyond residence to the four years, and the institution still maintains a four years' course akin to the four years' American college course until recently considered almost sacred by the colleges. This is now a point of difference between Dublin and Cambridge and Oxford. Having raised the standards of work and examination Cambridge reduced the required residence to three academic years in 1858 and Oxford in 1859. On the other hand Dublin has not made residence a necessity for the B. A. degree. If one passes an examination each term he need not reside in college or attend lectures. Thus Dublin prepared the way for the external students and degrees of the University of London. But Dublin required residence and attendance in the faculties of law, medicine, divinity, and engineering. The further condition for graduation in all these faculties that one must first take the B. A. degree makes Dublin stand out as over against Oxford and Cambridge as a "professional" university.

The standard of medical degrees is of the highest. The establishment of the school of physic (medicine), dating from the time of Charles II, promoted also the foundation of that famous corporation the College of Physicians which has cooperated with "Trinity" in requiring the B. A. degree as a preliminary to medical degrees. A bachelor of medicine must have taken the degree of bachelor of arts and must have spent five years in the study of medicine. A doctor in medicine must have taken the M. B. degree and must be of M. A. standing. There are also subdivisions in the medical curriculum courses leading to degrees of bachelor and of master in dental science, in obstetric science, and in surgery.

In 1841 the university established the first school of engineering in Ireland.

In 1873 the university abolished all religious tests for all offices except for teachers in divinity. In 1914 a Roman Catholic was mentioned for the provostship. By more than 40 years Dublin anticipated the action of Cambridge in opening its degrees to those not members of the established church.

Reforms in the constitution of the university, moving in the direction of representative government, began in 1857. The small oligarchic "board," consisting of the provost and senior fellows, was given power to alter rules only when approved by the senate or public congregation of the university, then for the first time incorporated. The Senate consisted of doctors and masters on the books. The

caput of the senate, consisting of the chancellor and the provost or their substitutes and the senior master of three years' standing elected by the senate, can collectively or singly veto a grace. The chancellor or vice chancellor has an absolute veto in the senate. Still in 1873 Mr. Gladstone spoke of the University of Dublin as in "servitude to eight gentlemen, who elect the other fellows, who elect also themselves, and who govern both the university and the college." In 1874 an advance in representative government was made by the institution of the council of the university. It consists of the provost, the senior lecturer, the registrar, and sixteen members of the senate; two elected by the "board"; and the others by senior and junior fellows, professors; and four members elected at large by all the members of the senate.

The council nominates to all professorships not subject to previous legal restrictions and not in the school of divinity. The nominations are subject to the approval of the board. The approval both of the board and of the council for regulations respecting qualifications, duties, and tenure of office of professors, and respecting studies, lectures, and examinations is required.

A full measure of reform was made possible by letters patent of the present King in 1911. The governing body, "the board," formerly consisting of the provost and 7 senior fellows, was enlarged to a possible 14 or 15 members with representatives elected by the junior fellows and the body of professors.

In 1911 the Crown surrendered its power of making new statutes to the board, subject to the consent of a majority of the fellows and the approval of the visitors.

The visitors are the chancellor of the university and the Lord Chief Justice of Ireland.

The chancellor, with life tenure, is elected by the senate from three persons nominated by the board. The provost is appointed by the Crown.

The same letters patent made provision for the constitution of a divinity-school council, all to be members of the Church of Ireland. It consists of the provost, five representatives of the board, three representatives of the teaching staff, and three representatives of the bishops chosen by them. The divinity-school council is empowered to nominate to divinity professorships. The appointments are subject to the approval of the board. The divinity-school council is not to have control of the conditions on which university degrees in divinity are conferred. The exercises and examinations for such degrees are subject to the approval of the board and of a court constituted for the purpose from ecclesiastical professors of the Church of Ireland or churches in communion therewith or similar

courts of other denominations, the regius professor of divinity being among the examiners. No religious tests are to be required.

Letters patent in 1904 made it possible to admit women to privileges and degrees of the university. They now enjoy these privileges except in the engineering and divinity schools. A separate anatomical department has been provided for women medical students.

In the undergraduate arts courses there are several distinctive features. For the pass B. A. degree the outlines of the old four years' course of compulsory studies even into the last two years are more fully preserved than elsewhere. Ethics and astronomy are still compulsory as well as logic which from the beginning of the institution has been made prominent. The four years' course, however, may be completed by keeping two out of the three terms of each year, or within three years from entrance by taking the final examination of the first year at the time of entrance. The tutorial system is preserved in that every student must choose one of the staff of the tutor fellows as his tutor, and honor courses are given partly by professors and partly by tutors. An honor B. A., called a "moderatorship," can be taken in 10 different groups.[1]

The Oxford and Cambridge practice of admitting to an M. A. degree a B. A. of three years' standing upon the mere payment of a fee still prevails.

Though degrees in the professional schools of divinity, of law, of medicine, and of engineering may not be taken without the precedent B. A. degree, by reason of the privileges extended to the arts students of attending professional lectures, the advantages can be obtained of what are known as the combined arts and professional courses in American universities. Since 1877 the university has had an Indian and home civil-service school. It also had a post-graduate army school with a two-year course recognized for commissions by the army council. The school is suspended owing to the war but the officers' training corps, established in 1910, with total strength of about 400 before the war, continues.

A professorship in education was established in 1905 and diplomas and certificates in education are given. A training department for secondary teachers, for women students only, is carried on in connection with Alexandra College, Dublin.

The latest development is the beginning of a school of agriculture and forestry with a two-year course. The purpose is to cooperate with the Government agricultural department and to make use of its farm near Dublin.

[1] 1. Mathematics. 2. Classics. 3. Mental and moral philosophy. 4. Experimental science. 5. Natural science. 6. Historical and political science. 7. Modern literature. 8. Legal and political science. 9. Engineering science. 10. Celtic languages.

Since the opening of the present century, modern laboratories and equipment for the teaching of physical and natural science and for research have been given by the graduates and friends of the university.

The library, famous for its "long room" and MSS., affords opportunity for research students, as it is one of the largest libraries in the British Isles, receiving by act of Parliament a copy of every book printed in the United Kingdom.

The ample walled grounds, entered by an imposing gateway, and the buildings with their "courts" or "quads" called "squares," opening one into another give the air of an Oxford or a Cambridge dropped into the midst of Dublin. This outward semblance reflects the actual kinship of Trinity College with its two unique sisters. Graduates in arts of the Universities of Oxford and Cambridge are admissible in Trinity *ad eundem* to all degrees they have received in their own universities, and undergraduates from Oxford and Cambridge have full acknowledgment of their residence and standing by Dublin. In turn Oxford and Cambridge extend similar privileges only to one another and to Dublin by "incorporation," marking a supposed equality in this trinity of institutions.

Trinity College has brought the advantages and spirit of the other two venerable universities to Ireland. Planted as a bulwark of English and Protestant influences it has well been called "the only English foundation that ever succeeded in Ireland." But its success has been largely due to its becoming Anglo-Irish and its secularization.

From the first "it attracted not only the sons of the English plantation, but those of the Irish gentlemen left as tenants upon their estates" and occasionally the sons of Irish chieftains. The evasion of religious tests before their abolition, the broad terms of residence, and the tolerably low standards of admission, due in part to the absence of public schools like those of England, gathered a widely representative constituency with a sprinkling of Roman Catholics among the Protestants of different denominations.

Many of the leading minds in Ireland have been graduates of the college. The alumni have been strong enough to defeat every attempt to make Trinity a constituent college in a larger university of Dublin or of Ireland. In 1873 Mr. Gladstone brought in a bill to emancipate the University of Dublin from the control of Trinity. The Queen's Colleges of Belfast and Cork, the Catholic University, and Magee (Presbyterian) College were to become parts of the university with Trinity. The latter's theological school was to be given to the recently disestablished Church of Ireland. To avoid controversy metaphysical and moral philosophy and modern history were not to be taught in the new university. The measure failed. Protes-

tants did not like it because it deprived them of power and limited the range of instruction. Roman Catholics opposed it because it gave them no endowments.[1] In 1907 Mr. Bryce, then Chief Secretary of Ireland, proposed a scheme meeting these objections, merging Trinity College in a new University of Dublin with the Queen's colleges and a new college for Roman Catholics. The control of the university was to be in a board, partly nominated by the Crown and partly by the colleges and with representatives of the students. The alumni organized a "Dublin defense committee" of four or five thousand. They argued that the ideals of Trinity were incompatible with the principles of authority and of scientific theory as expressed in the "Index." On the other hand the Roman Catholic bishops objected on the ground that Catholic students would be brought into an atmosphere inimical to their religious faith. The plan, so far as it concerned Trinity College, was dropped, owing to the strong opposition the "Dublin defense committee" had developed, and to the departure of Mr. Bryce to become ambassador to the United States. It prepared the way for Mr. Birrell, Mr. Bryce's successor, to bring to a conclusion the agitation of many years for a National University.

Whatever opportunities Trinity College may have lost in saving the people the expense of duplications, in lending luster to the National University, and leavening its lump, the question is settled that Ireland, like England and the United States, is to have the advantage of the independent and endowed university side by side with the State-supported institution. Trinity College remains as an illustration that it is the nature of a university, whether founded by church or state or both, to develop its own independent life and to be a free witness to truth.

Referring to the settlement of the Irish university question by the establishment of the National University and the Queen's University of Belfast, in both of which there are to be no religious tests, the erroneous statement (a natural impression from past history) has been made that "it was tacitly agreed that the former should be the resort for Roman Catholics and the latter for Presbyterians, Trinity remaining the recognized Episcopal center."[2] This is not true as to an agreement, though, in fact, it has a large element of truth.

In the new era when Ireland shall have passed out from intense politicalism and religious zeal and sectarianism Trinity College may have a special mission in preserving the continuity of university traditions and in cooperation with the new foundations in perpetuating a genuine university life.

[1] Balfour, Graham. The Educational Systems of Great Britain and Ireland. Oxford, Clarendon Press, 1903. Cf. *passim*.

[2] Encyclopaedia Britannica, Vol. XXVII, p. 774.

CHAPTER II.—THE CATHOLIC UNIVERSITY.

One is surprised to discover that the Catholic University of Ireland, made illustrious by its first rector, Newman, and his famous inaugural lectures on his "Idea of a university," still exists *in posse*. Though it is now in abeyance and its existence was largely on paper, its story throws an important sidelight upon the history of higher education in Ireland. It reflected the combined ancient national and church traditions, not without traces of the legendary period of an independent Irish learning which had survived successive foreign invasions and which the present Gaelic cult has emphasized. Memories lingered of attempts to establish Irish-Catholic universities from the time of the founding of a University of Ireland, in 1312, by an archbishop of Dublin, and of the work of education partially done by the great abbeys, like those of Dublin and Kells, before the Reformation. Nor were the appeals by the Jesuits to the Popes to establish Irish universities in the counter Reformation forgotten.

The occasion of the establishment of the Catholic University was the reaction against "mixed education"[1] and the inauguration of the Queen's colleges by the State. Mixed education had been supported by the Roman Catholic Archbishop Murray, of Dublin, and others intimately acquainted with conditions in Ireland. There was opposition from the Catholic Archbishop of Tuam. In 1841, however, the Pope decided that "mixed schools" were to have a fair trial and forbade further controversy. But the spirit of the day manifested itself in a public declaration in 1845 by nine of the bishops of the Established (Episcopal) Church against any plan of education established and maintained by the State.

After the return of Pius IX from exile, Dr. Cullen was sent from Rome as Irish primate and apostolic delegate. Under his influence the bishops in the Synod of Thurles, in 1850, by the majority of one declared the Queen's Colleges dangerous to faith and morals. They resolved to erect a Catholic university.

Under a brief from the Pope the university was put into operation in 1854, the governing body consisting of the Roman Catholic archbishops and bishops of Ireland.

[1] Combined literary and moral with separate religious instruction in a school.

Dr. Cullen proposed to Dr. Newman that he should allow himself to be nominated rector and suggested that he should deliver discourses on university education in order to prepare the Catholic public for the project of a university.

Newman had a vision of an Irish university that should be an Oxford of his time, made cosmopolitan, Catholic, and modern.[1] Students were to be attracted to it from England and the Continent. Ireland was to become again a center of faith and missions for the world, as in the days of St. Columba. In the year 1852-53 Newman made studies of continental universities and concluded to make Louvain the pattern for his. He made the decision not to grow a university from a college, but to plant a university at once. He wrote: "I suppose a college is a domestic establishment or community in which teachers and taught live together as one family; sufficient for itself and with little or no direct bearing upon society at large. I suppose a university is a collection of professors and scholars independent of each other, though united under one head and by one code of laws, addressing all comers, acting on all the world, and assuming a national aspect." Though his discourses so emphasized the idea and scope of liberal education that he has been taken as advocating literally that a university is a place where nothing useful should be taught, one of his first acts was to purchase a medical college. Simultaneously he urged the establishment of an engineering school despite the "difficulty of combining academical residence with the practical studies and the experience in field works which the science requires." Believing a residential college to be indispensable to a university, he gave his earliest attention to providing a lodging house. At his own cost he erected a temporary church for the university to "maintain and symbolize that great principle in which we glory as our characteristic—the union of science with religion." Newman anticipated many features which have become prominent in modern universities. He proposed a "scholar's degree" at the end of the first two years of a liberal-arts course. At this point one might turn aside to a particular profession or continue a second course of liberal studies for two years, leading to the bachelor's degree. At the end of another three years, or at the end of seven years from entrance, when the student is twenty-three years old, he may receive the degree of master of philosophy or letters, or doctor in theology, in law, or in medicine, or an engineering diploma. He proposed certificates or diplomas of merit for persons short of a degree submitting themselves to an examination in philosophy or letters.

[1] Newman, *Cardinal*. "My Campaign in Ireland." Part I. Catholic Reports and other papers. Printed for private circulation only. Aberdeen, A. King & Co., 1896. Cf. passim.

Besides intern and extern members of the university, to open its advantages to the furthest possible extent, he proposed a group of auditors for studious persons to attend lectures without the examinations. He would continue the discipline of the school and college into the university exercised through the heads of the residential halls and tutors. These are to "conduct students to the arms of a kind mother, an alma mater, who inspires affection while she whispers truth." Recognizing the difficulties of government in the transitional stage of youth, he said, "a certain tenderness or even laxity of rule on the one hand, and an anxious, vigilant, importunate attention on the other are characteristics of that discipline which is peculiar to a university." He acknowledged the necessity for the exercise of this "Lesbian Canon." "The *genius loci* is the instructor." Certain honorable emoluments and privileges should be open to deserving students. These "would constitute a middle party between the superiors and the students." He saw the importance of relating the university to the secondary schools and of the power of inspecting them. He was feeling after a system which would also affiliate the country schools and training schools for teachers.

With a high sense of academic freedom and of the essentially democratic nature of a university, Newman recommended a plan of government. He said: "It was our business to make the constitution of the university as perfect as possible in itself, and as little dependent as might be on the interposition of external authority." He seems to have been conscious of various dangers attendant upon university government. Loyal to his ecclesiastical superiors, he recognized the possible disadvantages of a governing board constituted *ex officio* instead of *ad hoc* and without lay representatives.

He recommended that the government of the university be committed to a rector nominated during the first 10 years by the episcopal body, and revocable by them. His belief in vesting authority and responsible leadership in the rector, not unlike the functions given to the American college president, was brought out in his further recommendations. The deans of discipline and other university officers were to be appointed by the rector, subject to the approval of the archbishops. The archbishops, acting in the name of the governing body, were to appoint the professors and lecturers and determine their salaries upon the recommendation of the rector. "The Rector's jurisdiction is supreme throughout the university. Nothing can be done without his concurrence, whether in the faculties or in the collegiate houses." He was studying to preserve the unity of the university and to forefend against the development and predominance of colleges which had occurred in Oxford.

With the same care with which he had guarded the prerogatives of the rector, he safeguarded the powers of the teaching staff. He

formed two bodies for the transaction of the business of the university, a senate and rectorial council.

He considered the senate, consisting of the resident body of teachers and officers, as "the supreme power of the university." Appreciating the danger of academic freedom becoming merely academic in the sense of impractical or eccentric, by the sole exercise of the supreme power by the resident body of professors and officials he gave seats in the senate and council to "Fellows of the University," viz, such as have what elsewhere would be called the degree of doctor in any of the five faculties."

The professors of each faculty were to elect annually out of their own body their dean and secretary. Each division of the faculty of arts was to have a dean and secretary.

The council, which was intended for the support of the rector, was to be composed of the vice rector, the deans of faculties, and three professors with one vote from the faculty of arts due to the prominence and number of this faculty. His "innovation on the pattern of Louvain," in the interest of professorial representation in the executive, and his proposed "corrective to the evil of a residential oligarchy" anticipate modern university reforms.

With wisdom he proposed that certain innovations in his advanced scheme of government be set up, at first for 10 years, possibly to win favor for their adoption and to have the benefit of the experiments.

Two of his propositions were certainly ahead of his times. The first was the blending of the professorial and tutorial systems in having the same person act in both capacities to the same students. The second was the establishment of "a school of useful arts to develop and apply the material resources of Ireland comprising the professorships of engineering, mining, agriculture, etc., applying a scientific treatment to museums, observatories, and archæological remains."

A pathos surrounds Newman's seven years' rectorship (1851–58). He had to contend against the prejudice of being English and an Oxford man. His installation as rector was delayed three years, and in the meantime important steps were taken independent of the rector. His governing board, consisting of archbishops and bishops and he being merely a priest, made him glad of a suggestion of Cardinal Wiseman that the Pope should create Doctor Newman a bishop *in partibus*. He wrote: "I did feel glad for I did not see how without some accession of weight to my official position I could overcome the inertia or opposition which existed in Ireland on my project of a university." The appointment failed to come. The institution was dependent for support upon voluntary subscriptions, and though they were relatively generous they were never sufficient,

despite Newman's vigorous campaign. He even projected a visit to America, which was not carried out, but considerable sums were collected in the United States. He felt keenly the disadvantages of his new institution in competition with Trinity College, the State-endowed Queen's colleges, and even with Oxford. The State refused to grant a charter to the Catholic University, therefore it could not confer degrees recognized by the State. This intensified the opposition between it and the Queen's colleges. The Pope had already forbidden priests to teach in the latter. The thought that the Pope should be asked to withdraw his censure of them in order that the State might recognize the Catholic University was not acceptable. "Newman felt sure that the Holy See would never agree to any plan which mixes up Catholic and Protestant youth, let alone the professors."

Newman's personal views were that the Queen's colleges were one of the fruits of "a formidable movement since 1827 among us toward assigning in the national life political or civil motives for social and personal duties, and thereby withdrawing matters of conduct from the jurisdiction of religion. Men are to be made virtuous [by this movement] on purely secular motives." He was even anxious for fear that his university instead of attracting the sons of Catholics in the upper classes in England should be used by the Irish upper classes as a preparatory school for Oxford. Though religious tests at that time were not abolished at Oxford, it was possible for Roman Catholics to enter. Rome did not prohibit the attendance there until 1865.[1]

The story since his day of what is still known as "Newman's University" reveals changes in sentiment and action in both church and state encouraging to the friends of higher education. Hampered for want of funds the university became willing to accept State aid but repeatedly failed to secure it. In 1882, when the Royal University of Ireland came into operation, the governing body of the Catholic University changed its constitution and status. They decided to accept partial and indirect State aid through the Royal University and to prepare for its degrees. The scope of the Catholic University was enlarged on paper so as to include several ecclesiastical colleges. The Arts and Science Department in Stephen's Green became "University College, Dublin," and with the other existing department the Medical School, Cecilia Street, became two of six constituent colleges of the Catholic University; the others were the ecclesiastical colleges at Maynooth, Blackrock, Carlow, and Clonliffe. Occasional meetings of the heads of these institutions were held, but the university was no longer in operation in the ordinary way. Its students

[1] Prohibition was not enforced after 1895.

were unusually successful in obtaining first-class distinctions at the Royal University. Nevertheless, the Irish Catholics were not content with anything less than a university able to hold its own with Trinity College and the University of Dublin. Their influence coalescing with other causes resulted in the appointment in 1901 of a Royal Commission and the ultimate establishment of the National University.

When the National University of Ireland superseded the Royal University, in 1909, the former Arts and Science College of the Catholic University was dissolved. Under the endowed-schools commission (1886–1895), the medical school had been incorporated by the State. Later this school obtained power from the master of the rolls to merge the school in the University College, Dublin, of the National University, and to make certain special disposal of trust funds. At this time a judicial decision was given that the Catholic University was still in being and later on might become an active teaching institution. It was held that the papal power to confer degrees was intact though the institution never had such power from the State.

The separate power to confer degrees in theology, received from Rome by Maynooth College, in 1895, its centennial year, continues to be exercised sparingly.

Upon the death, about 1907, of the rector of the Catholic University, the Right Rev. Monsignor Gerald Molloy, who was also a senator of the Royal University, no anouncement was made of the appointment of a successor. It is understood, however, that the Most Rev. Patrick O'Donnell, Bishop of Raphoe, was elected by the bishops. He has also been coopted a member of the governing body of University College, Dublin. This is a signal of the happy coalescence of the Catholic University in the National University of Ireland, and of concord in education after two generations of controversy between church and state. Each has learned by experience to concede positions for which it had fought. Each has learned more of the nature of a university, of its tolerance, and that it can not flourish with external interference. It is proven that without legal formalities, through mutual faith, and the choice of officers and teachers possessed of university spirit, church and state may cooperate in an institution serving both.

In harmony with the American doctrine neither church nor state asserts a monopoly in education and both recognize religion as essential to character and university training.

CHAPTER III.—THE STATE PREDECESSORS OF THE NATIONAL UNIVERSITY.

The National University of Ireland is the latest organization outside South Africa of a national and federal university. Retarded by the University of Dublin (Trinity College), indirectly accelerated by the Catholic University, complicated by political changes, it has been not less than 70 years in the making.

The genealogy of the university may be traced from the system of national education which resulted in the creation in 1831 of the Board of Commissioners of National Education. From this scheme sprang (1845–1849) the Queen's Colleges of Belfast, Cork, and Galway, which begat in 1850 the Queen's University, which begat in 1882 the Royal University of Ireland, which begat in 1909 the National University of Ireland and the Queen's University of Belfast. The real genesis of these institutions goes back to the great movement in the eighteenth century which resulted in the French and American revolutions, and in the reform measures in England culminating in the reform bill of 1832. This movement found fertile soil in Ireland; in the keen interest manifested there in elementary education. The interest had been fostered by voluntary societies whose schools had been filled with national and proselytizing zeal and supplied with public money.

We have begun our genealogy of the National University with the plan [1] for national education in Ireland submitted to the Government (Dec. 9, 1830) by Mr. (afterwards Sir) Thomas Wyse, M. P., for the County Tipperary. After the act of Catholic emancipation (1829) Mr. Wyse was among the Roman Catholics who were for the first time returned to the English Parliament. He was happily fitted to prepare the scheme and to be listened to by the Government because he was a trusted native Irish leader, a Roman Catholic, a graduate of Trinity College, and, having lived abroad, a student of educational systems there, particularly of the French state system, which he considered a beneficent outcome of the revolution.

Mr. Wyse's plan rested upon the principles that religion is the foundation of all education and that "nationalism not sectarianism should be the first article of our common character." Among his

[1] Wyse, Winifrede M. Notes on Education Reform in Ireland. Compiled from Speeches, Letters, etc., of Rt. Hon. Sir Thomas Wyse, K. C. B. Waterford, C. P. Redmond & Co., 1901.

specific recommendations were the following: Catholics and Protestants were to be educated in the same school to prepare future citizens for a common country. Religious instruction was to be given regularly to the pupils of each persuasion by their pastors. The schoolmasters were to be chosen by the parents in each parish from a teachers' school under the superintendence of a board of national education. This board was to be composed of Protestants and Catholics, of clergy and laity. In addition to the elementary schools thus provided for he wished to establish an academy in every county for the education of the middle classes of society. The courses of study were to include the experimental sciences, and agricultural and commercial chemistry. Above these academies he proposed to have a college in each of the four provinces "managed by a committee representative of the interests of the several counties of the provinces."

These colleges were to be subsidiary to a nationalized teaching university. This was to be done by enlarging Trinity College or by founding a second university. He apprehended the danger of placing a university "under the jurisdiction of any public board" but realized the importance that each part of the whole system of national education should be brought into cooperation with the others. Therefore he suggested that the university should constitute a council to communicate with the national board or that powers limited to their proper purposes be given to a university board. Mr. Wyse received approval of his scheme from many Roman Catholic prelates and distinguished Protestants. In 1831 the Hon. E. G. Stanley, the chief secretary for Ireland, adopted the part of the scheme dealing with elementary education and secured the Government's financial support.[1] The Board of National Education was created—at present consisting of 20 members, one-half Catholics and one-half Protestants. These are unpaid except for the Resident Commissioner. They are appointed by the Lord Lieutenant and are independent of the House of Commons except for their annual grant. The important parts of Mr. Wyse's scheme dealing with university and secondary education were shelved. With the passage of the years his advanced ideas are being realized one by one.

Mr. Wyse, as chairman of a "select committee on foundation schools and education in Ireland of the House of Commons," and by his untiring activities, became the virtual father of the Queen's Colleges established under an act of 1845 and opened in 1849 in Belfast, Cork, and Galway. The name may be traced to an address to Queen Victoria in 1838, unanimously adopted at Cork "by the representatives of all religions, professions, orders, and parties," with the

[1] At first $150,000 a year.

"hope that the commencement of her reign will be made memorable by the establishment of institutions which will place an extensive course of education within the reach of all." The colleges were strictly undenominational. The professors were not to make any statements disrespectful to the religious convictions of their classes, or to introduce political or polemical subjects. A grant of $500,000 was made for sites and buildings for the three colleges, and each college received $35,000 a year for maintenance. Each institution had a faculty of arts, of law, and of medicine. For the corporate life of the colleges the presidents were provided with apartments in the colleges and common libraries opened for the students. Dean's halls for those coming from a distance were established under the auspices of "Deans of Residence" of different religious denominations.

The colleges did good work, but they failed to "solve the problem of providing a generally acceptable teaching university. They received little support from the Government that founded them." The new departure of handing over education to the State from the church or voluntary corporations was met with great prejudice. Mr. Wyse, in advocating the original legislation in the House of Commons, had the epithet "godless" hurled at his scheme by "a Low-Churchman of the most extreme type" (Sir Robert Inglis). Suspicions of dangers to faith and morals were cherished by churchmen of Protestant denominations and in 1850 the Roman Catholic hierarchy changed from support of the colleges to opposition.[1]

Each of the colleges was an independent foundation reporting directly to the Crown. Each had a board of visitors, upon which were the chief secretary for Ireland, justices of the law courts, president of the Royal College of Physicians and Surgeons, and the moderator of the General Assembly of the Presbyterian Church in Ireland. Each had a corporate body consisting of the president of the college and the full professors. Associated with the president was the college council, consisting of representative professors.

The college at Belfast had the largest attendance, ranging from about 300 to nearly 600 students, of whom the overwhelming majority were Presbyterians, but always with a sprinkling of Catholics. Cork came next, ranging from 200 to 400, with a majority of Catholics, but always with a good representation of the churches of Ireland and England. Galway was the smallest, with an attendance from 100 to 200, a minority of whom were Catholics.

The maximum attendance in all the colleges was reached at the moment of transition (1881–82) from the Queen's University to the Royal University. The colleges came to have the modest sum of about $20,000 for scholarships and exhibitions.

[1] Cf. *supra*, p. 19.

In 1850 Queen's University was incorporated to complement the three Queen's colleges. The function of the university was to examine for degrees students who had qualified by attending the colleges.

From this point the university movement runs nearly parallel to that of the University of London, after which it has been largely patterned. Mr. Wyse in his advocacy of the Queen's colleges and university at the beginning held up the example of the University of London in which the Stonyhurst Roman Catholic College and the Church of England King's College among others dwelt peaceably together as approved institutions in the University of London. As we have seen, Irish conditions did not permit the same success as in London.

In 1866 a supplementary charter was given to Queen's University granting the right to examine and confer degrees upon students who had not been educated at the Queen's colleges, but it was upset in the courts.[1] London, overwhelmed by the number of colleges of unequal rank which had been approved, was driven to take a similar step and became a mere examining body.[2] The status of the Queen's colleges as State institutions delayed until 1882 the degeneration of the Queen's University into a board of examiners.

The continued agitations and religious difficulties surrounding Queen's University resulted in its being succeeded by the Royal University of Ireland, chartered in 1880. It was empowered to confer degrees in all faculties except theology upon the passing of its examinations. No residence in any college was required nor attendance upon any lectures except in the case of medical students. The old Government annual grants to Queen's University of about $20,000 were increased from the funds of the disestablished (1869) Church of Ireland to $100,000.

The corporation consisted of a chancellor, senate, and graduates. Of the 86 senators the maximum number of 30 was nominated by the Crown and six by the convocation of the university. The matriculation and the first university examinations were held at different local centers; the other examinations at Dublin only. The numbers presenting themselves rose to between 2,000 and 3,000, as compared with some 700, the highest number in Queen's University.

Fellowships, scholarships, and prizes were assigned to persons in the chief institutions which gave instruction for the university examination. In view of the number of candidates appearing, by a tacit understanding half of the fellowships and scholarships were filled by University College (of the Catholic University), Stephen's

[1] Balfour, op. cit., p. 269.
[2] Cf. MacLean. U. S. Bureau of Education. Bulletin, 1917, No. 16, p. 68.

Green, Dublin; the remainder were distributed among the Queen's colleges and one was given to Magee College, Londonderry. The last is primarily a Presbyterian theological college with an arts course which is undenominational.

An offer of fellowships to the students at Maynooth, the Roman Catholic Theological Seminary, was declined by the bishops. Otherwise the Catholics availed themselves of the examinations and accepted the offices and fellowships of the new university. At length it seemed as if the religious difficulties which had surrounded higher education had been overcome. On the disestablishment of the Church of Ireland (Episcopal) in 1869 all denominational endowments from the Government ceased, and existing interests were compensated.[1]

The first statutes of the Royal University opened all degrees, honors, exhibitions, prizes, and scholarships to women. Consequently in 1882 Queen's College, Belfast, followed by the other two colleges, matriculated women and admitted them to classes and scholarships.

The university committed the matter of examinations to a board of fellows, elected by the senate in equal numbers from the non-denominational and the Roman Catholic colleges.

It became a source of complaint against the university that practically no extern examiners were appointed.

The reaction against a university as a mere examining body with nonresidential students, which resulted in the reconstruction of the University of London in 1900,[2] swept into Ireland.

It combined with other factors and resulted in the setting up of a royal commission (1901–3) "to inquire into the present position of higher, general, and technical education in Ireland, outside of Trinity College, and to report as to what reforms, if necessary, are desirable in order to render that education adequate to the needs of the Irish people."[3]

The commission condemned the system of the Royal University of conferring degrees upon the result of examinations alone and also the indirect method of endowment of colleges by fellowships. It urged that the Royal University should be restored to the proper ideal of a university by being made a teaching institution, in which attendance at lectures should be required, and the corporate life of the students encouraged.

---

[1] Trinity College received about $703,300 as compensation for the loss of advowsons; Maynooth about $1,845,200, being 14 times the previous annual grants; Belfast Academical Institution, a college for the education of Presbyterian ministers, "about $219,880, being 14 times the grant, and $75,000 for the college buildings."

[2] Cf. MacLean. U. S. Bureau of Education. Bulletin, 1917, No. 16, pp. 68–72.

[3] P. P., Cd. 1483.

The Queen's colleges were to become constituent colleges of the university, together with a fourth—a Roman Catholic college in Dublin—which should also receive Government support.

The Catholic University School of Medicine was to be absorbed in it. Belfast was to be more liberally supported, but Cork and Galway to receive rather less until they showed greater growth. The policy of residential halls for men and women was to be extended.

Though these recommendations were not immediately adopted, most of them were carried out later in the establishment of the National University of Ireland.

By the terms of reference the Royal Commission's inquiry and consequently its recommendations were "outside of Trinity College." In an age of combination for the sake of efficiency and economy, and with the incoming of a new government at Westminster, a final attempt was made to include Trinity College in a reconstituted University of Dublin in which should be merged the Royal University, the Catholic University, and the Queen's colleges.[1] The strong opposition of Trinity promised the defeat of this project which Mr. Bryce had brought forward in 1907. His successor, Mr. Birrell, modified the plan leaving out Trinity. By his measure the National University of Ireland succeeded the Royal University, and Queen's College, Belfast, was erected into a university.

[1] Cf. *supra*, p. 18.

CHAPTER IV.—THE NATIONAL UNIVERSITY.

Under the Irish universities act of 1908, King Edward VII chartered the National University of Ireland, having its seat in Dublin, and the Queen's University of Belfast.[1] He dissolved the Royal University of Ireland on October 31, 1909, and founded a new college known as the University College, Dublin, into which were received the University College (Catholic), St. Stephen's Green, and the Cecelia Street Medical School. From the same date Queen's College, Cork, and Queen's College, Galway, became University College, Cork, and University College, Galway, and they were made with the new University College, Dublin, constituent colleges of the National University.

In effecting changes in higher education British good sense and justice impress an American. Scrupulous care is taken to preserve the continuity of the institutions and to keep or compensate the officers and professors. The transition from the Royal University to the National University of Ireland was gradual, lest the institution should suffer, as it were, from nervous shock. Though an "appointed day" was set for the dissolution of the Royal University and the putting into operation of the new, the rights of graduates and students of the former were preserved in the latter. Provisional appointments, continuing as far as possible the old officers, were made for seven years.

All religious tests in the university and its constituent colleges are prohibited. No State money can be used for the provision or maintenance of any place of religious worship or to pay for religious teaching or study. There is a proviso that the university may recognize any teacher in theology as a professor of the university so long as the professorship is maintained entirely by means of private benefaction. But no student shall be compelled to attend any such religious instruction, nor shall such a professor be eligible for membership of the general board of studies or of any faculty other than the faculty of theology. In accordance with this provision, a professorship of Catholic theology has been endowed by the Roman Catholic archbishops and bishops of Ireland.

Every professor "other than a professor of theology or divinity recognized by the senate" has to sign a declaration that he will not

[1] Cf. *infra*, p. 52.

"make any statement or use any language that would be disrespectful to the religious opinions of any of my class."

The organization of the university, which harkens back to that of the University of Wales and that of London, has modifications strengthening the university as over against the colleges.

As in the University of Wales, there is no university teaching staff apart from the staffs of the constituent colleges.

The visitor of the university is the King, acting through a board of visitors. The presidents, professors, and lecturers of the colleges, if removed from office by the university, have the right of appeal to the King's board of four visitors. If the visitors do not unanimously concur in the removal, it is not to take effect.

In Wales the King is the visitor through the Lord President of the Council.

In respect to the membership of the university the National University of Ireland follows Wales.

"Women are eligible equally with men to be members of the university or of its colleges and to hold any office or enjoy any advantages of the institutions."

In both Ireland and Wales the chancellor of the university is elected for life, in Ireland by convocation, in Wales by the court, subject to the approval of the visitor.

The vice chancellor, "the chief executive officer having supervision over educational and other arrangements of the university," is elected by the senate from among its members and holds office for such period, not exceeding five years, as the senate may determine, and is eligible for reelection.

In Wales the principal of each university in rotation is vice chancellor, holding office for two years.

In Ireland the supreme governing body is the senate of only 35 members, corresponding in functions to the large university court of some hundred members in Wales.[1]

The Irish senate consists of the chancellor, the presidents of the constituent colleges, four members nominated by the King, of whom one at least shall be a woman, six members elected by the governing body of University College, Dublin, of whom three at least are members of the academic council of the college, four members elected by the governing body of University College, Cork, two at least being members of the academic council of the college, four members elected under the same conditions from Galway, the registrar, eight members elected by convocation, and four coopted members. The term of office of elected members is five years.

The general board of studies in the National University of Ireland corresponds to the senate in Wales.[2] It consists of the vice

[1] Cf. infra, p. 77. [2] Cf. infra, p. 77.

chancellor, the presidents of the constituent colleges, and one member elected by the senate from lists of names submitted by the academic council of each constituent college from among the university professors and lecturers of each college in each of its faculties, and in addition one or more representatives, determined by the senate, of recognized teachers of any recognized college and at least three extern examiners.

The faculties in the National University of Ireland are eight as over against six in Wales.[1] Ireland is peculiar in having faculties of philosophy and sociology, of Celtic studies, of engineering and architecture, and of commerce, and Wales in having faculties of music and of theology. Both institutions cover essentially the same departments of study. Both include education, engineering or applied science, and agriculture. Ireland is singular in having the faculty of commerce and one of Celtic studies in which Irish is made a compulsory study.[2]

In the University of Ireland each faculty consists of the vice chancellor, a dean appointed annually by the members of the faculty from among the professors in the subjects of the faculty, and of the professors and lecturers.

Convocation is the last authority of the National University of Ireland, which corresponds to the guild of graduates in Wales and to convocation in London. It consists of the chancellor, the vice chancellor, the members of the senate, the professors and lecturers, and the registered graduates who are enrolled as members upon the payment of a fee of 5 shillings. The convocation like the guild of graduates in Wales is limited to discussion and making representations to the university authorities on any matter affecting the university. It has powers, beyond those of the guild in Wales and like those in London, to elect the chancellor and eight of its members as representatives on the senate.

The method of appointment of professors and lecturers and the regulations for their tenure of office are designed to rest appointments upon merit and to safeguard academic freedom. The statutes as to the creation of positions are designed to obtain a considered judgment upon the multiplication of instructorships. After the period of provisional appointments in the new university (ending July 31, 1916), the senate fills vacancies subject to the following conditions: The president of the constituent college concerned is to ascertain if it is the opinion of its governing body that the office

[1] In Ireland—arts, philosophy and sociology, Celtic studies, science, law, medicine, engineering and architecture, commerce. In Wales—arts or letters, science, music, law, medicine, theology or divinity.

[2] Cf. *infra*, pp. 35, 66.

should be continued or modified and shall make a statute accordingly and inform the vice chancellor. The vice chancellor is to lay the matter before the senate, but in the event of any statute in respect of the vacant office the senate shall defer action until the expiration of not less than 40 days after the statute has been laid before both Houses of Parliament. If the place is to be filled and if the statute shall not be disallowed by the King, upon the presentation of an address in either House of Parliament or by the Lord Lieutenant, by order in council, upon a presentation of a petition the report and recommendations of a governing body are to be placed before the chancellor by the university registrar. The chancellor submits ordinarily not less than three names of candidates elected by the college governing body to the senate, who make the appointment. This system of appointment is in striking contrast with that of Wales in which each constituent college is free to create departments and appoint professors and lecturers.

A full professor is to hold office subject to good conduct and the due fulfillment of his duties until he attains the age of 65, and may thereafter be continued annually for five further years. Lecturers are appointed for periods of seven years and are eligible for reappointment until they are 65 years of age, and may be continued in office for five further years.

The senate may recognize a college in Ireland in which matriculated students of the university may pursue approved courses of study of a university type under teachers recognized by the senate for the purpose. Such a college must satisfy the senate that it does not give secondary education and that it meets university standards as to financial support, qualifications of teachers, and equipment.

The consent of the constituent college, in whose district the college to be recognized is situated, must be given and a satisfactory report obtained from the university's general board of studies or inspectors. The senate may recognize the college in whole or in respect of particular subjects and for a limited time.

The senate may also, as in London, recognize individual teachers. The recognition of a teacher may be withdrawn at any time by the senate, but removal from office of a president, a university professor, or a lecturer of a constituent college or other officer of the university is a grave matter. The senate may not proceed except upon due cause shown in an application of the governing body of the college, nor without two months notice accompanied by the particulars of the charge against the person and an opportunity for a hearing in his defense.

The National University is made predominantly a teaching university, as over against the Royal University—an examining insti-

tution—by the requirement similar to that in Wales of "an approved course of study," approved by the senate as qualifying for a degree or other academic distinction. The course of study, however, may be pursued in the university, in a constituent or recognized college, or partly in one or more of them.

There is a survival of the extern student of the Royal University and an open door for some work outside a college in the proviso that a component part of an approved course of study may be pursued "partly in such other place as may be prescribed by regulations." This prescribed instruction may be in the form of lectures, catechetical or clinical instruction, practical work in laboratories, shops, or field, and research in libraries, museums or among monuments within or outside the United Kingdom. The practice of holding examinations at "centers" outside the colleges may be another survival from the Royal University. The "duty of equalizing standards of knowledge" is enforced by a common matriculation examination, by regulations accepted by all the bodies concerned, and by associating with the teachers an extern examiner appointed by the senate in each subject or group of subjects.

For the matriculation examination all students must pass in five subjects arranged in six groups. The peculiarity of the examination is that Irish is required.[1] Students not born in Ireland, and other students whose home residence has been outside Ireland during the three years immediately preceding their matriculation may enter without Irish, but are expected to attend a course in Irish literature and history prior to obtaining any degree in the university. English is another absolute requirement. Latin and Greek are requisite only for students entering for degrees in arts, philosophy, and Celtic studies. Since 1914 candidates entering for the first time are obliged to pass in all five subjects at one and the same examination. In contrast with Oxford, Cambridge, Trinity College, Dublin, and Wales no student can begin his course of study for a degree in the university until he has completed his matriculation. In common with the new English universities attention is given to the raising of standards of admission.

As in all British universities there are distinct pass and honor courses for degrees.[2]

The ordinary length of the course for a bachelor's degree is at least nine terms, i. e., three academic years.

[1] 1. Irish. 2. Latin or Greek. 3. Any modern language approved by the Senate. 4. English. 5. Mathematics or natural philosophy. 6. English, ancient and modern languages, history and geography, mathematics, and sciences.

[2] Cf. MacLean. U. S. Bureau of Education. Bulletin, 1917, No. 16, pp. 234–235.

There is the usual range of degrees in the several faculties, with the unique addition, under the influence of the Gaelic League, of the degrees of master and doctor of Celtic studies.[1]

Ireland with Wales and the new English universities has abandoned the custom of the old universities and of Trinity College of admitting a B. A. of three years' standing to his M. A. degree upon the simple payment of a fee. The candidate for the degree of M. A. must pursue an "approved post-graduate course" for an academic year and present an acceptable dissertation, or two years after obtaining his B. A. degree present a dissertation and pass a special examination.

In Wales the conditions for the degree of M. A. are somewhat stiffer. The "qualifying period of study" is not less than two academic years. A scheme of study is required in one department consisting of two parts, a "general and a special study." The "general study" must not be completed before the end of the first year, nor the "special study" less than one year after the completion of the "general study." A dissertation must be presented on one subject of the "special study." A candidate who has completed an Honor's Course for the degree of B. A. is deemed to have completed his "general study" and is permitted to finish his "special study" in one academic year, but not before the end of the fifth academic year after he entered on his scheme of study for his B. A. Residence, however, in a constituent college of the university is not required.

Wales set the example of offering a degree of M. A. in recognition of original research in arts, or in science, or in laws. Any college approved for the purpose may present a graduate qualified to pursue a scheme of advanced study or research in a constituent college of the university. The scheme must be pursued for three years in the university, but may be reduced to two years if the candidate has pursued studies qualifying for a degree in the approved university. The candidature must be sustained by the submission to the university of work embodying the methods and results of the researches in which the degree is sought.

In both Ireland and Wales the doctors' degrees are not conferred until at least three years after the admission to an initial degree. In Ireland examinations are required and the presentation of a dissertation embodying the result of the candidate's independent research. As a matter of fact, in neither university has an advanced degree

[1] (1) B. A., B. Mus., M. A., D. Litt., D. Mus.; (2) D. Phil.; (3) M. Litt. Celt., D. Litt. Celt. (Master and Doctor of Celtic Studies); (4) B. Sc., B. Agr. Sc., M. Sc., M. Agr. Sc., D. Sc.; (5) LL. B., LL. D.; (6) M. B., B. Ch., B. A. O. (Bachelor of Obstetrics), B. SC. Pub. Health, M. Ch., M. A. O., M. D., Sc. Pub. Health, B. D. S. (Bachelor of Dental Surgery), M. D. S.; (7) B. E., B. Arch., M. E., M. Arch.; (8) B. Comm., M. Comm.

higher than that of M. A. been taken. Research, however, is specifically named as an object in the plan of each of the institutions.

The two institutions have powers by charter to examine and inspect schools and other educational institutions and to grant certificates of proficiency. These powers have not been exercised, being in the hands of other bodies. In Ireland inspection of secondary schools is vested in an unpaid board of commissioners of intermediate education established under a Parliamentary act of 1878. By an act of 1900 power was given to the board to appoint inspectors of schools. The board's examinations superseded after the closing of the Queen's University (1879) a system of middle-class examinations resembling the English local examinations which Queen's University had established in 1860. The board has large public funds to distribute among the schools, and though the principle is recognized that the university is the proper source of inspection it is not likely to perform the function unless some large scheme of the coordination of educational forces such as Mr. Wyse dreamed of is adopted by Government.

In Wales the case is somewhat similar, but the university has the advantage of representation in the secondary education bodies. A representative of some one of the three Welsh university colleges is on each county governing body. The Central Welsh Board for Intermediate Education is the recognized organization for the inspection of such schools as may be desirous of inspection. The university has representation upon this board. It is noticeable in the appointment of the Royal Commission on the University of Wales, the Central Welsh Board, or the relations of the university to it are not specified in the terms of reference. The National University of Ireland has not entered upon university extension even in the form of cooperation with the Worker's Education Association,[1] though Queen's University, Belfast, has begun such work and the university colleges of Wales have developed it. This fact is probably accounted for by the difference in character of the constituencies of the institutions.

There is no faculty of education in the National University of Ireland, in Queen's University, Belfast, or in the three university colleges of Wales. There is, however, a rapidly increasing interest in the training of elementary and especially of secondary teachers in the universities. All these institutions have professors of education, chairs being created in Queen's University, Belfast, and University College, Galway, in 1914–15. In Ireland the first examination in the history and theory of education was held in 1898 and in the same year the Royal University created a diploma in teaching for

[1] Cf. MacLean. U. S. Bureau of Education. Bulletin, 1917, No. 16, pp. 252–258.

the graduates of that institution. At the same date a training college was opened for women teachers in secondary schools at the Ursuline Convent, Waterford, which was recognized by Cambridge. The first professorship in education in Ireland dates from 1905 in Trinity College. In each of the institutions in Ireland there is only a professor in the department of education, whereas in Wales there is a staff ranging from seven in University College, Cardiff, to three in University College, Bangor.[1]

The education department in University College, Dublin, leads all others in Ireland in attendance especially in postgraduate courses. In 1915–16 it had 44 graduate out of 70 postgraduate students in all the 8 faculties of the college.

The faculties of law in all the institutions in Ireland and Wales are small and the graduates few. This is due to the British system of legal education through the Inns of Court and Law Societies.[2]

King's Inns, Dublin, corresponds to the Inns of Court, London. The professors of law, excepting in the University of Dublin, are for the most part also engaged in practice, and are part-time men.

All the institutions in Ireland have law faculties, but in Wales, University College, Bangor, has none; University College, Cardiff, only a lecturer in bookkeeping and trust accounts and another teacher; and Aberystwyth, that had a professor and two assistant lecturers, is suspending the instruction during the war.

All the universities and university colleges in Ireland have courses in medicine, but in Wales only Cardiff has a medical course.[3] Trinity College, Dublin, has the oldest and strongest school,[4] followed by University College, Dublin, and University College, Cork. These institutions all have extensive hospital privileges. They also include, according to the British practice, dentistry as a subsection of medicine.[5] Trinity College, Dublin, has a combined arts and medical curriculum and also combined arts and dental curriculum. Candidates for diplomas in medicine, surgery, and obstetric science must be matriculated in medicine, and must have completed two years in arts and five years in medical studies. Diplomates on completing the course in arts and proceeding to the degree of B. A. may be admitted to the degree of bachelor of medicine, etc. To become a doctor of medicine one must pass the final examinations in medicine, surgery, and midwifery, read a thesis or undergo a special examination and be of M. A. standing. In the University of Dublin in order to obtain

[1] Concerning training colleges and university departments of education in England and Wales cf. Judd. U. S. Bureau of Education. Bulletin, 1914, No. 35, pp. 12, 27, 28.
[2] Cf. Richards. U. S. Bureau of Education. Bulletin, 1915, No. 18.
[3] Cf. *infra*, p. 80.
[4] Cf. *supra*, p. 14.
[5] Cf. MacLean. U. S. Bureau of Education. Bulletin, 1917, No. 16, pp. 114, 206.

a degree of bachelor of dental science one must have completed the course for the arts degree of the university and have spent at least four years in the school of dentistry. The degree of master in dental science is awarded after a further examination and can not be taken until the end of a fifth year of study. Either of these degrees entitles the holder to be registered as a licensed dental practitioner. The way is open to students in the three university colleges to proceed to the degrees and certificates in medicine, science, and public health in the University of London, and to the diplomas conferred on candidates who have passed the examinations held by the conjoint board in Dublin, Edinburgh, and London.

The courses and degrees in music are included in the faculty of arts in Ireland whereas in Wales there is a separate university faculty of music which is quite consonant with the national attention to music in Wales.

In both countries the courses and degrees in agriculture are included in the faculty of science.

Ireland emphasizes engineering and architecture by the organization of a separate faculty while in Wales these subjects are included in the faculty of science.

The secular and nonsectarian character of each of the universities as State institutions is insured by their charters. Nevertheless, without evasion of the law, each institution is able to maintain the ancient ideal of a university in rounding out its faculties with a faculty of theology or its equivalent.[1] In Ireland, as yet, no faculty of theology has been established. The Irish universities act (1908) contemplates the possibility of such a faculty in laying down the limitations that attendance upon theological teaching shall not be compulsory and that the members of the faculty of theology shall not be eligible for membership in the general board of studies or in any other faculty. A beginning of theological instruction has been made by the private endowment of the professorship of catholic theology, and by the recognition of St. Patrick's College, Maynooth. No theological degrees have been conferred by the university. This is not necessary so far as Roman Catholics are concerned as Maynooth enjoys Papal powers to confer degrees.[2]

One great secret of the promised success of the universities and colleges in Ireland is the wisdom shown in the appointments of the administrators by the original Royal Commissioners and in the arrangements for the future representation of the predominant friendly and diverse religious and political interests of their respective localities.

[1] Cf. *infra*, p. 79.

[2] For arrangements for theological instruction in Wales, cf. *infra*, p. 79.

This is abundantly illustrated. The chancellor of the university is the present Roman Catholic Archbishop of Dublin, the vice chancellor is a physician, the pro-vice chancellors, the principals of the university colleges are, one a Presbyterian layman and the other two Roman Catholic physicians. The other members of the senate are prominent ecclesiastics and members of different professions. It is noteworthy that though the Roman Catholics predominate there are representatives of different churches and parties and the laity are in the majority. In the election recently held upon the expiry (1916) of the provisional organization of the institutions by the commissioners the tradition they established is maintained.

It is significant that in the election of senators by the graduates of the whole university in 1914 seven of the eight places were secured by professors, one of whom was a Jesuit professor, two Protestant professors, and the rest Catholic laymen.

In the second election to the governing body of the University College, Dublin, by its graduates there was a total defeat of non-academic candidates. All six elected were from the college staff. A Jesuit headed the poll, followed by three laymen and two women professors. In Cork a woman professor headed the list out of four elected. In Galway out of four a woman professor was also elected. Before this only one woman professor was elected in Dublin, one in Galway, and none in Cork. These elections were not due to the voting strength of women graduates, e. g., in Dublin they are but one-sixth of the whole.

In the Queen's University, of Belfast, in accordance with the religious preferences of the population, there is a predominance of Presbyterians. It is noteworthy that a special lectureship is added in scholastic philosophy and filled by a Roman Catholic priest for the accommodation of Roman Catholic students.

In an election last year by the senate of the National University to fill a position in philosophy a layman was chosen out of three candidates despite the fact that the others were priests strongly supported by ecclesiastical influence.

In short, there is ground to believe that all the universities of Ireland through the mediation of the State and the growth of the university idea will be in fact, as they now are on paper, nonsectarian and nonpartisan like the State universities and older endowed universities of America. It does not militate against this fact that the membership of a university will be in faith and politics largely what its constituency is.[1] The obligation to the State and the uni-

[1] It has been estimated that the attendance of Roman Catholics at Trinity College has not equaled 6 per cent since 1871. In Cork, in 1912–13, there were about 20 per cent of Protestant students; in Dublin, 98 per cent Catholic, 1 per cent Protestant, and 1 per cent non-Christian (India); Galway, formerly attended by Presbyterians from Ulster, is now overwhelmingly Catholic; Queen's, Belfast, not above 4½ per cent Catholic.

versity world, to say nothing of the power of the State to intervene, put an institution consisting almost wholly of one church or party upon its mettle to observe scrupulously its charter and statutes. This has been done the more easily since a way has been found to have a theological faculty in a university, but not of it, without compromising church or state. The churches have been able to change completely their attitude toward secular universities since 1850. In that year the Roman Catholic hierarchy by a narrow majority banned the secular Queen's University, and they now bless the secular National University.

The Established Church (Episcopal), then virtually in complete control of Trinity College, Dublin, also looked askance at a State university, and the Presbyterians of Belfast were suspicious of it.[1]

Whether the National University as a federal institution with constituent colleges in different localities is permanent or an intermediate stage toward the development of universities at different centers depends upon the success of the present well-devised scheme with its checks and balances, and perhaps upon the growth of the local centers and of the idea of municipal universities. The arguments for and against a federal university were carefully considered by the Royal Commission of 1901–1903, by the proposers of the Bryce plan, and by the organizers of the National University under Mr. Birrell in 1908. All had in mind the experiments in Victoria University and the University of Wales, and all agreed in recommending the federal system. The testimony is that it has worked well during these eight years of its initial period. The confidence in its future is such that the institution asked for no guaranties for its protection in the home rule bill. The arguments against a federal university, wittily called a "sprawling university" by the present provost of Trinity College, have ceased to be urged during the last two or three years. For a dozen years Cork presented the stock arguments against a federal institution and reenforced them by efforts for an independent municipal university. When the Royal Commission visited Cork, in 1902, a plea was made for the foundation of a Cork University. The subject was taken up again in 1906 when a Royal Commission was sitting with reference to Trinity College and the University of Dublin, and while legislation on the question of Irish university education was pending in 1907–8. The old idea for an institution for the south of Ireland, an independent university of the Province of Munster, was advanced. The county council of Cork and the councils of the three Munster cities, Cork, Waterford, and Limerick, passed resolutions favoring such an institution.

[1] Cf. *supra*, p. 27; *infra*, p. 72.

A committee of representatives of different religious persuasions and of various parts of the Province of Munster presented a resolution to the commission of 1906 favoring the creation of an independent university for Munster. If it became necessary to unite the college with other colleges in a single university, they urged that "it is of the utmost importance that these colleges should have the largest amount of autonomy, and that each should, subject to the control and revision of the university, manage its own affairs, draw up its own curriculum, conduct its own examinations, and confer locally its own degrees."

They desired that the governing body, which in the Queen's College was of a purely academic character, should be reconstructed so as to include representatives of the Province in order to bring the college in touch with the different localities. The last two recommendations were embodied in the constitutions of the university colleges. The movement to found a local university was supported by the offer of a fortune, of which $250,000 might be immediately available, by a prominent citizen of Cork and his wife.[1] In 1908, at a a public meeting in Cork, resolutions were passed welcoming the prospect of a settlement of the Irish university question by Mr. Birrell's plan for a national university, but expressing disappointment that Cork was not to have a separate university. The scheme was only accepted as a "temporary settlement" upon the condition that "the local college has complete autonomy, an effective voice in the appointment of its future teachers, and the management of its own finances, and is given an adequate representation on the senate of the new university and on the body of commissioners who are to draw up statutes for that university and its constituent colleges." Though these conditions were virtually fulfilled the idea of an independent university at Cork was presented in several reports of the president down to 1913. The example of the new English universities,[2] particularly of Birmingham, has been powerful upon Cork.[3]

The stock arguments against a federal university are reiterated. It is asserted that the administration is wasteful, costing for the traveling expenses of the officers and professors over $2,500 annually.

There is a costly inroad upon the time of the presidents and the professors of the Cork and Galway colleges in attending the meetings in Dublin. Delay and cumbrous administration are involved, for example, "any modification in the courses of study must be submitted to seven different bodies before final approval." A change must be passed upon by an individual professor, by a faculty, an

[1] Cf. The Report of the President of Queen's College, Cork, 1906-7 (Cd. 3655); Cf. Reports of the President, 1902-3 to 1912-13.

[2] Cf. MacLean. U. S. Bureau of Education. Bulletin, 1917, No. 16, p. 116, *passim*.

[3] The president, Sir Bertram C. A. Windle, formerly dean of the medical faculty at Birmingham, was active in the reconstruction of that institution.

academic council, and a governing body of a college, and by a university faculty, general board of studies, and senate. Lastly, despite the care taken to give equal or proportionate representation to the three colleges, rivalry among them has not been altogether eliminated or the suspicion of the undue prominence of the one or the other. One may cite as an illustration an alleged disproportionate representation of Cork as compared with Dublin in the university senate which occurred in filling a Cork vacancy by the appointment of a gentleman living in Dublin.[1] Something of this kind is quite likely to occur, as representative citizens of the Cork or Galway district migrate to Dublin.

Since 1913 Cork has not pushed its claims to independence. It has been flourishing. It has received benefactions but by no means the great sums which would be necessary for a single university in these days. It has perhaps found the checks and balances of the National University beneficial as over against intense provincial tendencies. The mere mention of the possibility of the separation of Cork from the federal university put the Galway College on record as in opposition. Were it to be supposed that Cork and Dublin were strong enough to become independent universities certainly Galway would not be.

On the whole, there is a general feeling that the present university is doing as well as could be expected in the seven years of its operation. The standard replies are made by the friends of the university to the stock arguments against it. It is contended that the annual expenditure of the university in traveling expenses for common meetings is relatively a small sum and makes savings in coordinating the institutions. The tax of time and travel upon the officers and teaching staff is conceded, but is believed to be compensated for by the advantages of change and of meeting with their colleagues of other institutions.

It is said that the delay and cumbrousness of university administration and legislation are reduced to a minimum by the large degree of autonomy of the colleges. Now that the university is in full operation, required changes are few and important and deliberation by different bodies is desirable.

An argument which is made fundamental in Wales is that a national university is one of the highest expressions of nationalism and that its degrees are of more worth and gain a wider recognition than those of a single college.

This point is somewhat vitiated in Ireland because Queen's University of Belfast is independent, and historically speaking Trinity College, Dublin, has claims to be a national university. If the

[1] "Times" educational supplement, May 7, 1912. Cited University College, Cork, Official Gazette, July, 1912.

population and wealth of the island were to increase sufficiently, the time might come for the substitution of a State university in each of the four provinces[1] in place of a National University, but the examples of the Scottish and the northern universities in England teach that these four universities should be interrelated at least by joint boards.[2]

[1] In 1911 the population of Leinster was 1,162,044 (Dublin); Munster, 1,035,495 (Cork); Ulster, 1,581,696 (Belfast); Connaught, 610,984 (Galway).

[2] Cf. MacLean. U. S. Bureau of Education, Bulletin, 1917, No. 16, pp. 200, 201.

CHAPTER V.—THE THREE CONSTITUENT COLLEGES.

The organization of the three constituent colleges of the National University of Ireland is essentially the same and is designed to maintain the individuality and in a large measure the autonomy of each of the colleges. The general plan of organization follows that of a constituent college of the University of London, except that each college retains and supervises its funds. The scheme for a constituent college of Wales is more complex. At the head of each college is a president, in whom are vested powers beyond those of most American college presidents. He is a member and the presiding officer of the governing body, of the academic council, of the faculties, and of the committees of these bodies. He receives a salary twice that of the largest stipend of any professor, and in addition a residence, fuel, and lights. He is appointed by the university's senate, from among candidates presented by the governing body of the college. He holds office until he has attained the age of 70 years. He has the power to fill temporarily vacancies on the teaching staff, to advise and remonstrate with teachers, and if necessary with due notice of his intention to call the attention of the governing body to their conduct. He has full authority to appoint, suspend, and dismiss the servants of the college, to exercise supervision over all departments, and to discipline the students in conjunction with the academic council which frames regulations to be approved by the governing body. The governing bodies of the colleges range from 34 members in Dublin to 26 in Galway. They are thoroughly representative of all interests concerned. In each case the president is a member and the mayors and persons elected by the county councils of the district adjacent to the college. Persons also are appointed by the Crown, by the senate of the university, and professors of the college are elected by the academic council. The graduate members of the college choose members from among themselves, and other persons are coopted.[1]

[1] As an example, the governing body at Cork consists of the president of the college, three persons nominated by the Crown, four appointed by the senate, four professors of the college elected by the academic council, four graduates elected by the graduates, the mayors of Cork and of Limerick, the chairmen or others representing the county councils of Cork, of Waterford, of Kerry, of Limerick, and of Tipperary, and of four persons coopted.

The members of the governing body, other than the ex-officio members, hold office for a period of three years but are eligible for reappointment.

The academic council consists of the president and professors of the college, with such lecturers as may be coopted by the president and the professors. In addition to the power to elect representatives on the governing body, the academic council serves as a general faculty in all educational matters.

The particular faculties consist of the professors and lecturers, and subject to approval by the governing body and the academic council deal with all educational matters pertaining to each faculty. Each faculty elects a dean from amongst its members who holds office for three years and is eligible for reelection. He keeps a record of the conduct of each student and makes a report to the president.

It is the duty of a faculty to report to the academic council upon candidates for teaching posts and examinerships connected with the faculty before the candidates are reported on by the academic council to the governing body.

The governing body, in turn, submits the names of not less than three candidates to the university senate which makes the appointments. The stipends of professorships and lectureships are fixed by university statutes.

Assistants and demonstrators are appointed by the governing body of the college upon the recommendations of the academic council. The governing body determines the stipend and the term of office. In like manner it appoints tutors from among the teaching staff. It is the duty of a tutor to supervise the studies of his students. The governing body also appoints deans of residence and one or more lady superintendents called "officers of residence," to exercise supervision over the conduct outside the precincts of the college of the students committed to their care. An officer of residence is required for each licensed hostel.

There may be both matriculated and nonmatriculated students. The former must have met the entrance requirements of the university, produced a certificate of good character and have signed an engagement to observe the rules of the college. The latter need only meet the last two requirements.

The National University of Ireland and its constituent colleges are almost absolutely state supported. The original Queen's colleges at Belfast, Cork, and Galway received by the act of Parliament $500,000 for sites and buildings, and an annual grant of $35,000 to each college. Queen's University was given about $25,000 annually and its successor, the Royal University of Ireland, about $100,000 a year out of the funds of the disestablished Church of Ireland.

By the Irish universities act (1908) this $100,000 was divided equally between the National University and the Queen's University, of Belfast. By the same act the new University of Belfast received $90,000 per annum; the new University College at Dublin, $160,000; the college at Cork, $100,000; and the college at Galway, $60,000. For the purchase of lands and provision or improvement of buildings and equipment a maximum sum was set apart for the University of Belfast of $300,000; for the new university and college at Dublin, $750,000; for the college at Cork, $60,000; and at Galway, $30,000. These Parliamentary grants were given in lump sums to the governing bodies of the universities or colleges concerned to be expended at their discretion in accordance with the charter or statutes. These grants are supplemented by the fees of the students and payments made by the intermediate education board and local authorities to assist students at the university. The county councils and boroughs may also make appropriations for the institutions in any year not to exceed the amount which would be produced by a rate of one penny in the pound. Even a higher rate may be levied with the consent of the local government board.

Among the features common to the three constituent colleges each has some characteristics to be mentioned. University College, Cork, which was one of the most vigorous of the original Queen's colleges, has stressed its connection with the locality and with the traditions of the past. It chose as its site the seat of one of Ireland's ancient monasteries and saints, and incribed the legend on its coat of arms, "Where Findbarr taught let Munster learn." It has always made a specialty of its medical school having advantages for clinical instruction in the extensive hospitals of the city. In 1912 it opened a school of dentistry. In 1904–5 the college opened a new department of education for the training of secondary teachers which was the first in Ireland to be recognized by the English Board of Education. In 1912 the faculty of commerce initiated a scheme by which students can obtain practical experience in business houses during the summer holidays. The experiment has been encouraged by several of the county councils making special grants to their scholars to defray their expenses. This is the only college in the National University which provides for musical education in preparation for the degrees of bachelor and doctor of music.

It is the only college in Ireland and perhaps in any university in the three kingdoms to give a special arts degree in journalism. In response to an appeal of the county council, referring to the neglect to provide courses of instruction leading up to degrees in agricultural science, the faculty of science, in 1912, put forward a scheme combining theoretical and practical instruction. The first year of the course is spent at the college in pursuit of the scientific subjects

underlying agriculture; namely, chemistry, physics, botany, zoology, and physical geology. Practical instruction is given in horticulture in the extensive gardens of the college. The second year is spent in an agricultural college approved by the college, where practical farm work can be carried on. The University College of North Wales is cited as a preferred agricultural college. The third year is taken in or near the college at Cork, the first six months in attendance at college courses, and the summer six months with only a class in surveying at the college, the rest of the time being used upon an approved farm in the county. Cork affords a fresh illustration of the growing practice of associating a municipal school of science and technology with a university in order to avoid the expense of duplication.[1]

In 1914 after prolonged negotiations a provisional arrangement was made between the university and the University College of Cork and the Crawford Municipal Technical Institute, which is under the control of the city of Cork's technical instruction committee, by which instruction in mechanical and electrical engineering in the institute is recognized for university degrees. The institute, installed in 1912 in an elegant new building with modern laboratories and workshops, made application to the university to become a recognized college, but the university did not grant the recognition. In 1914, however, the university senate resolved "that the courses for the B. E. degree in mechanical and electrical engineering, proposed by University College, Cork, be approved and that the courses in mechanical engineering, electrical engineering, engineering, chemistry, workshop practice, design and drawing, at the Crawford Municipal Technical Institute, be accepted for these purposes."

Upon the reconstitution of Queen's College into University College private beneficence began to supplement State support through the gift of $50,000 for scholarships.

A further gift from the same source made possible the completion and equipment of a biological institute and of a hydraulic department of the engineering laboratory.

By a generous bequest from the same donor, in 1914, an example was set for an ideal arrangement for the promotion of the social and religious life of students in a State institution.

A hostel for 50 Roman Catholic students was founded on property adjoining the college. It was vested in a board of governors, consisting of laity as well as of clergy, with representation from the staff of the college and with a Catholic warden, a married man, one of the college teachers. A residence was also planned for a chaplain and a suitable chapel erected.

[1] Cf. MacLean. U. S. Bureau of Education. Bulletin, 1917, No. 16, pp. 59, 61, 188, 199, 208.

The importance of the corporate life of the students is recognized by the erection of a building for the men's club and for the women's social club.

The college has fine athletic grounds comprising 15½ acres, with a grand stand and two pavilions. The college requires the payment of a small annual fee from each student which gives admission to the social and athletic clubs.[1]

University College, Galway, is an excellent specimen of the "small college." It is Europe's most western collegiate outpost facing the Atlantic, situated in the ancient capital of Connaught, the most sparsely populated of the native Irish provinces. It has a special mission. It has inherited the traditions of the prosperity of the port in the days of the Spanish Main, and of its ancient collegiate church and school. It has been the protagonist of the federal university system as it was evidently too small to become an independent university.

When the plans were under consideration for the constitution of the National University proposals were made that the Queen's College, Galway, should be reconstituted as an agricultural and technical college. The proposition was laid aside not only because the college is not in a region favorable to agriculture and manufactures but because of the united political opposition of the five counties in the province. They have come forward loyally to support the institution by contributing $7,500 annually by laying, despite their poverty, a farthing rate. They have thus secured an increase of the original Government grant of $60,000 by $10,000.

The institution, in common with the other two Queen's colleges, has a suitable site, and an imposing Gothic quadrangular building with a tower over the principal entrance. The small grant for additional buildings in 1908 has prevented, as at Cork, the erection of a substantial structure with architectural features comparable to the original college.

In 1914, in pursuance of its policy to cover the branches of instruction offered in its sister colleges, the college added six new chairs and two lectureships.[2] Small salaries are paid, but the cost of living is supposed to be less. The feeling in Connaught is strong that the college should not be limited in its departments, and that

[1] University College, Cork, in 1914, had a teaching staff of 46 (professors, 34; lecturers, 12); 407 students; number who obtained degrees, B. A., 25 (7 women); M. A., 6; B. Sc., 2 (1 woman); M. B., M. D., 1; B. E., 8. The influence of the new English universities may be traced in the fact that Principal Grindley, of the Institute, is a graduate of Manchester and was a member of its teaching staff and also of the teaching staff of the University of Liverpool.

[2] Chairs of commerce and accountancy, of education, of geology and mineralogy, of history with special reference to Irish history, of philosophy, of ophthalmology and otology, and lectureships in mental diseases, and in operative surgery.

every educational facility should be brought to their own doors. In other quarters it is thought that the college should concentrate upon arts, science, and education, and that only premedical, prelegal, and preengineering courses should be attempted. It remains to be seen whether in time the central university will work out a differentiation of instruction in the different colleges with adaptations to their localities, restraining them to be only colleges instead of miniature universities, or if the colleges shall be developed into a sisterhood of universities.[1]

The University College, Dublin, which did not have the advantage of springing from one of the original Queen's colleges, has the compensations of succeeding to the libraries and laboratories of the former Royal University, of having the good will of the Catholic University, and of having new buildings erected for it at the seat of government and of the university. Its modern buildings will provide for the departments of the faculties of arts, law, and commerce, and for several of those of science and medicine.

The college has one of the strongest medical schools in the island enjoying the hospital facilities of Dublin.

Its law school, being at the seat of government and close to King's Inn, flourishes.

The relations between the college and the college at Maynooth, in the suburbs of Dublin, are intimate and favor combined arts and theological courses for Roman Catholic students.

The proximity of the National Museum, of the National Library, and of the Royal College of Science, and the size and attractiveness of the capital city have already made this youngest the largest of the university colleges. After prolonged negotiations between the college and the College of Science the college recognizes the third and fourth year courses of the latter for the B. Agr. Sc. degree.

The college has recognized the importance of the department of education and the development of the postgraduate higher diploma courses. In 1916 the department had 44 graduates out of 70 postgraduate students in the entire college.

The department also offers a special diploma for experienced and trained primary teachers for which about 30 candidates have entered annually.

In the courses for the higher diploma under "the practice of education" five hours each week are required in the demonstration of teaching method in three or more school subjects. In addition,

[1] University College, Galway, in 1914, had a teaching staff of 30 (professors, 25; lecturers, 5); students, about 100; number taking degrees, B. A., 8 (4 women); M. A., 4; LL. B., 2; D. Sc., 3 (1 woman); M. Sc., 1; B. Sc., [illegible]; B. E., 8; M. B., B. Ch., B. A. O., 8; higher diploma in education, 1 (woman).

the student is obliged to teach in a suitable school under the supervision of the professor of education and his assistants for at least 100 hours during the year, and also to attend the lessons given by experienced teachers in schools.

A diploma in education is open to students who have completed a two-year course in a training college recognized by the Board of National Education and have finished a year in the courses in University College prescribed for the diploma, which courses include general subjects approved by the professor of education and three hours a week in professional subjects.

Education may be presented with two other subjects for the ordinary degree of B. Sc., or with three other subjects for the degree of B. A.

An M. A. degree in educational science may be secured through a postgraduate course of three terms and the acceptance of a dissertation, or by examinations with a dissertation in prescribed subjects, at least six terms after a B. A. degree.

Annual vacation courses in education are offered.

An education society has been founded, with the professor of education as director of research, to undertake research work into the history of education in Ireland and into other educational questions affecting Ireland. The membership of the society is limited to the staff of the department of education and to graduates who have been intern students in the department and have obtained a postgraduate qualification.[1]

[1] In 1913–14 the staff of instruction of University College, Dublin, numbered 53, of whom 7 were lecturers. The number of students at the University College was 787 (181 women). Degrees obtained were as follows: M. A., 14 (3 women); M. Litt. Celt., 1; B. Sc., 7; M. Sc., 6; LL. B., 2; M B., 41; M. D., 4; B. E., 4; M. A. O., 1; B. D. S., 1; total, 174 (32 women).

CHAPTER VI.—THE QUEEN'S UNIVERSITY OF BELFAST.

Under the Irish Universities Act of 1908, the Queen's University of Belfast was established simultaneously with the National University of Ireland, but by a separate commission. It is a "single college" university like the Scotch [1] and new English universities,[2] with the general plan and terminology for its organization taken from the University of London.[3] Its predecessor was the strongest of the three Queen's colleges whose continuity it preserved even in its title. It was deemed expedient to set it up as an independent institution in view of its location in the largest and richest city [4] in Ireland with a constituency of practically one race and one religious persuasion.

The public spirit in Belfast has been more like that of the Scotch and English in anticipating the State in founding schools and colleges. The atmosphere in which Queen's College was planted and the university exists may be inferred from the history of the Royal Belfast Academical Institution, in some sense a precursor of the college. The Academical Institution was established by the generosity of the citizens of Belfast and the inhabitants of the district in 1810 as an undenominational, classical, and mercantile school and college. It was largely made use of for the education of the Presbyterian clergy. After 1828 it enjoyed an annual subsidy from Parliament until it was commuted at the disestablishment in 1869. Since then it has been the recipient of more benefactions than ever before. Since 1897 its board of governors have been brave enough to drop the characteristics of its college period and to maintain it as a strictly nonsectarian public high school for boys between 9 and 19 years of age. Without a division of the school into classical and modern sides, opportunities for specialization are given in the higher classes. Pupils are prepared for the scholarship and matriculation examinations of the universities.

The variations in the statutes from those for the National University with reference to the authorities of the university are slight, and due to the fact that it is not a federal institution.

[1] Cf. MacLean. U. S. Bureau of Education. Bulletin, 1917, No. 16, p. 55.
[2] Ibid., p. 111.
[3] Ibid., p. 70, passim.
[4] Belfast population in 1911, 396,000. Rateable value, £1,557,809.

The president of the university is by virtue of his office the vice chancellor; instead of his term of office being limited to five years subject to reelection his tenure extends until he is 70 years of age, and he may be requested to remain in office for an additional period not exceeding five years.[1] Instead of officers and persons elected from the constituent colleges as in the National University, the Belfast senate has representatives of the Students Representative Council, of the Executive Committee of the "Better Equipment Fund," of the Belfast Technical Instruction Committee of the Corporation of Belfast, of the Chamber of Commerce, and of the Royal Victoria Hospital.

The Belfast senate appoints professors or lecturers upon the advice of a board of curators similar to a like board in the University of Edinburgh. The board consists of the vice chancellor, four nonprofessorial members of the senate, one of whom retires annually, and four professors elected by the academic council, two of whom hold chairs in subjects cognate to that in which the professor or lecturer is to be appointed.

The statutes provide for the establishment of advisory committees representing the interests of commerce, of technology, and of the extension of university teaching throughout the Province of Ulster.

The committee on technology has the important function of reporting on "any matter affecting the mutual interests of the university and the Municipal Technical Institute,[2] and in particular any proposal involving the establishment within the university of new departments or the addition to the lists of subjects of the faculty of science of new subjects relating to applied science or technology."

Under its statutory powers of recognizing colleges or teachers of other institutions the university has cordially put into operation the policy of the coordination of scientific and technological instruction in the Island.

The senate of the university and the corporation of Belfast, in 1911, entered into an agreement for at least seven years for cooperation. The Municipal Technical Institute is to provide an adequate teaching staff, laboratories, and equipment for giving instruction of a university standard to day classes in subjects approved by the university. The university agrees not to offer courses of instruction in these subjects. The university receives the usual university and examination fees and pays the expenses of the external examiners. The institute collects the fees and enrolls the students.

[1] Cf. *infra*, p. 56.

[2] Under the Agriculture and Technical Instruction (Ireland) Act of 1899 the Corporation of Belfast amalgamated different schools in the Municipal Technical Institute. Between 1902 and 1911 the corporation erected and equipped a magnificent building for the school.

The professors and lecturers of the institute who are "recognized teachers" are eligible to be members of the general board of studies of the university, to be internal examiners and to be members of the science faculty. The principal of the institute is ex officio a member of the faculty of science.

The students at the institute who wish to proceed to a degree must matriculate in the university before entering on their course of study. The degrees open to them are those of B. Sc., M. Sc., and D. Sc.

The teachers in the institute recognized in 1914–15 as extramural professors and lecturers are in the departments of mechanical engineering, electrical engineering, textile industries, chemical technology, and design.

The arrangement between the university and the Municipal Technical Institute not only prevents duplication of work by the institutions but also affords a first-class opportunity for applied science in the university. Without diverting from the primary practical aims of the institute for the majority of its pupils the plan points the way for higher education to the gifted among them.

In like manner the university has an arrangement with the Royal College of Science, Dublin. The university recognizes the professors of agriculture, of agricultural botany, of agricultural chemistry, of geology, of botany, and of zoology in that college.

The degree of bachelor of science in agriculture is conferred by the university on students taking the first two years of a course of study at the university and a second two years at the College of Science. In addition to pursuing the courses of the first two years for the ordinary B. Sc. degree in the university, the candidate is required to attend a class in some subject of the faculty of arts, but he is not required to pass the class examination.

It may be significant of the character of the constituency of Queen's College that it is the only Irish university to conduct tutorial classes under the auspices of the Worker's Education Association.[1] University extension, in the form of lecture courses, is undertaken, but these are almost wholly delivered in the buildings of the university.

A notable event in the university's history was the foundation, with the aid of Down and Armagh County Councils, of a chair of education, and the appointment of a professor to fill it with whom have been associated the professor of logic and metaphysics, the lecturers on scholastic philosophy and on hygiene.

Courses in preparation for diplomas in education are offered similar in scope to those in the National University. The senate com-

[1] Cf. MacLean. U. S. Bureau of Education. Bulletin, 1917, No. 16, p. 253, *passim*.

mittee set forth the ends in view in the establishment of the chair. The first purpose is to provide "facilities for professional study to teachers in secondary and technical schools and to graduates in arts and science who are about to become teachers"; second, to provide courses of lectures for teachers in elementary schools; third, the recognition of education as a university subject in the faculty of arts; and to open the way for the formation of a university training center for elementary teachers. An advisory education committee has been appointed composed of members of the senate and representatives of the contributing county councils, of the headmasters', of the assistant headmasters', and of the assistant mistresses' associations. This committee is in harmony with the system of advisory committees by which the university seeks to keep in close touch with those outside it who are interested in the courses of instruction concerned.

The youngest faculty in the university is that of commerce. It is expected to make a special appeal in Belfast, the commercial metropolis of Ireland. In 1915 the faculty secured a distinctive addition to the title of its degrees which at first were in "Science." The full title is now Bachelor of Commercial Science (B. Com. Sc.); Master of Commercial Science (M. Com. Sc.).

Queen's is peculiar among the Irish universities in having a students' representative council, after the pattern of those in the Scotch universities.[1] The president of the council, if a graduate of the university, is a member of the senate. The council is elected annually and is composed of members from each year's class in the faculties of arts, science, medicine, and law. The council looks after all matters which may affect the students. It has authority over all clubs, societies, and affiliated societies, and each club has a representative on the council.

Belfast has been the first among the new institutions in Ireland to adopt after long deliberation the pension scheme for pensionable persons appointed after the passing of the Irish universities act, 1908. The act continued the allowances of "existing officers" in the Royal University and Queen's colleges, received under the superannuation acts, 1834–1892, if they accepted equivalent offices in the new institution, and also empowered the institutions to confer pensions. The scheme adopted is a noncontributory one and the management and investment of the pension fund are conducted by the university instead of by an arrangement with an insurance company. In these two points the scheme contravenes the strong recommendation of the Belfast University Commissioners of 1911 and the contempo-

[1] Cf. MacLean. U. S. Bureau of Education, Bulletin, 1917, No. 16, p. 246, *passim*.

rary plan of the Advisory Committee for Universities in England and Wales and now in operation there.[1] The scheme creates a superannuation fund administered by the finance committee of the university. The university sets aside annually a sum calculated at the rate of 10 per cent of the normal salary of each president, full-time professor, and other pensionable officer.[2]

An original point in the scheme is "the accumulated fund in relation to the officer" which is the sum available for a pension or allowance, viz, the total amount of the yearly contributions made on the 10 per cent basis of his normal salary together with compound interest at the rate of 3 per cent per annum until his retirement or death. Any officer certified as medically unfit for service receives a retiring allowance.

Any officer may retire at the age of 60 irrespective of the state of his health and receive an allowance, but the age[3] for a president is 65. No person retiring before he is 60 years of age is to receive an allowance except upon satisfying the senate of his inability. In the event of the death of an officer while in office the senate may grant a gratuity or charitable allowance to his widow and children, if any, not exceeding the equivalent of the "accumulated fund in relation to the officer." The same provision applies to near relatives immediately dependent upon the officer. The senate is not permitted to make an allowance where there are only legal personal representatives of the deceased.

The senate after considering any representation the officer may make has absolute discretion to pay the benefit in whole or in part when due, or to apply it for an annuity, or to pay it in such form as may be deemed best to meet the circumstances of the case.

Under the Irish universities act of 1908 Belfast received $300,000 for buildings and equipment which sum has been supplemented from the "fund for the better equipment of the university," established some 15 years ago by the friends of the institution. The result is the addition of a series of substantial buildings harmonizing with the quadrangle inherited from Queen's College.[4] The new buildings are a physics block, new medical laboratories, a library, and a drill hall. In 1913 the university received $175,000 by private benefaction for a hostel for women students which has just been opened.

[1] Cf. MacLean. U. S. Bureau of Education. Bulletin, 1917, No. 16, p. 187.

[2] Normal salary of president is not to be reckoned as greater than $6,000, of professor than $3,000, of other pensionable offices than $2,000. No pension or superannuation allowance shall exceed for a president $5,000, a professor $2,000, other pensionable officer $750.

[3] Retirement is compulsory for a president at 70, for a professor at 65, unless the senate request them to remain in office for not exceeding five years.

[4] The architect of the quadrangle survived to win at the age of 86 the award in the competitive plans for the new buildings.

The attendance at the university has ranged since 1909–10 around 600.[1]

The university impresses one as belonging to the sisterhood of new English universities in its intimate relation to its locality, its wide range of instruction, and its democratic spirit.

[1] In 1914–15 the number of students was 545; total number of staff, 68, of whom 25 were professors. Degrees conferred: B. Sc., 2; LL. D., 3; M. D., 7; M. Ch., 2; M. A., 15 (6 women); M. Sc., 5; B. A., 38 (16 women); B. Sc., 12 (10 women); B. Sc. in Engin., 7; LL. B., 6; M. B., B. Ch., B. A. O., 47; diploma in Pub. Health, 8.

CHAPTER VII.—THE DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION.

The Department of Agriculture and Technical Instruction for Ireland is the result of a movement initiated in 1895 by Mr. Horace Plunkett, then a member of Parliament. He published a letter inviting members from each political party in Ireland to form a committee for the promotion of noncontentious matters affecting the social and material interests of the country. He was made chairman of a recess committee which was aided by an Ulster consultative committee. The report of the recess committee,[1] favoring the establishment of a department of agriculture and industries for Ireland, was presented in 1896 to Mr. Gerald Balfour, then chief secretary for Ireland. He made it the basis for the legislation which he added in 1899 to his other important measure, the local government act of 1898.

The report embodied a review of the economic condition of Ireland, its available resources, and the studies of special commissioners sent to continental countries to inquire into the development of their industrial resources through State-aid and cooperative agencies.

The report marked a chapter in the story of the agricultural cooperative movement of the United Kingdom, which originated in Ireland about 1889. Its aim was to stay the "increasing subordination of agriculture to commerce, which was then a characteristic defect of rural economy in the English-speaking portion of the globe in contrast with the policy of the continental governments."[2] On the Continent, where the fear of invasion was believed to necessitate a military régime, as a measure of safety for the nation, the endeavor was made to keep agriculture on a parity with commerce and industry. By 1889 the end of the old conflict in Ireland between landlords and tenant farmers was in sight as a result of the Gladstonian legislation of 1881, giving the tenants permanence of tenure at a rent fixed by a State tribunal, and the right of selling their interest to the highest bidder. But by this time the competition of the world market reduced the price of the farmers' crops. The farmers, join-

[1] Report of the Recess Committee on the Establishment of a Department of Agriculture and Industries for Ireland. A new edition. Dublin, Browne & Nolan, 1906.

[2] Cf. Plunkett, Sir Horace. "A Suggested Solution of the Rural Problem." Supplement to the Irish Homestead, July 19, 1913.

ing with the landlords who were suffering from reduced rents, called for new land legislation. The State met the demand by the use of its credit, possibly to the amount of $1,000,000,000, to make it possible for the tenant to become the sole proprietor by the purchase of the landlord's interest.

This was an opportune moment for Sir Horace Plunkett and others to teach the farmers the lesson learned from their continental competitors of cooperative production and marketing with judicious State aid. "The political influence developed by the organized farmers enabled them to obtain from Parliament the Department of Agriculture and Technical Instruction."[1] For the first seven years of its operation the department had as its working head Sir Horace Plunkett, a connecting link with the Irish Agricultural Organization Society, of which he is still the leader. The work of this society and its influence even in America are well known.[2]

We only make reference to it here because it gives a background for an understanding of the development of Irish higher education and is in some sort a form of university and school extension under voluntary and local auspices. It contains valuable hints in its methods and in its spirit for American university and agricultural college extension. Its principle embodied in its motto, "better farming, better business, better living," has been well applied as regards the first phrase in American agricultural college extension work, but needs to be taken up more vigorously as regards the last two phrases. The society's order of procedure in putting "better business" with genuine cooperative features first has not been as yet sufficiently remarked by the American college.

The limitation of our report to higher education must curtail our references to the department of agriculture and technical instruction. It is a branch of Government covering, like the Department of Agriculture in Washington, a wide field, but, unlike that department, administered in part through local Government bodies, and having direct control of educational institutions. In its organization it coordinated various separate branches of Government, including several educational institutions.[3] Local conditions at the time may have

[1] Plunkett, *supra*, p. 17.

[2] Organized, 1894; parent of about 1,000 agricultural cooperative societies, with over 100,000 members. In 1914 annual business transactions amounted to $10,500,000; supported by voluntary subscriptions from the beginning of $600,000, annual fees of branch societies and governmental grants. Bulletin of the Cooperative Reference Library, July, 1914. Plunkett House, Dublin. Cf. American Commission on Agricultural Cooperation and Rural Credit in Europe, 1913. Senate Doc., 214.

[3] The act transferred to the department the powers and duties of the existing veterinary department; of the registrar general and land commission in relation to agricultural statistics, etc.; of the board of education, South Kensington, in relation to the administration of the science and art grant, the technical instruction grant, and the science and art institutions in Ireland; of the Board of National Education in connection with the Glasnevin and Munster institutions; and of the Inspectors of Irish Fisheries.

justified their inclusion. The desirability of following this example in separating the administration of educational institutions from boards of education and putting them under boards of agriculture, as was later done in England, and has been advocated in other parts of the world, may still be an open question. This was shown by the inquiries of the Dublin Commission (Irish universities act, 1908) as to the coordination of the Royal College of Science with the National University, as well as by the report of the Royal Commission on University Education in London (1913) with reference to coordinating the Imperial College of Science and Technology with the other institutions in the University of London.[1]

In accordance with a wise British habit, to forefend against the evils of bureaucracy, to keep an institution in touch with the people, and to make business subserve educational ideals, the department was bound up with several advisory and administrative bodies. Among these is the Council of Agriculture, which consists of 104 members, representative of each county council, and of each of the four provinces, apportioned with due regard to the agricultural and industrial organizations in the province.

The department must administer the portion of its endowment fund, intended for the purposes of agriculture, with the concurrence of an agricultural board. The agricultural board consists of 12 persons, eight appointed by the provincial committees of the council of agriculture, and four appointed by the department.

The Board of Technical Instruction, to advise the department with reference to technical instruction, consists of 21 persons representing the councils of county boroughs, the Provincial Committees, the Commissioners of National Education, the Intermediate Education Board, and four persons appointed by the department. The last of the bodies surrounding by law the department is the Consultative Committee of Education "to coordinate educational administration." The committee consists of the vice president of the department and one person appointed by each of the following bodies: The Commissioners of National Education, The Intermediate Education Board, The Agricultural Board, and The Board of Technical Instruction. This committee has done much to harmonize science teaching and technical instruction in primary, secondary, and higher education.

The Royal College of Science and the Albert Agricultural College, Glasnevin, are the two institutions committed to the department which come especially within the purview of our studies.[2]

[1] Cf. MacLean. U. S. Bureau of Education. Bulletin, 1917, No. 16, pp. 78–79, 81, 90–91.

[2] The other institutions, maintained by the department from its Parliamentary vote, are the Museum of Science and Art, Dublin, the Metropolitan School of Art, the National Library of Ireland, and the Royal Botanic Gardens.

The history of the Royal College of Science has been similar to that of the Imperial College of Science and Technology, London, by which it has been influenced, and like the latter it has been repeatedly reconstituted and had several names. It is descended from a provision made by the Irish Parliament through the Royal Dublin Society for the encouragement of agriculture and industries and arts and education connected therewith. In 1845, it was known as the Museum of Irish Industry under the Office of Woods and Forests. In 1847 its scope was enlarged under the name of the Museum of Irish Industry and Government School of Science applied to Learning and the Arts. In 1853 it was put under the control of the department of science and art, which had then just been created as a branch of the board of trade. In 1867, in accordance with the recommendations of a Commission of the Council on Education and a committee of the House of Commons it was established as the Royal College of Science for Ireland and absorbed the existing Museum and School of Science. The college remained under the control of the Science and Art Department in England until its transfer in 1900 to the Irish Department of Agriculture and Technical Instruction.

The department has made "the college an institution for supplying an advanced course of instruction in science as applied to agriculture and the industrial arts; for training teachers for technical schools, and for secondary and intermediate schools in which science is taught; and for carrying out scientific research." All appointments in the college are made by the department. The professors and lecturers hold permanent and pensionable appointments.[1] The professors and lecturers constitute the college council which is presided over by one of the professors, who is called the dean of faculty. The functions of the council are to advise the department on educational matters. The staff is divided into the faculties of agriculture, of applied chemistry, and of engineering. Students who pass the entrance examination and take the regular courses are known as associates. Students not less than 16 years of age who are not taking a complete course of study and who are not required to pass an entrance examination are known as nonassociate students.

The college, not having the power to confer degrees, offers a diploma of associateship (A. R. C. Sc. I.) to associates who have completed the four years curriculum or one of the special groups for science teachers. An A. R. C. Sc. I., who studies for another

[1] Professors' salaries range from $3,000 to $3,500; lecturers, from $1,750 to $2,250. The teaching staff (1914) numbered 30; professors, 10; lecturers, 9; demonstrators and assistants, 11.

year in the college and submits satisfactory thesis, may be awarded the diploma of fellowship (F. R. C. Sc. I.).

A number of scholarships and "teacherships-in-training" are offered for competition.

The scholarships are of the value of $250 per annum and in addition free instruction and railway fare for one journey each year.[1]

Scholarships in agriculture, horticulture, forestry, and creamery management are offered for students specializing in one of these subjects. These scholarships include free instruction and either a maintenance allowance of $5 per week while in attendance at the college or free board and residence at one of the departments' institutions.

Research studentships are awarded to specially qualified persons. These include free instruction but no maintenance allowance. A teachership-in-training entitles the holder to free instruction, a maintenance allowance of $5 per week for the academic year, and a railway fare. The candidates are required to enter into an undertaking that they will pursue the full associate course with a view to becoming teachers of science in Ireland, and will refund to the department the sums paid them if they fail to carry out their intentions.

The entrance examination in five subjects is similar to that of the universities, except that in the case of students entering for the faculty of agriculture the subject of experimental science is replaced by agriculture, and the candidate must have had "substantial experience of practical work in connection with farming, gardening, the management of woodlands, or of dairies and creameries." The examination in agriculture is limited to one of the four topics: Agriculture, horticulture, forestry, dairying and creamery management.

In addition to passing the entrance examination in literary and scientific subjects, the entrant must attain "a high standard in an examination on practical farming, since he is required to have had considerable experience in all ordinary farm operations." The young farmer's preparation may begin in one of the winter classes conducted in each county by one of the department's instructors. If the pupil can be spared from his farm work during the entire year he can proceed to one of the department's agricultural stations and finish his preparation at the Albert Agricultural College, Glasnevin.

The student in the Royal College desiring a degree may avail himself of an arrangement, made with the Queen's University of

[1] Fees for all associate students: First year, $75; each of the three succeeding years, $100.

Belfast,[1] or the National University of Ireland,[2] by which taking the first or the first and second years of the college courses in the university he may enter the college as a second or third year student, the work done in the college being counted toward that required for its degree by the university.

In 1903 an act of Parliament appropriated $1,125,000 for additional land and the erection and equipment of new buildings for the Royal College of Science and other public offices. The site is adjacent to the National Museum, which in turn is adjacent to the National Library. This aggregation of fine stone structures on a plot not far from the new buildings of the National University and University College and the venerable walls and "squares" of Trinity College impresses the visitor with the expenditure for higher education in Dublin, and that it must remain the educational as well as the political capital.

The Albert Agricultural College, in a suburb of Dublin (Glasnevin), finds its germ in one of the two agricultural schools established under local management in 1837. The model farm and garden of 17 acres have been extended to cover an area of about 180 acres. Under the commissioners of national education the school expanded into the Albert National Agricultural Training Institute between 1851 and its transfer to the Department of Agriculture in 1900. In this period it served for higher and intermediate agricultural teaching, for training of national school teachers, and also for experiments and practical dairy work. The department converted the institution into a technical college for the training of agriculturists and horticulturists. The agricultural course occupies in the department scheme a position intermediate between the instruction given at the agricultural stations and that in the Royal College of Science. The horticultural course is intended for selected pupils who are seeking to qualify for the post of instructor in horticulture. Incidentally the college serves as a hall of residence for a number of the agricultural scholars at the Royal College of Science. The candidate for admission must not be less than 17 nor more than 30 years of age, and must pass an entrance examination in English, arithmetic, the elements of mensuration and algebra to simple equations, and agriculture. The examination in agriculture is to test knowledge gained by practical experience of farm work and not that gathered from a textbook. The college can accommodate only about 60 students.

The policy of the Department of Agriculture and Technical Instruction is the most suggestive part of its activities. The department, shaping its policy at the beginning after a comparative study of continental systems, has had a free hand to carry out its policy

[1] Cf. *supra*, p. 64. [2] Cf. *infra*, p. 64.

in a compact country little hampered by educational traditions. It believes that experience has justified its determination made at the start to center higher agricultural and technical education in the Royal College of Science with its auxiliary in the Albert Agricultural College.[1] The training of teachers and instructors has been confined to these institutions.

The department has steadily resisted the widespread notion that "the salvation of backward farming lies in the teaching of agriculture in the primary schools and in the multiplication of agricultural colleges and model farms." It found objections against residential colleges in towns where young men get ideas and form habits that make farm life and work distasteful. Experience has taught that the class of youth attending the residential agricultural college is nonagricultural. The low fee and the advantages offered at the residential school attract children of the professional, mercantile, and nonagricultural classes. The cost of equipping modern collegiate centers favored the one strong college for training experts and teachers and using other means for the education of those who are to be bona fide farmers. These means included: The appointment of one or more itinerant instructors in each county, who not only give lectures but carry out field demonstrations and experiments; the formation of winter agricultural classes at outlying centers where pupils who can not be spared from their fathers' farms have opportunity to attend; the provision of agricultural stations, not in the high American sense, but as centers where young men intending to become farmers may undergo an apprenticeship in farm practice, making use of the unpretentious permanent establishment for practical experiments; and the erection of farmers' institutes, i. e., buildings at a railway center equipped with classrooms, laboratories, and offices. The classrooms are for short technical courses for young farmers.

The department's system of agricultural education extends neither to the elementary school nor to the university. It rests upon the practice followed in Scotland and Denmark. The school is supposed to train the man and the farm the farmer. The example of the successful farmer is relied upon to advance agriculture more than the teaching of the schoolmaster.

The Royal and Albert Colleges are reserved for training in the technology of agriculture and are in some sense the apex of the lower agricultural education. On the other hand, they recognize as beyond their higher work a highest education in the universities with which they seek to be coordinated.

[1] Memorandum on Agricultural Education, 1909. Department of Agriculture and Technical Instruction for Ireland. Cf. Campbell, J. R., Agricultural Education with Special Reference to Ireland, 1908; Fletcher, George, A Decade of Technical Instruction in Ireland, 1911; Gill, T. P., Character and Educational Efficiency in Ireland, 1908; Education and Citizenship, 1913; North and South in National Work, 1914.

Agriculture as they teach it is "largely concerned with the details of an industry, belongs to the domain of technology and not to pure science or to the humanities. It is important that agriculture should also be treated as a branch of the wide subject of national economics. All public men need a knowledge of its history, potentialities, and relation to our social and economic system. Technical agriculture should form no part of a university course, but agriculture in its humane aspect should be taught in every university."

The Department of Agriculture and Technical Instruction, hewing to these lines, seeks through local organizations and schools to teach agriculture and mechanic arts as trades full of professional spirit, and only to coordinate their institutions as colleges with the universities which have the broader function of shaping the general higher education.

89725°—17——5

PART II. WALES.

CHAPTER VIII. MOVEMENTS PREPARATORY FOR THE UNIVERSITY OF WALES.[1]

For years Wales has afforded "a happy hunting ground for educational experiments." Wales was the latest part of the United Kingdom to enter the field of modern education in which, as if by magic, it soon took the lead. The founding of the University of Wales, chartered in 1893, was the crowning of a movement whose distinct progress can be traced back for some thirty years from that date and its more remote origin to the religious revival of the eighteenth century. Entirely without any medieval or reformation university foundations, which have exerted an influence in England, Scotland, and Ireland, Wales has been free to build on modern lines.

Oxford mellowed the modernity of the University of Wales through the touch of Jesus College, founded in 1571 as a Welsh college, and particularly by the activities of its graduates like those of its late principal, Sir John Rhŷs, in establishing and counseling the new university.

The glamor of a Celtic antiquity is shed, as in Ireland, over the university. The tradition survives that "before the coming of Christianity, before the Roman invasion of England, the Celts of Ireland and Wales had already attained a high level of civilization." This belief intensifying nationalism and enriching the culture of the people has very happily given a prominence to the Celtic language and literature as an option among the diciplines of the University of Wales. But these studies have not suffered by being made compulsory as in Ireland,[2] where, through the zeal of the Gaelic League which sometimes resorted to political influence, the colleges yielded their judgment that the studies should be elective only.

The singularity of Wales in having no university had long been felt. At the beginning of the fifteenth century Owen Glendower asked the schismatic pope to establish two universities, one in north and one in south Wales. It is reported that Henry VII granted a charter to the Abbot of Neath Valley "to set up there a university the like of Oxford for the benefit of the Welsh."

[1] Cf. Davies, W. Cadwallader, *and* Jones, W. Lewis. The University of Wales and Its Constituent Colleges. (College Histories.) London, F. E. Robinson & Co., 1905.

[2] Cf. *supra*, pp. 33, 35.

In the period of the Commonwealth Richard Baxter endeavored to have a college or a university established in Wales to educate ministers of religion, and corresponded with Oliver Cromwell on the subject.

These early suggestions of a university, bespeaking a need and an aspiration, have no direct connection with the modern national movement which culminated in the foundation of the University of Wales. No university was ever planned to be more truly national, modern, and a people's university. The church, earlier Roman Catholic and later Anglican, had kept learning alive in certain centers. But the Methodist revival at the end of the eighteenth century, followed by the multiplication of Sunday schools and the circulation of the Bible in Welsh, gave a new development to national life and imbued the humblest homes with a "passion for education" similar to that which has possessed Americans.

Simultaneously with the religious revival there was a revival of the study of older Welsh literature stimulated by a group of bards, and the expression of a desire for a national college or university. Literary societies were formed far and near. In 1819 a congress in Carmarthen resuscitated the ancient national festival of the Eisteddfod. Miniature Eisteddfodau spread through the country uniting in a common Welsh culture that of the bards and of the Bible, especially as taught in the Sunday schools and chapels. This union justifies the use of the term spiritual in Matthew Arnold's reference to an Eisteddfod as "a kind of Olympic meeting: and that the common people should care for such a thing at all shows something Greek in them, something spiritual, something humane, something (I am afraid one must add) which in the English common people is not to be found."

The spread of folk culture by the revived spirit of bardism and of the Bible prepared the way for the demand for higher schools. The first fruits were theological colleges, which were poverty stricken. They were erected by the different denominations. Vying with the nonconformists the State Church secured the incorporation in 1828 of St. David's College, Lampeter, which ultimately obtained the power to give the degree of B. D., in 1852, and of B. A., in 1865. Lampeter, through the influence of the church and at a time when university reform was abroad in Oxford and Cambridge, overcame the unbroken precedent that only a university could grant degrees and became the pathfinder for a degree-granting institution in Wales.[1]

The theological schools made more apparent than ever the lack of lower as well as of higher education.

[1] Cf. MacLean. U. S. Bureau of Education. Bulletin, 1917, No. 16, pp. 18–19.

The influence of the rising tide of national education following the era of political reforms and extension of the franchise dating from the Reform Bill of 1832 coalesced with the local Welsh movements. Lord John Russell had moved in 1832 that a grant should be made for elementary education in England and Wales.

In 1845–1849 he added to the elementary grants in Ireland the provisions for the establishment of the Queen's colleges and Queen's University.[1]

The question was raised of founding also Queen's colleges in Wales, and a commission was appointed in 1846 to inquire into the state of education in the principality. The inclusion of Wales in England as one political entity as contrasted with Ireland and Scotland has often retarded action in Wales. Fortunately perhaps for Wales, Queen's colleges were not imposed by a well-meaning government upon the country as in Ireland. It was left for the people to found and appreciate their own institutions.

The definite movement resulting in the foundation of the University of Wales may be dated from the time of an address to the public issued by a "provisional committee" from "The University for Wales Office" in 1864. The provisional committee consisted of friends of education in Wales, and wealthy and representative Welshmen in England who organized themselves into a committee at a meeting in London. The Rev. Dr. Nicholas, of the Presbyterian Theological College, Carmarthen, who had published in 1862 a series of letters entitled "Middle and High Schools and a University for Wales," was appointed secretary. An appeal was made to the people of Wales and friends of Wales in England to form a national fund and to apply to Parliament to supplement it.

The Prime Minister, Mr. Disraeli, in 1868, and Mr. Gladstone, in 1871, declined to favor Government aid for the enterprise though in this same period increased grants were given to reconstitute the Queen's University as the Royal University of Ireland.

The results were concentration upon the establishment of university colleges while the scheme for a university waited, and the arousing of the people to work for themselves.

The site for a proposed "central and sole college for Wales" was determined by the opportunity for a bargain in the purchase for $50,000 of an unfinished hotel at Aberystwyth, costing $400,000. Voluntary contributions for the establishment and support of the college flowed in from "at least 73,000 persons of the middle and industrial classes" in Wales. Appeals were organized to reach the entire population. Congregational collections were taken up in the different denominations. Members of Parliament for Welsh con-

[1] Cf. *supra*, pp. 25, 28.

stituencies were interested as well as municipal corporations, local boards of health, and school boards. Donations were received from the National Eisteddfod. The focussing of popular attention upon higher education and the establishment of the University College, at Aberystwyth, inaugurated the epoch of the three Welsh university colleges.

"The University College of Wales," Aberystwyth, opened in 1872, became the pathfinder not only for the two other university colleges, but also for a number of movements connected with higher education, and ultimately for the University of Wales. The zeal of localities inspired by their territorial interests in becoming the site of public institutions, familiar the world over, soon played a part in an agitation for the establishment of other university colleges. Aberystwyth, though a salubrious and beautiful seaside resort, is a small place of about 10,000 inhabitants on the western coast, just within the borders of North Wales, and somewhat inaccessible. It has had to contend with the disadvantages of its location. It is not central for the whole of Wales nor for either North or South Wales, the natural divisions of the Principality. It has, however, the advantage of being at the center of the Welsh speaking population and of having had the start of 10 years over the other colleges. As a pioneer initiating broad national policies it secured respect and an argument for its permanence. It gave the practical start to the movement which has resulted in the erection of the magnificent National Library of Wales, at Aberystwyth.[1] Collections of rare Welsh manuscripts and books were gathered and instruction in Welsh and cognate languages offered.

The college's idea of a national science museum, yielding valuable collections to the college, has come to full fruition in the National Museum of Wales, housed in one of the most imposing buildings just approaching completion among the great group of public buildings in Cathays Park, Cardiff.[2]

[1] The National Library of Wales was founded by Royal Charter in 1907, and is maintained by annual grants from the Government. The property of the library is vested in a large court of governors, representative of the Government, of the university, and university colleges of Wales, of the Central Welsh Board for Intermediate Education, of teachers, of county councils, of other public bodies, and of certain donors. The administration is in the hands of a council. In the main, the library is for research in Celtic literature and history. In modern books it circulates loan collections, e. g., for the Workers' Educational Association. In 1911, foundation stones of permanent buildings were laid by King George V. and Queen Mary. A magnificent quadrangle of buildings, to cost a million and a half dollars, is planned on a hillside overlooking Aberystwyth. Two blocks and a transverse for the department of manuscripts have been completed. Under the Copyright Act, 1911, the library obtained the privilege of claiming publications, with a few exceptions, printed thereafter in the United Kingdom. The library insures that Aberystwyth and its University College will become one of the world's greatest centers for research in Celtic literature and history.

[2] The museum is in the hands of a representative national corporation similar to that of the library. It will afford special facilities for scientific research in the University College, Cardiff.

The college forced the consideration of the relation between the college and grammar schools.

It endeavored to align the theological colleges with itself by proposing the acceptance by them of its "certificate of associate" as a preliminary for admission to the study of divinity.

A scheme was proposed to establish county scholarships, open to pupils of elementary schools, first of all at grammar schools, and then upon competitive examinations at the college.

A beginning of university education in agriculture in the principality was made by the appointment of an agricultural expert to deliver lectures at the college and to teachers, and by the translation into Welsh and circulation among the farmers of an agricultural pamphlet.

The poverty of the college, its precarious support dependent upon voluntary contributions, and its desire to fulfill national ideals caused it repeatedly to bombard the Treasury for aid. This combined with the first fruits of the Elementary Education Act of 1870 led to the appointment in 1880 of a departmental committee to inquire into the condition of intermediate and higher education in Wales.[1] It is to be noted that the president of the governing board of the college, Lord Aberdare, was the chairman of the committee. The outcome of the recommendations of the committe was twofold. In 1882 the college received the first payment of an annual parliamentary grant of $20,000, strengthening the precedents of an annual maintenance fund which has since meant so much to the new English universities and, indeed, to all the universities in the United Kingdom. The second result is the existence of three university colleges. Constrained by the political necessity of Welsh-wide support to secure the grant, the committee recommended that there should be two colleges, one in Cardiff or Swansea, for South Wales, and another for North Wales, at Aberystwyth, or at some place to be designated.

The contention of various towns to secure the location of the colleges in them ended in the decision of a government board of arbitrators to fix the College of South Wales at Cardiff and of North Wales at Bangor. The annual grant to Aberystwyth was diverted to Bangor, but a little later the full grant of $20,000 a year was given to Aberystwyth as well as to the other two colleges. Thus at a critical moment in its history the college was preserved from removal or extinction and a new lease of life given. A fire in 1885 destroying a large part of the buildings, proved, as is often the case in public institutions, a blessing. Additional funds were raised, and later a Government grant was made for building purposes. By 1888 Aberystwyth was strong enough to claim recognition by a charter simi-

[1] Cf. *infra*, p. 71.

lar to those of the other two colleges and a permanent grant. The case was established "that in the district lying between Bangor and Cardiff there was ample room for another college."

To appreciate the next stage in the movement toward a university and the parallel progress of the three colleges we must turn to the establishment of the other two colleges.

The immediate occasion of the University College of South Wales and Monmouthshire was the report in 1881 of the Government's Departmental Committee of Inquiry into the nature and extent of existing intermediate and higher education in Wales,[1] and incidentally the success of the University College at Aberystwyth. The recommendation of the committee that there should be established a university college for South Wales in the County of Glamorgan as well as a college in North Wales caused the towns of Cardiff and Swansea to vie with each other to secure it. The Government proposed an annual grant of $20,000 for maintenance upon the condition that an equal amount should be raised locally.[2] Cardiff was able by private munificence to outbid Swansea and obtained the college. Cardiff at that time had a little over 80,000 inhabitants.[3] It is a modern industrial city of rapid growth and of rather heterogeneous population. Situated on the border of Wales, within Glamorganshire, it is only three miles from the boundary of Monmouthshire. The neighboring collieries and commercial opportunities have attracted many non-Welsh people, some of whom after making their fortunes there return to England. It has brought the college the advantage of the largest, wealthiest, and most cosmopolitan city in Wales together with the disadvantages in rural and Welsh eyes of not being thoroughly national and of not having a united constituency so ready to make financial sacrifices for higher education. The college, relatively speaking, has suffered equally with the others from poverty. It was opened and is still in part housed in old infirmary buildings.

The college, backed by South Wales and the city, under the virile leadership of its first principal,[4] quick to respond to the demands of its environment, from the beginning became marked as a modern urban or almost municipal college in comparison with its two rural sisters at Aberystwyth and Bangor.

---

[1] Cf. *supra*, p. 70.

[2] The committee cited the precedents of Scotland and Ireland for the grant of public funds. Glasgow had been granted $600,000 toward new buildings, and Edinburgh was promised $400,000. Ireland had received for buildings of Queen's colleges, $500,000. In 1881–2 Ireland's two universities and Queen's colleges had $126,940 annually, and the Scotch universities $94,960 for maintenance

[3] In 1911 Cardiff's population was 182,495; Bangor, 11,287; Aberystwyth, 8,412.

[4] The late John Viriamu Jones; cf. his Life, by Katherine Viriamu Jones. London, Smith Elder & Co., 1915.

The principal with great enthusiasm rallied local interest to the support of the college and encouraged the establishment of evening classes, of a social settlement, and the development of departments concerned with the enterprises of the community. At the same time inheriting the traditions of an intensely Welsh and religious family he was an advocate of unity among the three colleges, and of the unification of a Welsh educational system from bottom to top pivoted in a national university.

He emphasized the provision of the charter "to give such technical instruction as may be of immediate service in professional and commercial life; and further, to promote higher education generally by providing for persons who are not matriculated students instruction in the form" of what we know as university extension.

The college was the first of the three to be incorporated and therefore in accordance with its charter the first to admit "female students." The charter, formed largely upon those of University College, London, and of Owen's College, Manchester,[1] forbade any religious tests and the acceptance of any endowment for theological purposes. In these respects and with slight variations the charter became the model of the charters of the sister colleges.

Two adverse influences had to be met. The nonsectarian character of the institutions caused them to be looked upon as anti-Christian in an era of intense denominationalism.[2] The welcome given to the college at Cardiff by the local episcopal dean, and the expressions of kindly sympathy for the National College by the Archbishop of Canterbury, upon a visit to Lampeter in 1885, were not sufficient to allay the fears of some of the churchmen friends of Lampeter, and even increased the suspicions of some nonconformists. An outcry was raised by many of the nonconformist supporters of Aberystwyth which caused Mr. Mundella to exclaim, "Can nothing be done to satisfy the Welsh nonconformists that their apprehensions are unreasonable and groundless?" Lord Aberdare, the loyal president of Aberystwyth, who became also the president of Cardiff, was constrained to write: "I wonder the Welsh are not ashamed of their contemptible opposition to Cardiff and Bangor. They would have it appear that the two most populous and stirring towns in North and South Wales are disqualified to be sites of colleges because there is a cathedral in one of them and near the other." The high Christian character and the prominence in the religious activities of their several denominations of the principals and of the overwhelming majority of the teaching staffs have in time won the subsidence of this opposition.

[1] Cf. MacLean. U. S. Bureau of Education. Bulletin, 1917, No. 16, pp. 72–75, 112–113.

[2] Cf. *supra*, pp. 40, 43.

The other antagonism which had to be overcome was that of the headmasters of the endowed grammar and proprietary schools. They feared their interests would be affected by the steps proposed for both intermediate and higher education in the report of Lord Aberdare's committee. He found in operation only 13 endowed schools in North Wales, 11 in South Wales, and three in Monmouthshire with an attendance of only 1,805. Only three of these schools were for girls. There were 79 private schools for boys and 78 for girls with a total attendance of 4,158. It was estimated that secondary school accommodation ought to be furnished for not less than 15,700 boys alone. The headmasters, at a conference in 1884, formed a provisional committee to watch the progress of the intermediate education bill, and passed a resolution that the age of admission to the State-aided Welsh colleges should be raised to 17, and that high entrance examinations should make it unnecessary to give elementary instruction in the colleges.

As the outcome of the religious opposition ended happily and the theological colleges were associated with the university, so it was with that of the schoolmasters. They were represented in the government of the colleges and the university, and though 16 is the minimum age for admission a definition of intermediate education of a good standard was secured in the act.[1]

The recommendation of Lord Aberdare's committee, which resulted in the opening of the University College for South Wales in Cardiff, resulted in the opening of the sister College of North Wales a year later in 1884 at Bangor, after the claims of 18 competing towns for its location had been considered. Within one year above $150,000 had been subscribed by a house-to-house canvass from about 8,000 persons in rural North Wales and among the quarrymen. The college received an annual maintenance grant of $20,000. Like its sister colleges it was opened in temporary buildings to which adjoining scientific laboratories were soon added.

By 1888 the college began to receive supplementary grants from the Government, and subscriptions for agricultural education in North Wales. Three dairy schools in connection with the college and an agricultural department were opened. In 1897 the college secured the use of a farm for practical instruction and experiments. Responsive to its environment and rooted in its scientific laboratories Bangor has developed special interest in agricutural education.

It has been favored on two other sides by being at the seat of a cathedral, of two theological colleges, and of two training colleges,

[1] "A course of education . . . which includes instruction in Latin, Greek, the Welsh and English languages and literature, modern languages, mathematics, natural and applied science, or some of such studies, and generally in the higher branches of knowledge."

one of them dating from 1862. It has become the recognized educational center of North Wales.

In 1886 we find the three sister colleges each settled in its own independent household and each receiving an equal grant of $20,000 a year for maintenance from the Government. They entered upon a period of generous rivalry which has never altogether ceased. They were more or less interrelated by certain representatives in common upon their boards. Their common interests in higher education, their inability to confer degrees, and their desire to be something more than preparatory schools for the London University examinations, or for Oxford and Cambridge, brought them into cooperation to secure a University of Wales. The time was favorable. The awakened sense of Welsh nationality coincided with fortuitous legislative measures. The recommendations of Lord Aberdare's committee with reference to secondary education and those pertaining directly to the colleges slowly found their way into legislation. They made possible a school system preparatory to a university. The recommendations included provisions for the establishment of undenominational schools for boys and girls supported by local rates and Parliamentary grants, for exhibitions to aid scholars to pass to the higher schools, and for the inspection and supervision of these schools. The means for fulfilling these purposes followed one by one. In 1888 county councils were established by the Local Government Act. In 1889 the Technical Education Act gave the councils power to levy a local rate. In the same year the Welsh Intermediate Education Act inaugurated secondary public schools, upon whose county governing bodies were representatives of some one of the three Welsh university colleges. In the following year (1890) by a stroke of good fortune the Local Taxation Act ("whisky money") allotted to the funds of counties and county boroughs large sums which they were at liberty to devote to technical education, and which they did in Wales. This gave a great impetus to intermediate schools.

The coordination of these schools and their inspection led to the establishment of the Central Welsh Board for Intermediate Education,[1] to which was committed the inspection of these schools in 1897. This action followed an extended discussion if the authority to inspect schools should not be lodged in the new university. The Joint County Education Committees of Wales and Monmouthshire, from whom proceeded the Central Welsh Board, had such influence

[1] Established in 1896 under the Welsh Intermediate Education act of 1889. Of the 81 members, 48 represent the county councils and county boroughs; 17, the universities; 10, the teachers, and 6 are coopted. The chief function of the board is the annual inspection and examination of the secondary schools, the allocation of Treasury grants depending upon its report. Cf. Papers read at a conference convened by Central Welsh Board. Llandrindod Wells, May 20, 1915. (Roberts & Co., Cardiff.)

in the preparation of the draft charter of the university that the university was only given power to inspect schools upon request from the schools. The coordination of the secondary schools with the university was chiefly to be effected by the representation of the proposed Central Board upon the University Court through six members and by three persons appointed by the head teachers of public intermediate schools.

The time was ripe for Wales to bring forth her national university. She had a popular, locally governed, and State-aided school system with provision for passing pupils from the elementary to the secondary grades, whose standards were maintained by a central board.

The system was in close sympathy with the three aspiring and inspiring young university colleges, which were multiplying departments responsive to local demands. A supply of prepared students was assured by the increased number of secondary schools and the opposition of the endowed schools had ceased. Wales was cited as having the groundwork of a model for a school system in the days of struggling toward one by a series of educational acts in England. But comparisons made it seem more anomalous to have a system lacking a university or head of its own or having a triple head in the three colleges. It became inevitable that all the educational forces in the Principality should unite to renew the movement for a university. It was stimulated by the examples of the University of London and of Victoria University federating colleges in different centers.[1]

CHAPTER IX.—THE UNIVERSITY OF WALES.

The renewed movement for the creation of a University of Wales was continuous and persistent from 1887 until the charter was granted in 1893. The movement was most democratic, gathering into itself every available force in the Principality. Intensely national, it was launched at a meeting of the Cymmorodorion section of the National Eisteddfod in London, in 1887. It followed the report of a royal commission, appointed in 1886, on the working of elementary education since the act of 1870. In the discussion on Welsh education in the Cymmorodorion the need for the University of Wales definitely emerged in connection with the training of teachers for elementary and intermediate schools. The Cymmorodorion section passed a resolution that the university colleges of Wales ought to be placed in the same position as the training colleges as regards the reception of grants for the training of teachers. The society summoned an educational conference which met at Shrewsbury in January, 1888. This conference resolved that "it was expedient that the provision for intermediate and collegiate education should be com-

[1] Cf. MacLean. U. S. Bureau of Education. Bulletin, 1917, No. 16, pp. 68, 108.

pleted by university organization; that the inspection of State-aided intermediate schools should be committed to the university with representatives of such schools on its executive body, and that the Welsh members of Parliament should be interested in the movement." A little later the colleges at Cardiff and Bangor proposed to Aberystwyth joint action "with a view to obtaining a university charter for Wales on the basis of the recent charter of the Victoria University." A conference of the representatives of the three colleges declared that the time had come "when these colleges should conjointly apply to the Government for a charter for the establishment of the University of Wales." A deputation from the conference was presented by Lord Aberdare, who had been so effective as the chairman of the departmental committee, to the president of the privy council. In their petition for a university charter they showed that nearly 650 students were attending the three colleges; that a larger attendance might be expected under the intermediate education act; and that one-eighth of the bachelor's degrees in art and science conferred by the University of London, in the preceding year, had been gained by the students of their colleges. In reply the president invited them to prepare a draft charter and to submit it to him.

From this time (1889) until the completion of the draft charter and its presentation and acceptance in 1893 a series of conferences, representative of the three colleges and of the joint intermediate education committees, deliberated upon the draft charter. Not only was the attempt made to perfect the charter by four or five years of deliberation but also to make it national by what was practically a referendum. The draft charter was submitted to the colleges, to all the county councils, and to the press. It passed the ordeal of all sorts of public discussion during six months before its presentation to the privy council. It had to cope with two or three divergences of opinion of a fundamental character. Under English influence Wales had been a battle field between the preparation of candidates for degrees given merely upon the passing of the examinations of the University of London and the preparation for admission to the residential colleges of Oxford and Cambridge. The advocates of a teaching university prevailed on the whole in the charter. Those who pleaded for a system of examinations and inspection of schools by the university, similar to the practice of Oxford and Cambridge, gained only a permissive clause, the legal inspection being reserved to the oncoming central Welsh board. The promoters of the charter, after extensive studies of other universities, intended it to carry out a consistent educational theory adapted to

the needs of Wales at the time and promising a degree of permanency.[1]

The charter of the university did not set up strictly speaking a federal university. It established a confederation of the three previously incorporated and self-governing colleges. "An association," Principal Roberts called it, "of the three university colleges for the training of their students."[2] His ideal was "a trinity of colleges in the unity of the university."

Each college retained its independence with its own governing body, its financial management, its powers of appointment, of creation of departments, organization of faculties, and of discipline. The "trinity" was substantial; the "unity" in the university somewhat shadowy, restricted to conferring degrees and diplomas upon students presented by the colleges as having "pursued a scheme of study approved by the university" and having passed examinations conducted by the university. Every precaution was taken to preserve the equality of the colleges, and to preclude the misapprehension that the institution entailed "a separate place of instruction to be styled par excellence, 'The University,' located either in one of the university towns or in some other center. The university, so far as its higher teaching and examining functions are concerned, is the three constituent colleges."[3]

The university is on wheels. Like a court it has a circuit. Its examinations are held at each of the three colleges on the same days. Its degrees are conferred annually at that one of the colleges whose principal is vice chancellor at the time. The university court meets once in each year in one of the university college towns taken in rotation.

Each of the principals of the three colleges serves in rotation as vice chancellor of the university for a term of two years.[4]

The national character of the university appears in the wide representation of the people themselves in the constitution of the university court, in which the entire legislative and executive power of the institution is vested. An exact equality of college representation is also insured in the court. This body consists of some

---

[1] Cf. British Universities: Notes and Summaries contributed by Members of the Senate of the Uni. Coll. of North Wales, with introduction by W. Rhys Roberts, M. A. Manchester, J. E. Cornish, 1892.

The University of Wales and its Educational Theory. An Address by Isambard Owen, M. A., M. D. Reprinted from the Journal of Education, May, 1898. London, C. F. Hodgson & Son, High Holborn, 1898.

The University of Wales in its relation to the National Life. A paper read before the Liverpool Welsh National Society, 1894, by Principal T. F. Roberts, Aberystwyth.

[2] Cymmrodor, the Magazine of the Hon. Society of Cymmrodorion. 1890-91. Edited by Egerton Phillimore. Vol. XI, 1892, p. 234.

[3] Cf. *supra*, p. 43; *infra*, pp. 92, 95.

[4] Roberts, T. F., *supra*, The University of Wales, etc., p. 2.

[5] Cf. *supra*, p. 32, *passim*.

100 members, of whom at present 27 are representatives of the county councils and county boroughs, and 36 of the three colleges, 12 appointed by each of the colleges. Of each of the 12, 4 are professors appointed by the college senate giving direct professorial representation in the court.

The university senate consists of all the heads of the departments of instruction in the several colleges.

The senate is purely an advisory body to the court with reference to schemes of university studies or examinations.

Each constituent college is "entitled to propose schemes of study and examination for its own students as qualifications for the several initial degrees of the university." These are submitted to the university senate, which has power to recommend them to the court for approval or to refer back to the college or to reject. The college has the right to appeal to the court. The design was to maintain the university standards as a whole without the formal enactment of university curricula or syllabuses of examination. This provision to secure an equivalence of the courses of study was supposed not to interfere with the liberty of a body of teachers or an individual teacher in shaping courses. There was the further safeguard that schemes of study and examinations might be approved by the court specifically "for the college and for the degree in question." The practical success of the theory of this part of the university's constitution is challenged by some of the reformers.[1] The third corporate authority of the university is not given the usual name of "convocation," but of "guild of graduates." The framers of the draft-charter intended it to be a working guild for the continuance of fellowship and the cultivation of learning among the children of the university. It was to administer independent funds for the encouragement of learning and original research. The charter, as adopted, left only the power of collecting funds for the university for the foundation of scholarships and prizes. The guild elects 13 members of the university court and, like the general council of a Scotch university or the convocations of the new English universities, "may make representations to the court on any matter concerning the interests of the university."[2] The guild, like the university court, is required to visit each of the colleges of the university in annual rotation.

The guild of graduates is composed of all graduates, in the case of the bachelor's degree of two years' standing, honorary graduates and members of the teaching staff of any of the constituent colleges.

Although not enumerated in the charter among the authorities of the university, the external examiners are important officials. The

[1] See *infra*, pp. 78, 79.

[2] Cf. MacLean. U. S. Bureau of Education. Bulletin, 1917, No. 16, pp. 156, 167, 168.

charter prescribed that "every examination conducted by the court as a qualification for a degree shall be conducted by external examiners jointly with internal examiners appointed by the constituent colleges, and no examiner's report shall be received unless the external examiners have concurred in the report." The intention was on the one hand to have the examinations conducted by the teachers themselves, as in the Scotch and American universities, and correlated to the courses of study that the candidates had pursued. On the other hand, it was thought to satisfy the public as to the standards and impartiality of the examinations of the new university by reserving the ultimate authority to external examiners. It was believed that the evils of passing examinations alone as a qualification for a first degree and of having to conform courses of study to syllabuses of examinations were escaped by the setting up of schemes of study approved by the university. In view of the ultimate authority of the external examiners and the exigencies of agreement on the part of independent departments in the same subject in the several colleges the reformers of to-day query if the evils have been avoided.

The regulations for initial degrees emphasize the teaching side of the university by the requirements that a "qualifying scheme" of study shall be composed of a certain number of courses of study in sequence, and covering a qualifying period of study of at least three years of about 40 weeks each. Consecutive stages in a qualifying period are marked off. Honor courses are offered. The result is practically an elective group system of studies, for which each college is responsible, tested by university intermediate and final examinations.

Consonant with the interest in theology in Wales one of the original contributions of the charter is an arrangement for instruction and degrees in theology which does not infringe the secular character of the university or compromise the theological colleges.[1] The charters of the university and of the constituent colleges debarred them from undertaking theological education. Without evasion of this prohibition, in line with the power given to the court to recognize teachers and courses for degrees in other institutions than a constituent college, the court was permitted to recognize theology as a subject in the faculty of arts or letters, and to admit to a theological degree graduates of universities after pursuing a "scheme of study" in a recognized theological college. The responsibility for the theological schemes of study and examinations is vested in the university court and not in the university senate which, of course, would have no representative of theological departments. The court has met the situation by defining and recognizing as an

[1] Cf. supra, p. 39.

"associated theological college" one approved and accepted by the court as providing instruction in all the subjects required by the university for theological degrees. Such a college must be in Wales and have a staff of at least four teachers in the subjects required by the university for degrees in theology.

The court appoints a committee of advice called the theological board and pays proper expenses incurred by it. The board consists of two persons appointed by each associated theological college, of six persons appointed by the university senate, of two by the university guild, and of nine appointed by the court from persons not members of the teaching staff of an associated theological college.[1] Four of the nine persons are to be learned in theology but not members of the court. The duties of the board are to recommend to the court schemes of study and examinations, the names of examiners, and to report upon the qualifications of theological colleges. The churches of England, of Scotland, and the principal nonconformist churches are represented on the board and among the examiners, together with nontheological scholars. The theological senate consists of the teaching staffs in the associated theological colleges and of all doctors in divinity of the university. They are recognized teachers of their subjects by the university but receive no salaries from it. The theological senate reports to the theological board upon matters concerning studies and examinations in the faculty of theology.

The charter was the first to "strike out a new line providing for a degree of bachelor or master in education open to those who have already graduated in arts or science." It even proposed a "faculty of education." This was a great step forward in the movement for bringing teachers into touch with English universities which has been dated back to 1853, when Owen's College started lectures for schoolmasters. Though Matthew Arnold, in 1863, recommended that university examinations and degrees should be made accessible to teachers in elementary schools, and the Scotch education department, in 1873, approved of the attendance of scholars from the training colleges in a Scotch university, it was not until 1888 that the establishment of day training colleges, in connection with the university, was recommended by the royal commission on the working of the elementary education act of 1870 in England and Wales. Previous to the adoption of the charter separate training colleges had been established in Wales, e. g., the Normal School, in 1862, at Bangor. The friends of the university were working for a "unity of organization

[1] In 1915 the associated theological colleges were Aberystwyth (Calvinistic Methodist); Bala (Calvinistic Methodist); Bangor (Baptist College); and Bangor (Independent College). These two Bangor colleges form a "Joint School of Theological Studies"; Brecon (Congregational); Cardiff (S. Wales, Baptist); Carmarthen (Presbyterian); Lampeter (Church of England); and Mansfield (Congregational), Oxford, are approved but not "associated" at this time.

which should give greater breadth and diversity in the training of teachers. It was said elementary teachers should have the advantages of a university education and that the training colleges should be linked with the universities. Three methods of settling the question in Wales were discussed. First, the Scotch system in which the training college offers a complete education both general and technical but is established in a university town so that certain select students may attend university classes.[1] Second, an arrangement like that carried out for the theological colleges by which the general education of the teachers should be given wholly in the university and the technical training in the theory and practice of education be provided by independent associated training colleges. It was argued against this plan that there was not the same reason for division in the training of teachers as in the training of divinity students, and there were the positive disadvantages of divided authority and of increased expense. The charter adopted a third plan, by which the training of teachers should be a department of work in the university, combining the general training of teachers with technical training in the theory and practice of education.[2]

Accordingly the university colleges were among the earliest to appoint professors of education in the faculties of arts and of science, and to open departments for the training of elementary and secondary teachers. The intention, however, of the charter to have a faculty of education and degrees in education has not been carried out. Only a certificate in education open to university graduates has been offered. Neither has the problem of the relation of training colleges to the university been solved; hence the subject has been included in the terms of reference to the royal commission.

Certain omissions in the charter, despite the fact it was so advanced a document for its day, are indicative in part of the wisdom of not undertaking too much in the first stages of a university and, in part, of the tardy development in the British Isles of certain university ideas. The happy progress of the university in the first decade of its operation brought these points to the surface. In the meantime they had been embodied in the charters of the new English universities.

The result was that some of these things were taken up in a petition for a supplemental charter granted in 1906. Provision was made for degrees in recognition of research but open only to members of the guild of graduates. The degree of magister in recogni-

[1] Cf. *supra* Life of John V. Jones and T. F. Roberts' University of Wales in its relation to the National Life

[2] Cf. MacLean. U. S. Bureau of Education. Bulletin, 1917, No. 16, pp. 49, 87, 210, 213.

tion of research may, however, be obtained by the graduate of any approved university upon presentation, through one of the colleges, of evidence of being qualified to pursue a scheme of advanced study or research and successfully pursuing such a scheme for three years and submitting "a work or works embodying the methods and results of the researches."

The framers of the original charter looked to fellowships and scholarships and the pursuit of post-graduate schemes of study covering prescribed periods for advanced degrees as a means to promote research. This was an important departure from the practice of conferring the M. A. degree in course, upon the mere payment of a fee, by Oxford and Cambridge.[1] The faith was professed in the union of graduate and undergraduate work in a university. "The pursuit of knowledge is in danger of growing languid unless kept in tone by the obligation of communicating it, and educational methods of becoming dry and barren if they be not refreshed by irrigation from the living spring of original intellectual work."

The petition for the supplemental charter recognized "the desirability of carrying on research study and instruction in diverse branches in technical and applied science in contact with the industries to which they are related, and in such localities as offer special facilities therefor whether such localities are the seats of constituent colleges or no." This desire was met by empowering the university to affiliate in the university faculty of science or of technical or applied science or both any public educational institution in Wales, which is adequately equipped and endowed for the promotion of research study and instruction, even in one branch of technical or applied science. Up to this moment there are no such university official affiliations, but agreements have been effected with certain bodies by one or more of the colleges, and stimulus has been given to departments involved in the colleges. The university still has but the one faculty of science which includes applied science and agriculture.

The formative period of the university, beginning with the first concrete movement for a charter in 1888, may be considered as closed with the appointment of the royal commission in 1916. In the early days it was a time of rapid expansion. Preparatory to the charter the colleges were active in strengthening their positions. Under the impetus given by the charter they continued to multiply departments with slight regard to duplication, and latterly entered upon a building era involving them in indebtedness.

In 1888 the number of students attending the three colleges was 650. The preceding year one-eighth of the bachelor's degrees in

[1] Cf. MacLean. U. S. Bureau of Education. Bulletin, 1917, No. 16, pp. 215, 217. Cf. supra, p. 42.

arts and science at the London University were taken by Welsh students. In 1900 the number of students in the University of Wales was 1,310.[1] The total has never greatly exceeded this and in 1913–14 was 1,325.[2] The number qualifying for degrees in 1914 was 331.[3]

All the colleges have developed on about the same level the ordinary departments which prepare for the degrees of the faculties of arts, science, music, and theology on the nontheological side.

Specialization due to local environment is making itself felt in an increasing degree.

Aberystwyth, where agricultural education of collegiate grade was first undertaken, has organized a strong agricultural department, and receives grants from the board of agriculture and from seven county councils. The college has been made the center for agricultural education by the board of agriculture under its scheme for 12 areas for the United Kingdom, and it is the place of residence of the agricultural commissioner for Wales.[4] A farm for demonstrations and experiments has been secured. The courses of instruction range from those for a university degree to short courses for farmers and teachers. There are special courses in dairying. Extension lectures and farm demonstrations are given.

Aberystwyth is the only one of the colleges with a full department of law having a combined course leading to a B. A. and an LL. D. degree.[5] Recently the college has given prominence to the subjects of geography and colonial history.

At Cardiff, as early as 1889, the Drapers' Company of London made a grant which resulted, with assistance from the local employers of labor in mining and manufactures, in the opening of a school of engineering in 1896. To-day "the engineering school comprises the scientific, and, as far as possible, the practical sides of mechanical, civil, and electrical engineering.[6] There is also a mining department offering a three years' course for the degree of B. Sc. in mining of the university; a three years' course for the diploma in

[1] Aberystwyth, 437; Bangor, 305; Cardiff, 568.

[2] This number is exclusive of those in short courses and tutorial classes; Aberystwyth, 437; Bangor, 312; Cardiff, 576.

[3] M. A., 24 (3 women); M. Sc., 8; B. D., 6; B. A., 212 (83 women); B. Sc., 81 (11 women).

[4] Cf. MacLean. U. S. Bureau of Education, Bulletin, 1917, No. 16, p. 142. See *infra*, pp. 94, 95.

[5] At Cardiff, by an arrangement between the college and the Joint Board of Legal Education for Wales, a lecturer and a teacher prepare students for the examinations of the Law Society.

[6] At Bangor, in 1890, the professor of physics began a department of electrical engineering which is now maintained by an annual grant from the Drapers' Company of London. A course of lectures and practical work covering two years are offered to nonmatriculants. Matriculants may take a three years' course for the university degree in applied electricity.

mining of the college. Nonmatriculants or "occasional students" may be admitted to courses.

An interesting moment has been reached in the development of technical education in this region. Recently three technical schools have risen independent of the University College, indicating a possible drift contrary to the policy of association pursued by the college. It offers a point for consideration by the Royal Commission in the coordination of secondary with university education.

The City of Cardiff Technical College was associated in 1889 with the University College, but in 1908 was disassociated from it. This did not imply any animosity. The Cardiff education committee announce the setting up of "the educational ladder" in their reorganized scheme for technical education reaching from the elementary schools through the Technical College to the University College. They offer free studentships and scholarships tenable at the University College for residents in Cardiff who are students of the City Technical College. At the opening in 1916 of the magnificent new Technical College in Cathays Park the Lord Mayor said: "Almost side by side in this park, giving dignity to our ideals, the University College and the Technical College both will play their parts, not in unfriendly rivalry, but rather in close cooperation."[1]

The South Wales and Monmouthshire School of Mines has been established by the principal coal owners in the region for improving technological instruction in all branches of coal mining. The central school is at Treforest and another school at Crumlin in the heart of the coal fields. There are departments of mining, geology, and surveying, of mechanical engineering, of electrical engineering, and of chemical engineering. A four-years' diploma course in coal mining is given jointly by the School of Mines and the University College. Post-diploma studentships are available either at the University College or the School of Mines. The establishment of research work and laboratories at the school and not at the university is contemplated by the management with the wealth it has at its command.

In the not distant rival city to Cardiff is the Swansea Technical College, in close touch with the metallurgical firms and works of South Wales. It advertises courses in pure science, engineering (civil, mechanical, electrical, and chemical), and metallurgy for matriculated students preparing for the University of London B. Sc. degree. It has its own diploma courses and courses for the first medical examinations.

The University College, Cardiff, offers a limited number of short courses in agriculture and dairying science for which it receives a

[1] Address by Dr. R. J. Smith, Lord Mayor, Mar. 13, 1916. The estimated cost of the building is about $315,000.

grant from the Glamorgan County council. The counties of Glamorgan and of Monmouth have not accepted the recommendation of the Board of Agriculture and Fisheries that they should be in the agricultural province associated with Aberystwyth College.[1]

Cardiff is the only one of the three university colleges having a faculty of medicine and a department of public health. The college has arrangements with King Edward VII's Hospital, Cardiff, by which students of the college have opportunities for clinical instruction in the hospital. The privileges also of the Cardiff Hospital for Infectious Diseases are open to the students. At present three years of a five-years' medical course may be taken in Cardiff at moderate expense and recognized for degrees by the Universities of London, Cambridge, etc., This school of medicine seems destined just now to mark a turning point in the history of higher education in Wales. It was not intended when it was established to provide for more than the first three years of medical study. It advanced, however, in 1899 to the offer of graduate tuition for the diploma of public health. It was fortunate in having in the same city the King Edward VII Hospital which has been favored with large gifts. The ambition to have a complete national medical school for Wales appealed to the public. In 1912 a donor came forward with a gift of $150,000 to house the physiological department, and he has since offered $300,000 more for buildings on certain conditions. One of his conditions is that "the grant made by the treasury should be adequate for the upkeep and maintenance of a first-rate medical school." This has resulted in the appointment of the Royal Commission[2].

The University College, Bangor, has given special attention to agriculture since 1888, when it received a small grant out of the sum of $25,000 voted for the first time by Parliament for the promotion of agricultural education. A scheme of agricultural education for North Wales was laid out. Three dairy schools in connection with the college were established and an agricultural department opened in the college.

In 1897 the college secured the use of a farm. In 1912, aided by the Board of Agriculture and moneys from the development fund, the college entered upon the work of technical advice to farmers and the investigation of local agricultural problems. Under the plan for 12 agricultural provinces[3] of the Board of Agriculture the Bangor College is the center with which the four counties of North Wales are associated. The first farm school, however, in Wales, opened in 1913 in Carnarvon County, is conducted apart from the college.

[1] Cf. *supra*, 83. [2] Cf. *infra*, p. 90. [3] Cf. *supra*, p. 83.

Bangor alone[1] of the three colleges has a forestry department which was formed in 1904 with the aid of a small grant from the Board of Agriculture. In 1912 the board proposed that the forestry department of this college should be responsible for advisory work for the whole of Wales, with the exception of Glamorganshire, and for the adjacent English counties of Cheshire and Shropshire.

Bangor is unique among the three colleges in adding to the teachers' training department classes in kindergarten training, preparing for the theoretical and practical examinations of the National Froebel Union.

As we have seen, the three colleges were opened in preexisting structures which had to be adjusted to their purposes. All have since entered upon a building era which has been furthered, especially since the organization of the university, by private munificence, local authorities, and State aid.[2]

At Aberystwyth, after the destruction by fire of a large part of the fine college building, it was reerected, with improvements. In 1895 and 1896 Aberystwyth and Bangor each received special grants of $50,000 for building purposes and Cardiff a conditional grant of $100,000. In 1907 Aberystwyth opened new chemical laboratories in a fine building given by private donors. It is on a site of some eleven acres on a hillside some distance from the college buildings on the sea front.

The National Library of Wales, on a more lofty site in the same direction, lends special benefits to the college and increases the prominence of educational buildings at this center.[2] About 1908 an old vicarage field fortunately near the college was acquired for playing fields, and private liberality, assisting the Old Students' Association, built and equipped a gymnasium. The Alexandra Hall of Residence, of which the first two wings were opened as early as 1896, accommodates 200 women students. It is beautifully located on the sea front at a convenient distance from the college.

Cardiff, stimulated by the offer of the treasury grant referred to above, appealed to the public for building funds. The total amount received by 1912 from subscriptions, a gift of $80,000 from the Drapers' Company and the treasury grant, was above $575,000. In 1900 the corporation of Cardiff gave a magnificent site for the new college buildings in Cathays Park. The administrative and liberal arts blocks were completed in 1909 and the Viriamu Jones Memorial Physical Research Laboratory in 1912. The college buildings planned for extension harmonize architecturally with the splendid

[1] Aberystwyth announces that "an opportunity is afforded of studying forestry" in the woods of its farm, and Cardiff that the "establishment of a vacation course in forestry for working foresters is under consideration."

[2] Cf. *supra*, p. 69.

group of city, county, and national buildings located in Cathays Park, which it is proposed to make one of the finest civic centers in Europe. It is said "the ultimate aim is to erect the Welsh Parliament House" there.

The new medical buildings in course of erection are on a separate site near the old college buildings.

At Bangor plans for new buildings ran parallel with those at Cardiff. In 1900 the court of governors of the college sought the cooperation of the City Council of Bangor to secure a new site and buildings. In 1902 the council gave a site on a hill in the city commanding a fine view. A permanent buildings committee was appointed which, by 1915, had secured, including a Government grant of $100,000, the promise of over $570,000. The London Company of Drapers contributed some $75,000 to the library and museum section of the new buildings, to which the arts classes were transferred in 1911. Since then a great hall for college ceremonies has been added to the present scheme of buildings by a private donor.

Each of the three university colleges is now equipped with modern buildings, mostly of stone and of no mean architecture.

The canon demanding picturesqueness of location for a college is met in each case, but in a variety of ways. Aberystwyth "towers in pride by the western water's side where wild waves vainly beat along the bay." For a background it has mountain, moor, and plain. It befits the heart of Wales.

The classic halls of Cardiff, fronting upon the lawns of the midway, on the civic center of the rising capital of the Principality, befit the urban college.

Bangor's rising quadrangle, with its tower reminiscent of an ancient university, overlooking the cathedral close and the old city ensconced beneath it, commands a wide prospect of sea and mountain. It befits rugged North Wales.

The university as contradistinguished from the colleges has but one modest office building—the Registrary—located opposite the new university college buildings at Cardiff.

Despite the increasing liberality of private benefactors and of Government grants, poverty, so often the scourge of prosperous colleges, has been the constant lot of each of the three university colleges. They are accustomed to have annual deficits.[1] Beginning in 1886–87, each college received an annual exchequer grant of $20,000 until 1909–10, when it was doubled upon the recommendation of the quinquennial committee, and Cardiff received an extra amount of $7,500 in respect of work done at the medical school.

[1] In 1913–14 the total income of Aberystwyth was $101,285, expenditure, $101,930; Bangor, income, $96,955, expenditure, $118,620; Cardiff, income, $124,960, expenditure, $135,870. Bd. Education Reports (1913–14) from Univs. and Univ. Colls., Vol. II [Cd. 8188].

In accordance with one great object of the colleges and university to keep down the expenses of education, the students' fees, which are nearly uniform in the three colleges, are as moderate as in American State universities. They are even distinctly lower than in the new English universities.[1] In 1913–14 the three colleges received from Government the largest percentage (55.3 per cent) of total income as compared with all the English institutions (34 per cent) in receipt of exchequer grants. The Welsh deficits[2] are by no means due alone to the small student fees but to the comparative lack of income from endowments and from grants from local authorities.[3]

The chief source of the indebtedness of the three colleges arises from expenditures not in respect of maintenance but from their building operations, which are not yet complete.

The corporate life of the students is encouraged in the three colleges by the clubs, societies, and athletic sports usual in British universities. Aberystwyth and Bangor have a contingent of the officers' training corps.[4] The corps has been popular from the beginning, and the war has so proved its worth that it will be considered an indispensable adjunct in every college.

The colleges directly encourage the corporate life by having in their buildings "common rooms" for the teaching staff and for the men students and the women students. The value of halls of residence or hostels is making itself felt more and more. As usual, hostels for women were erected. At Aberystwyth, Alexandra Hall is owned and controlled by the college, and residence in it is compulsory for all women students not residing with their parents or guardians. Recently a small hostel for men students has been started. At Bangor, under a separate board, closely related to the college, houses for women students have been opened since 1897. In like manner a small hostel for men students has recently been established.

In the nineties, through the activities of the late Lady Aberdare, Aberdare Hall, under its own board of governors, was opened for university college women students in Cardiff and has since been enlarged.

---

[1] The fees in arts, $60 a year; in science, $80; etc.

[2] There is a deficit on capital account amounting in round figures to about $100,000 in each of the three colleges. Report of the Advisory Committee on Grants to Universities and Colleges, Feb. 26, 1914.

[3] In 1913–14 the percentage of total income of the three colleges from fees was 27.2; of the new English institutions, 28.1. From endowments, 6.5; English, 14.8. Annual grants from local authorities, 5.9; English, 16.

[4] Cf. MacLean. U. S. Bureau of Education. Bulletin, 1917, No. 16, p. 244. The Roll of Service in the King's Forces to July 31, 1915, contained 718 names (Aberstwyth, 252; Bangor, 186; Cardiff, 280).

CHAPTER X.—THE ROYAL COMMISSION AND EDUCATIONAL PROBLEMS CONFRONTING IT.

The climax of our studies is reached in the consideration of what the sensational press has called "the Welsh educational crisis." In truth it is a time of reflection, the university having just attained its majority. The Welsh, among other democracies, are peculiarly given to periodic scrutiny of their institutions. Our somewhat detailed survey of the university and its colleges has been necessary to understand the problems involved. Many of the problems will be of practical interest in the United States since they are connected with the question of the coordination of institutions, particularly those in different localities.[1]

The origin of the official inquiry is friendly. It is intended to usher in the next stage of development in higher education in Wales. Coinciding with the agitation caused by the war for educational reform the results may reach the entire kingdom. Again, as once before, Wales may set an example in education.

In order to follow the official inquiry it is necessary to premise that the national treasury and the board of education, though not enumerated among the authorities of the university and the colleges, have influence here often greater than authority. The treasury makes its grants upon the recommendations of a quinquennial advisory committee of distinguished educationists on university grants. Two such committees have reported. The first in 1908,[2] the second in February, 1914.[3] The board of education, London, *inter alia*, has a universities branch (with training of teachers), an office of special inquiries and reports, and a Welsh department with inspectors, but not directly concerned with the university and its colleges. In March, 1914, the board of education appointed a departmental committee on the National Medical School for Wales at Cardiff.[4] The appointment of the last committee was precipitated by an application for a special grant in aid of the medical school at Cardiff.[5] In February, 1915, the treasury issued a minute stating that after a comparison of the reports of the two last committees it had come "to

[1] Cf. MacLean. U. S. Bureau of Education. Bulletin, 1917, No. 16, Chap. XIII.
[2] Welsh Colleges Committee Report, 1909. (Cd. 4571.)
[3] Welsh Universities and Colleges (Grants in Aid). Parliamentary Paper. Ordered printed by the House of Commons. Apr. 19, 1916.
[4] Cf. Parliamentary Paper, *ibid.*
[5] Cf. *supra*, p. 85.

the conclusion that some reorganization of the University of Wales was required before they could feel justified in making any additional grants from public funds, either to the university and its colleges or toward the maintenance of a national medical school." This communication was considered by "The Welsh University Education Conference of 1915," consisting of representatives of the university and of the colleges. The conference sought to have a postponement of "the general question of university reorganization in consequence of the preoccupations of the war." "In the meantime the treasury was requested to make interim provision for immediate financial necessities."

The conference proposed a scheme for the formation of a "University of Wales Council of Medicine," on which other bodies than the university and its colleges were to be represented. The council was to have advisory powers with reference to the school of medicine in respect of the allocation of funds, the management of the school, and appointments. The scheme has been characterized as "a thing of checks and balances designed to reconcile the conflicting interests of the university, the Cardiff College, and the Cardiff Hospital." The reply of the treasury to the request of the conference intimated that increased grants would be made if the university and colleges would agree to ask "for the immediate appointment of a royal commission on the university, together with a promise to accept the decision which His Majesty's Government may arrive at, based on the findings of that commission, with regard to the form of the university, including the government of the medical school."

Thus constrained the university and colleges asked for a royal commission in accordance with the treasury's suggestions. Accordingly in April, 1916, the royal commission was appointed. The terms of reference of the commission read: "To inquire into the organization and work of the University of Wales and its three constituent colleges, and into the relations of the university to those colleges and to other institutions in Wales providing education of a post-secondary nature, and to consider in what respects the present organization of university education in Wales can be improved, and what changes, if any, are desirable in the constitution, functions, and powers of the university and its three colleges." The commission consists of nine members, of which Lord Haldane is chairman, well-known as a Parliamentary leader of reforms in all branches of education. He will bring his experience in handling university problems from the time of his connection with the case before the Privy Council for the dissolution of the federal Victoria University, in 1900, to the report of the royal commission, of which he was chairman, or university education in London in 1918. The membership

of the commission will bring together persons associated with the various types of federated institutions. They are also from the old and new English, the Scotch and the Welsh universities. The names[1] of the commissioners show the care taken to represent the interests involved in the way of arts and philosophy, of science, of agriculture, of medicine, of music, of women, and of secondary and elementary education. The commission has visited the three colleges and Swansea. It has announced that for reasons of economy it will sit in London and take testimony there.

A glance at some of the public discussions concerning the university indicates the variety and scope of the problems confronting the commission.

The desire to keep the university up-to-date has made itself constantly felt. It was stimulated within 10 years of the opening of the university by the experience of the newly founded English universities and even by observation of American universities. Suggestions were made drawn from the visit of the Moseley Education Commission to the United States. Principal Reichel brought them home to the University of Wales.[2] He referred to the large "private benefactions and public expenditure to which there is no parallel in Britain, and which is rooted in the profound conviction that education, especially on its higher side, is essential to the development of a great modern State." He compared the inclination "of the greatest commercial and industrial firms in America to secure for their highest posts college graduates, with the general prejudice of industrial leaders in the Islands against college training." He discovered that the American State university is most analogous to that of Wales. He was impressed by the "accrediting" system under which the pupils of high schools, inspected by the university, are admitted to the university upon the presentation of leaving certificates. The presence of a "culture element" in the American college of agriculture and mechanic arts and technological schools was noted as something lacking in Britain. The "almost organic connection between academic and industrial life" was commended for imitation. "The Welsh habit of mind of regarding ability to pass a written examination as the true test of training instead of reliance upon the regular work of the stu-

[1] The Right Hon. [illegible]unt [illegible]ne of Cloan, O. M., K. T., F. R. S., LL. D. Prof. W. H. Bragg, F. R. [illegible]A., [illegible]c., Quain professor of physics, University of London. The Hon. W. N. Bruce, [illegible]B., principal assistant secretary under the Board of Education Secondary Schools Branch. Sir Owen M. Edwards, M. A., Chief Inspector, Welsh Department, Board of Education. W. H. Hadow Esq., M. A., D. Mus., principal of Armstrong College, Newcastle. A. D. Hall, Esq., M. A., F. R. S., a commissioner under the Development Act. Sir Henry Jones, M. A., LL. D., D. Litt., professor of moral philosophy, University of Glasgow. Sir William Osler, Bt., F. R. S., M. D., D. Sc., LL. D., D. C. L., regius professor of medicine, University of Oxford. Miss Emily Penrose, M. A., principal of Somerville College, Oxford.

[2] Some interesting features of American universities. An address delivered before the guild of graduates, Apr. 7, 1904. Cardiff, 1905.

dent was compared with the almost entire freedom of the American institutions from this incubus." The American "sumptuous provision for gymnastic training," compulsory physical training, and institutional control of athletics impressed the visitor with the defects in these particulars of the Welsh colleges.

Graduate study with its laboratory and seminar methods of instruction which increasingly differentiates the American university from the mere college was used to stimulate the spirit of research in the University of Wales.

The first strain between the centrifugal and the centripetal forces in the university was noticed in 1903–1905, coinciding with the stir made by the Moseley Commission. It was the effect in part of the dissolution of the Victoria University and of the successful launching of the so-called municipal universities. Why should not Cardiff as an urban center have its own university? The standard objections to the Federal system for a university were discussed in an address delivered at Bangor in 1903 by the late Prof. Jebb, who expressed as powerfully as it has ever been put the argument from nationality for an undivided Welsh University.[1] He said: "Are the drawbacks to the Federal system outweighed by the fact that the university stands for all Wales, * * *. Yes, the advantage outweighs the drawbacks. To represent Wales is not merely to represent a geographical area and a distinct nationality; it is to represent also a well-marked type of national genius, characterized by certain intellectual bents, by certain literary aptitudes, by certain gifts of imagination and sympathy, especially manifested in the love of poetry and music—a type of genius which is peculiarly susceptible to the influence of humane studies. A university which is the one academic expression of such a national genius holds a position of unique interest and of peculiar strength. It would be a great pity to break it up into two or three universities, no one of which could have the same prestige. * * * The national sentiment would be divided, the strength which it gives would be impaired, and the unavoidable competition, however generous, might possibly be prejudicial to the interests of Welsh education at large."

In this period the question of a permanent "working head," a salaried principal of the university, in place of the vice chancellorship, rotating biennially among the three principals of the colleges, was thrashed out and decided adversely.[2]

The fundamental argument for the new officer, "rector and vice chancellor" of the whole university, was that the principals as vice

[1] Cf. *supra*, p. 46.

[2] Cf. versus "Working Head": Jones, Prof. Henry. The University of Wales: The Line of its Growth. An address. Cardiff, Oct. 3, 1905. In favor: Williams, T. Marchant (warden of the Guild of Graduates). The University of Wales: Its Past, Its Present, and Its Future. An address in reply to Prof. Henry Jones and others. Cardiff, Nov. 7, 1905.

chancellors in rotation had "signally failed to preserve a continuity of university policy." The demands of their own colleges dominated them. The administration of the university required the whole time of a chief "able to supervise effectively administration of every department of the university." The three principals of the constituent colleges were to be continued as heads of their institutions but to be ranked in the university as junior deputy chancellors. The, at that time, recently created office of principal[1] in the University of London beside that of vice chancellor was cited in favor of the scheme.

In the background of the argument for a "working head" was zeal for "Cymru'n Un," a united Wales, aroused by the suggestions of the breaking up of the university into three universities.

In reply it was argued that the appointment of a real "working head" to run colleges after the analogy of elementary schools or the normal colleges of the past was contrary to the very nature of a university, as a self-governing teaching institution and as a place of independent research. It would threaten academic freedom.

It was urged that this kind of academic centralization was in danger of embroiling the institutions in schemes for political or even national centralization. It would therefore not promote unity either within or without the university. The proposal might trench upon the principle deduced from educational experience that the political state can best serve religion, the direct promotion of morality, and higher education by leaving their authorities free to develop their institutions.

The discussions were concluded for the time by the report of the treasury's advisory committee in 1908.[2] The report was adverse to any constitutional changes. "Comparing the position of the University of Wales with that of the new universities in England, we find much reason to apprehend that the population in Wales and Monmouthshire is not sufficient to maintain more than one university." Looking at the question from the Welsh national point of view, the soundness of Prof. Jebb's conclusion was adopted.[3] The proposal to appoint a permanent executive head of the university was rejected.

Other allusions in the report point to emerging problems which await full solutions at the hands of the royal commission. A "closer cooperation among the colleges with a view to greater economy in the management of their resources" was suggested. The idea presented to the committee was that the three colleges agree that "the teaching (or the advanced teaching) in a certain subject shall be cen-

[1] The office of principal in the University of London, though ably filled, has not met with favor, and since it was vacated no attempt has been made to fill it on the plea that it is a good place for war economy.

[2] Welsh Colleges Committee Report, 1909. (Cd. 4571.)

[3] Cf. *supra*, p. 92.

tralized in the college which is best able to deal with it." "Any such centralized department was to be made accessible to all students by providing for migration from one college to another." The objection that "migration would break the tie of allegiance betwen the student and his college" was to be avoided by entering the transferred student in the calendar of the second college as a student of the original college. A college which allowed advanced work in a particular university department to be organized elsewhere was to make some provision for the subject. This would meet the contention that the college was maimed and less capable of serving its own part of the country.

The report remarks: "The charter empowers the University to inspect the constituent colleges but this power has not as yet been exercised." It is significantly added that "the university has aimed at promoting cooperation and has wisely refrained from attempting to bring the colleges under the control of a central authority, since the university has no power to interfere with the administration of a constituent college."

The committee noted that the "standard of matriculation had been rising with the improvement in Welsh secondary schools." They recognized that the colleges, for the time being, needed to provide for students who came from secondary schools not yet fully equipped. They expressed the hope that the university, the central Welsh board, and the recently established Welsh department in the board of education would cooperate in a further advance of standards, and in giving a preference to a system of admission to the university by school-leaving certificates in place of written examinations.

The committee put their fingers upon a world-wide temptation to colleges to increase the number of their departments, and to attract a large body of students at the expense of inadequate payment of the teaching staff.[1] The committee commended the aim of the colleges to raise the average professorial salary to $2,500. They added that it was essential to establish a pension fund for professors.

They hinted that the financial condition and spirit of the junior staff might be helped by the further development of tutorial assistance and postgraduate study. These things would improve the teaching of the colleges and develop the university spirit in which teaching and research should be inseparable.

It is significant that the committee suggested that the university rather than the colleges formulate a general scheme of university extension which would give relief to full professors, be of advantage to junior members of the staffs, and associate the colleges with many local interests.

[1] At the time the average professorial salary was $1,475 at Aberystwyth, and the highest average $1,675 at Bangor.

The system by which the board of education recognized the university colleges as training colleges for teachers was heartily commended by the committee.

In view of the supplementary charter (1906) authorizing the university to institute a faculty of medicine, a note was appended to the report to the effect that given new buildings for the medical school and new chairs for certain subjects, Cardiff would possess the requisites for a modern school of medicine and for postgraduate work in tropical medicine and hygiene.

The solutions of the problems presented in the report of the committee of 1908 became more pressing with the "advance made in all the colleges" in the quinquennium reported upon by the advisory committee[1] of the exchequer on university grants in 1914, and the reports in the same year of the departmental committee[1] of the Board of Education on the National Medical School for Wales at Cardiff. After handling almost the identical problems set out by the committee of 1908, the committee of 1914 concluded with a reference to the difficulty which confronted them "in making recommendations for increased assistance to the colleges of the university which are financially independent, but which collectively provide university education for the principality as a whole. As it has been represented to us that it is impracticable to intrust to the university, as at present constituted, the task of determining the lines of development to be followed at each college, and as we are convinced that there is real danger of wasteful overlapping of work if there is no coordinating authority, we are forced to the conclusion that the institution of new departments should not be undertaken without the previous sanction of the State as the principal contributor to the resources of the colleges."

A glance at some of the public discussions and official reports on the university and the colleges during the past dozen years exhibits the variety and scope of the problems before the royal commission. The questions are those not merely of federalism, but also of finance, of duplication and economy, of educational policies and standards within the institutions, and of relationships and national service without.

A representative Welsh leader summarizes the inquiry under three heads—machinery or organization, education, and university extension, including extramural social service. Though the present machinery might be cumbersome, it did not seem to him to be a matter of prime importance. He thought the great point is to differentiate the three colleges educationally.[2]

[1] Cf. *supra*, p. 89.

[2] Cf. a similar suggestion, *supra*, p. 93.

He suggested that Aberystwyth might concentrate upon the arts, Celtic studies, and music. In the pursuit of the last subject the relationship should be established with musical training and choirs in all rural communities. Perhaps agriculture should be retained.

The lines of development at Bangor should be in connection with theological colleges and its school of forestry.

Cardiff, in an industrial community, should specialize in mining, engineering, and medicine. It was believed that the service by each of the institutions, particularly of the interests of its neighborhood, would result in a renewed leadership of the nation by the university, and in financial support from local authorities and benefactors which would justify increased State aid. The present successful conduct by the colleges of tutorial classes in connection with the Workers' Education Association, encourages the vision of a new national educational era.

To give continuity in executive policy and the force of personality and responsible leadership, the principal of one of the colleges might be made the permanent working head of the university in place of the present triumvirate by rotation.

The above may serve as a specimen of general schemes which may be presented to the commission.

If the Royal Commission approach the problems from the point of view of machinery or organization, they will be confronted by two parties—the "separationists" and the "federalists." Each party falls into at least two groups. All separationists would dissolve the federal university; one school, however, would go the full length and make three independent universities out of the three colleges, while the other school would have but two universities—one for South Wales, at Cardiff, and one for North Wales, a conjoint institution composed of the colleges at Aberystwyth and Bangor. The federalists may be said to consist of high and low federalists. The high have faith in a federal type of university as one peculiarly fitted to Wales now and permanently. The low federalists hold allegiance to the existing federation, stressing the autonomy of the colleges. They fear the development of a superuniversity. They will submit out of necessity to an increase of powers in a federal university as a temporary measure. They believe "that from the academic point of view the ideal solution of the present difficulties would be to make the colleges independent universities. On the other hand, apart from the powerful spell exercised on the minds of Welshmen by the idea of a national university speaking for the whole of Wales, it would seem to be extremely doubtful whether university education has at present reached such a point in the country as to make this possible as an immediate settlement."[1]

[1] Cf. for a review of the entire university question The Times Educational Supplement, Welsh section, June 6, 1916.

They are willing to concede amendments to the university and college charters increasing the specific powers of the university in the lines desired by the Exchequer and Board of Education. The minimum requested by these bodies is that the university should be empowered to administer the Treasury grants to the colleges and to determine the departments of study which shall be set up at each college. In the wake of these concessions would follow the participation of the university in the appointment of teachers in each of the colleges, in the constitution of its staff, and in the determination of its relations with other public bodies. Some federalists, having in mind the report (1913) of the royal commission on university education in London,[1] would adapt its plan of government to conditions in Wales. They would have one strong university in which should be vested the financial and educational control of constituent colleges and university departments. The faculty would be exalted as the natural basis of university organization. This would protect the freedom of the teachers and give opportunity not only for a federation of constituent colleges but also of departments of institutions in which work of university grade is done by teachers of university rank. This last point would aid the commission in solving the problem of the relation of "the post-secondary institutions," i. e., technical schools and training colleges to the university.

As an offset to the London model the separationists cite the example of four Scotch universities[2] and of the northern English universities of Manchester, Liverpool, Leeds, and Sheffield.[3] The first do not break up the unity of Scotland and, like the second group, with its joint matriculation board and other conferences and means to secure common standards, show how the Welsh colleges may be "converted into relatively independent universities."

Universal discussion, so characteristic of democratic Wales in the press and magazines, by the advocates of the theories of the federalists and separationists, has passed into the stage of formal action by various bodies.

The Cardiff Parliamentary Committee, presided over by the Lord Mayor, asked the corporation representatives on the university college council to take up the question of a separate university for South Wales and Monmouthshire. The Cardiff College senate recommended to the council the foundation of a separate university for South Wales. The college council, however, dissented from the recommendation, "being of the opinion that the federal character

[1] Cf. MacLean. U. S. Bureau of Education. Bulletin, 1917, No. 16, pp. 91, 94.
[2] Cf. MacLean. U. S. Bureau of Education. Bulletin, 1917, No. 16, pp. 199, 227.
[3] Cf. *Ibid.*, p. 110.

of the University of Wales should be maintained."[1] The court of the university, by an overwhelming majority, adopted a resolution expressing the opinion that adequate teaching freedom for the staffs of the three constituent colleges can be secured without disruption of the existing federal university.

The drift of opinion in Wales seems to be in favor of the continuance of the federal system with a strengthening of the centralizing university.[2]

There is general agreement that certain educational reforms are as necessary as governmental changes.

Half governmental but all-important educationally is the election of professors at present vested in the council of each college.

Already in one of the colleges a reform has been proposed following the analogy of the boards of electors to professorships in Cambridge or curators of patronage in Edinburgh.[3] The proposed board was to consist of the president and the principal of the college, the vice-chancellor of the university, three representatives of cognate subjects, and a professor from each of the other two colleges; the council to retain only the right of veto. Another proposal was to enlarge the membership of the senate in the college by having representatives of the departments in addition to the full professors.

An increase of the powers of the faculties was also suggested. All these proposals are in line with the general tendency to increase academic representation and influence. A greater degree of academic freedom in the sense of lehrfreiheit for the individual teacher and lernfreiheit for the student is called for by the reformers. At present the professors in the three colleges have to prepare their students in accordance with a common syllabus. The examination questions based upon it are really dominated by the external examinet.[4] The students tend to lose interest in anything outside the syllabus and to cram for the degree examinations. Relief has been proposed along a horizontal plane, e. g., either that only the final and honors examinations be given by the university, or that the colleges control fully the schemes of study, syllabuses, and examinations for the initial degrees, and the university be confined to regulating advanced degrees, the award of fellowships, and post-graduate studentships, and the encouragement of post-graduate research. The desire is strong to preserve the individual initiative of the teacher without leading him to indulge his idiosyncrasies in his instruction. It is felt that the tutorial system should supplement lec-

[1] Cf. The Times Ed Sup., Aug. 1, 1916.
[2] Cf. The Welsh Outlook, June, 1916, p. 191; and the articles, "Welsh University Reform" and "War and Education." Cf. *infra*, p. 99.
[3] Cf. MacLean. U. S. Bureau of Education. Bulletin, 1917, No. 16, p. 182.
[4] Cf. *supra*, p. 78.

tures, and that the professor's personality should be brought to bear upon the student for character building. These and other strictly educational questions in these war times of serious attention to the realities of life, are transcending in public interest the more formal schemes of organization and government which were the first subjects of debate. The war is lifting all concerned out of provincialism and institutional selfishness, and giving a new sense of national unity and service to all concerned. Proof of this may be seen in the action of the council of the Cardiff College against the dissolution of the university, though Cardiff has at least half of the total population of some two and a half millions in the principality and four-fifths of its ratable value.

The war has so reawakened interest in education as a national necessity that a new impetus will be given to university extension and extramural service in public welfare.

With the tide of lofty feeling running so strongly in the direction of patriotism and unification, without presuming to forecast any action of the commission, one may give weight to the opinion of a prominent Welsh educator "that the commission would recommend the continuance of the federal university in some modified form."[1]

The commission are authorized to inquire into the relation of the university to "other institutions in Wales providing education of a post-secondary nature."

The commission here may find one of its greatest tasks. The reference may cover theological colleges, training colleges, technical, mining, and agricultural schools, and training schools of domestic arts.

The relation established between the university and theological colleges may serve in part as a model[2] to be followed with reference to the other institutions.

At the moment there is particular interest in the question of the university and the training colleges, and the university and the schools of mines. Outside the training departments for about 500 four-years' students at the three university colleges there are six colleges with accommodations for about 850 students.[3] The university does not recognize the work carried on by these residential training colleges. Their students, if they take the certificate examination of the board of education, must enter the university colleges as freshmen.

The claim is made that training college students who successfully complete their two-years' period of training should be admitted to

[1] Cf. *supra*, p. 98.
[2] Cf. *supra*, p. 78.
[3] Municipal colleges at Bangor, Barry, Carleon, and Swansea; Church of England colleges at Bangor and Carmarthen.

the university colleges as second-year students for the academic subjects taken by them at the training college. "This means that the two years at the training college would be recognized as equivalent to one year at a university college for degree purposes."[1]

It is hoped that the training colleges may be recognized by the university in a way to rank with other professional schools of the university upon meeting the demands of the university authority which it is proposed should be a "teachers' university training board" analogous to that for theological colleges.

Something similar is proposed for the South Wales and Monmouthshire School of Mines.[2] The present loose connection between the university college at Cardiff and the school, it is believed, ought to be strengthened so that time spent at the school of mines can be recognized for degree purposes.

Contemporaneous with the work of the royal commission is the culmination of a movement of some years standing in the principality for the coordination of education from bottom to top. In May, 1916, a committee of the Central Welsh Board submitted to the board a report preliminary to a public inquiry, which the board proposes to ask the Government to make, into the condition of all grades of education in Wales. The committee calls for a "closer coordination between secondary and elementary, technical and university education." If the Central Welsh Board is to be continued, it is urged that it should be the sole inspecting and examining authority in Wales for all forms of secondary education. This would transfer to the board the functions of the Welsh department of the board of education, London, with reference to secondary instruction. On the other hand, if the Central Welsh Board is not continued, the conclusion is reached, "pending the establishment of complete autonomy for Wales, that the most satisfactory solution of Welsh educational difficulties would be the constitution of a National Council of Education for Wales controlling all forms of education other than university." In this declaration, looking for the long promised grant of educational home rule to Wales, the great principle is recognized that from its nature a university must have its own government, and is not to be included under any State board with other schools. Hence we see the mission of the royal commission falls in happily at this time with the great movement for coordination. There is no chance for conflict unless it should be upon the debatable question as to the inspection and examination of secondary schools. The outlook is most auspicious for again setting in the forefront the University of Wales as the apex of an ideal national school system.

[1] Principal D. R. Harris, The Times Educational Sup., June 6, 1916.
[2] Cf. *supra*, pp. 84, 85.

PART III.—ENGLAND, SCOTLAND, IRELAND, AND WALES.

CHAPTER XI.—SUMMARY OF STUDIES AND SUGGESTIONS.

The war has brought to a head the educational reforms of the last half century. An immediate and "necessary revolution" in national education is demanded. The Government has announced that they would not wait for an inquiry by a Royal Commission. They have appointed four or five committees to inquire into subjects like the position of natural science[1] in the educational system, and the study of modern languages.[2] The results of the sectional inquiries of the subsidiary committees are to be submitted to a "reviewing committee," composed partly of members of the Government and partly of public men of parliamentary experience, who will "review generally the whole field of national education." This committee in turn is bound up with the general Committee of National Reconstruction over which the Prime Minister presides.

The Government has also announced that "they are agreed that education is a matter upon which they do not dare to restrict expenditure,[3] although the country has before it many years of heavy taxation. It would be a false economy which would starve education." This comports with rumors before the war of generous schemes for enlarged State aid for secondary and higher education.

The representative of the Government has said specifically that "there must be far greater honor for the teaching profession in its different grades, an improved standard of pay, and the possibility of making full provision for old age."

The declared object of the inquiries struck the note ever fundamental in English education, "that education is primarily training

[1] The terms of reference of the science committee are as follows:

To inquire into the position occupied by natural science in the educational system of Great Britain, especially in secondary schools and universities; and to advise what measures are needed to promote its study, regard being had to the requirements of a liberal education, to the advancement of pure science, and to the interests of the trades, industries, and professions which particularly depend upon applied science.

[2] The terms of reference of the modern languages committee are as follows:

To inquire into the position occupied by the study of modern languages in the educational system of Great Britain, especially in secondary schools and universities, and to advise what measures are required to promote their study, regard being had to the requirements of a liberal education, including an appreciation of the history, literature, and civilisation of other countries, and to the interests of commerce and public service.

[3] Cf. *infra*, p. 112.

of character demanding the religious sanction over and above the development of efficiency."

It is most significant that the speaker for the Government and others, in the three days' debate given to education in the House of Lords, did not hesitate to touch the ark of the old universities. The question was raised "of freeing the university from preliminary studies which ought to be carried out in the secondary schools."

In the matter of examinations it was explicitly said "the more entrance examinations could be replaced by a system of leaving certificates the better. As far as the two great English universities were concerned, earlier transit from the school to the university would be for the general advantage."

It was added "there was also the question of the proper and reasonable allotment of scholarships and bursaries. Although it was desirable to aid the more gifted to climb the ladder from school to the university, in a national system, the training of the average boy and girl must be a matter of paramount importance." Details were taken up. "It was not denied that the most promising and brilliant minds among the young men were intentionally directed into the humanistic road. But there could not be any real conflict between the humanities and science. A man's education should not be regarded as purely literary or purely scientific. The most eminent men in the scientific world advocated what is called a liberal education. This kind of education had turned out university graduates who have been gentlemen in the best sense of the term and successful agents of civilization in the darkest portions of the earth."

The mention of physical training was not omitted. Allusion was made to the passing, in the experience of the war, "of the dread entertained by some people of militarism as attaching to the institution of boy scouts, of church lads brigades, of cadet training, and of officers training corps in the public schools and universities."

In the debate on the reorganization of the entire "educational system or want of system" there were the usual expressions of British individualism deprecating any extension of governmental interference. The value of maintaining local interests and activities and a freedom from bureaucratic regulations were dwelt upon, and the Scotch system was held up as an example.

The Government reply made haste to say that "the experience to be gained from the Scottish system of education which stood so deservedly high in the public view would by no means be forgotten."

Reforms in curricula were deemed to be no less important than those in organization. The latter should be only a means to an end. It was assumed that compulsory Greek would go, not to be succeeded by compulsory substitutes. The principle of compulsion in

studies of a university grade was expected to give way to the principle of freedom of election within the bounds of groups of studies and natural sequences.

In connection with the pressing problems of the secondary school there was agreement on all sides in paying tribute to the great "public schools." "One of the lessons of the war was that the moral and physical training of these schools had stood the test. They had the power to train boys to be rulers of men."[1] In most of these schools now education in humanities and education in modern subjects are complementary of one another. The sciences are no longer named "stinks."

So far as generalizations can go, the program proposed by the Government embodies the results of the appeals, legislative acts, and university and college actions of the last 50 years.

This summary may be completed by turning to certain specific points in the bulletins.

There is a tendency to a rapid multiplication of universities which possibly the war may check. Since the opening of the twentieth century 10 universities have been established in the Islands. They are teaching universities condemnatory of the examining universities. A great feature has been the development of urban university colleges into universities, not, as is sometimes supposed, into city universities but into institutions for entire provinces.

The idea of a university has been clarified and enlarged. The idea that the university is only a degree-conferring institution, which sprang from the fact that historically only a university possesses the power to grant degrees, has been outgrown. "The idea of a university reaches far beyond a varied supply of professional training, the prodigal granting of degrees, and the anxious encouragement of research. A university is something more than an engine of utility or a product of organization. The essence of a university is a spirit, a principle of life and energy, an influence." It is more than a teaching institution consisting of a group of professional schools surrounding as a core a college of liberal arts, though it invariably has such a college.[2] Ideally it is a guild or corporation of teachers and scholars imbued with a "passion for excellence" and learning, and largely autonomous in the allocation of its funds. It provides the best teaching over the entire field of knowledge within the limit of its means, offering this teaching to a wide range of

[1] The spirit of the old public schools is represented by some well-turned phrases: "It is Eton's pride that she produces men not 'mugs.'" "There is no modern side at Eton." "The head master of Eton has more to do with the soul of England than the Primate of Canterbury." "Sport, the key to English rule and character." "Fair play is the pith and fiber of the Empire." The End of a Chapter, by Shane Leslie. Constable, 1916.

[2] Cf. *infra*, p. 105.

students who come prepared with a completed secondary education. But it is primarily a training institution to discipline intellect and spirit for purposes of character building and leadership. Recently emphasis has been laid upon the functions of a university on the one hand "to extend by original inquiry the frontiers of learning" and on the other hand in extra-mural work to diffuse knowledge and engage in social service for the public welfare. The idea of a university is illustrated in "The essentials of university education set out in the report of the Royal Commission on University Education in London."

(1) First in importance is the corporate life. "Students should work in constant association with their fellow students, of their own or other faculties, and in close contact with their teachers." A residential and tutorial system is favored.

(2) "In the university knowledge is pursued not only for the sake of information but always with reference to the attainment of truth." "This differentiates university work in its nature and aim from that in a secondary school where definite tasks are prescribed; also from that of the technical or professional schools in which theoretical teaching is largely directed by the application of ascertained facts to practical purposes." It involves as a standard of admission the completion of a secondary school course.

(3) In accordance with an almost universal old-world practice a "close association of undergraduate and post-graduate work" is urged. A superuniversity is an American development repugnant to European notions.

(4) "Special research institutes should not form part of the university organization."

(5) "A university press is an essential function of a university."

(6) "Technological instruction should be included among the functions of the university, but it should not be of a narrow utilitarian kind." It should be based upon a thorough grounding in pure science. Herein a line of demarcation is implied between professional or higher engineering as taught in a university and mechanic arts as taught in the polytechnics and colleges of agriculture.

(7) "A degree should signify that a university education has been received." This is accompanied by a pronouncement that degrees should be "practically the certificates given by the professors upon the whole record of the students' work." This indicates an English reaction against external examinations and examiners and toward the Scotch and American practice.

Plainly the British idea of a university differentiates it from a college not only in degree but in kind. The distinction between them is so historic and the university so different in kind that in Great

Britain there is never any confusion between them. A college is not a miniature university. Its prime function is instruction and, standing in loco parentis, character training in an atmosphere of general culture. The American college, originally planted by Cambridge and Oxford graduates, has developed from the English model, but unlike the latter has been slow to affiliate or federate itself with the university.[1]

The meaning of the term "college" is indefinite and without legal definition in Britain. The colleges incorporated in Oxford and Cambridge have given the word its highest meaning. Hence the adoption of the name, "university college" by modern institutions having a curriculum preparing for university degrees. Originally such a college was distinguished by its tutorial and residential features. "University college" has come to have a more definite meaning equivalent to a standard college since the Government began to give grants in aid for colleges which met its standards.

Among the standards required by the board of education are a consideration of the "standing and efficiency of the teaching staff and the extent to which both the staff and advanced students are active in research."

In addition to passing a matriculation examination of university standard the entrant should have been in attendance at a secondary school for at least four years subsequent to the age of 12 and be over 17 at the time of admission.

The grants of the board are not available in respect of courses in preparation for a matriculation examination nor in respect of courses in religious subjects. Ordinarily grants will not be available in aid of a college which gives day instruction of a lower standard than that of diploma courses. A diploma course is one of not less than two years' duration fitted for students educated in a secondary school up to the age of 17 at least.

According to the commission on university education in London, an efficient university college should have an income of not less than $100,000 a year. The groups of departments devoted to university work should be organized separately from those doing work of a lower kind.

The colleges offer courses qualifying for degrees at the universities in a modern curriculum with a wide range of subjects including preliminary legal, medical, and engineering courses. They also have part time and evening students in short courses in commercial, industrial, and art subjects of interest to the locality. They maintain courses for teachers of elementary and of secondary schools. Not being able to give degrees they give diplomas of associateship and

[1] Cf. *infra*, p. 231.

certificates. When they have not become "constituent colleges" in a university they seek affiliation with neighboring universities. The American isolated independent college is an expensive anomaly unknown in Britain. If the college can not be locally a part of a university it seeks recognition from or affiliation with one. In turn a university, consisting only of professional schools, without a liberal arts college, would be a violation of the fundamental idea and unbroken tradition of a British university.

A university may be conceived as the crown of a school system or as a place to be reached at the top of the "educational ladder" or "highway," but never, as it is sometimes expressed in the United States as merely "an integral part of the public school system" as if it were only a school of higher grade and to be controlled like lower schools.

The need of a national university at the capital of a country is taught by the presence of universities in all the great European capitals, and especially by the development of the University of London. The argument does not rest simply upon the advantages to a university of the experts, collections, and libraries gathered at the seat of Government, but upon the needs of a government to have at its own doors a university to aid it and to propagate an intellectual and spiritual influence throughout the national life.

The use of the term "college" for a technical or agricultural institution parallel in rank with a university college is gaining ground. There are above 80 so-called "provincial technical colleges" in the United Kingdom. They sprang from a movement for which the inventions of Watt and Whitney prepared the way at the close of the eighteenth century, antedating a similar movement in Germany.

The congeners of these colleges like the Imperial College of Science, London; Royal College of Science in Ireland; the Royal Technical College, Glasgow; and the great municipal technical colleges or schools, in the largest cities, have raised the question if, following the example of Germany, technical colleges should not be kept apart from the universities, or if there should not be such a thing as a technical university. The answer is decidedly in the negative. Applied science is included in the teaching of every university and university college in Great Britain and Ireland. The unanimity in practice has only been arrived at recently, after the earlier development of powerful separate technical institutions. The tendency of some of them to become "technical universities" has been stayed. All of them have become incorporated in a university or have come to an agreement for cooperation with a university. The thesis has been worked out that applied science as contradistinguished

from mechanic arts belongs in a university among its professional schools. Applied science emphasizes the teaching of the principles rather than the practice of an art or profession.

Applied science, in British usage, has further had its meaning expanded. It is coming to stand for instruction in higher education in a professional school associated with a university on a par with the other professional schools.

In a broad sense applied science is being made to cover the professional schools of divinity, of law, of medicine, and of teaching embraced in the universities of the Middle Ages. These schools, where they had sprung up separate from the universities, are seeking affiliation with them. The modern universities have also opened their doors to the new professions like agriculture, commerce, dentistry, engineering, and fine arts. All the professions, old and new, are coming to look to the university as the center for professional and advanced instruction in the science of the profession which is to be supplemented by gaining the art of the profession in practice regulated by the organized profession.

The modern secular universities, like London and Manchester and notably the University of Wales, practically a State university, have solved happily the problem of giving theological instruction and having a faculty of theology or its equivalent. They have accomplished this without evasion of the prohibitions of their charters against sectarian teaching, without cost to the State, and without compromising the churches and incurring the odium theologicum. The essence of the various plans is found in the power of the universities to recognize teachers and courses for degrees in other institutions. Theology may even be a subject for which credit is given in the place of arts. Of the two old universities Cambridge, by opening in 1914 its degrees in divinity to candidates not members of the Church of England, comes closely into line with the new universities.

The tardy evolution of agricultural education in Great Britain has enabled it to profit by experiments made earlier elsewhere. In Great Britain, where State aid is concerned, the work has been transferred from the board of education to the board of agriculture. A scheme has been adopted for coordinating agricultural education in 12 areas into which the country has been divided with a university as a central institution in each area. In Ireland the department of agriculture and technical instruction has a leadership in policies with which those in Great Britain are fundamentally in harmony. The department's system of agricultural education extends neither to the elementary schools nor to the university. Agricultural instruction is concerned with the details of an industry and belongs to the domain

of technology and not to pure science or to the humanities. Technical agriculture should form no part of the teaching in the primary schools or in a university, but agriculture in its humane aspect should be taught in every university. "The less the schoolmaster meddles with agriculture the better." Experience in Scotland and Denmark teaches that the "school is the place to train the man and the farm the farmer."

The agricultural colleges are to concentrate upon training in the technology of agriculture and to be the centers of college extension in agricultural instruction, especially by the organized work of local committees of farmers and cooperative societies. The Irish Agricultural Organization Society affords a model for such societies which might well be promoted by the colleges of agriculture in the United States. The colleges give the long courses of instruction suitable for future landowners, large farmers, land agents, teachers, and other officials. The college extension provides farm institutes or agricultural stations for small farmers. Demonstrations and advice are brought to the farm door by itinerant instructors and organizers. Most of the colleges defend themselves from becoming general colleges, largely patronized by the nonagricultral classes on account of low fees, by requiring for admission not less than a year's work on a farm and an examination not made from textbooks in farm practice.

The colleges seek credit for their courses in the universities with which they are coordinated in order that their students may resort to the universities for advanced work and degrees. In England there is a scheme to develop a dozen research institutes, generally attached to a university, and each with a special subject allotted to it.

All the colleges keep agriculture supreme and give no extended instruction in engineering except in subjects like surveying and farm machinery.

After a struggle of threescore years coeducation is firmly established in the field of higher education. The doors of every university are open to women for instruction, though as yet Oxford and Cambridge grant only certificates and not degrees. There are five types of women's colleges; the independent college, the university college, the university annex or coordinate college, the college incorporated in a university, and the unrestricted coeducational institution. There is a distinct tendency for the last type to prevail.

The organization and administration of universities and colleges is a subject of discussion in every part of the British Isles. The tendency is strong to escape from an oligarchic government by official heads or by faculty or lay groups, and to secure a representative government of all interests concerned.

A fourfold plan of organization or, in the case of State-aided institutions, sixfold plan, is in operation. Various titles are used for what amounts to the same thing.

First, there is a working head corresponding to the American university president. He is invariably an ex-officio member of the governing board and other important university bodies. The Scotch practice of choosing this officer, aut culpam aut vitam, has held its own. Only in Oxford and Cambridge is the appointment made annually. Modern institutions, after various experiments, seek continuity of administration and efficiency by the appointment as a responsible head of a distinguished educator with executive ability. He is expected to hold office usually until he is 65 years of age. He is paid an adequate salary, twice or thrice that of a full professor, and provided with an administrative staff and often with a residence.

Second, a governing board for which, after experiments with the whole professoriate or with large mixed governing bodies, legislation, as in Scotland, favors a small body. The tendency is to set up an executive board of about 15 members, consisting of the head of the institution and men of distinction of various professions and interests, who serve without emoluments, animated by a desire to benefit their fellow men. Without exception the teachers of the institution are represented on this board generally by two members.

Third, the general faculty or professors of the institution have the control of education and discipline subject to the approval of the governing body. There is a distinct tendency where it has not been as yet accomplished to have a representation on this body of the university staff outside the professors, and even also of outside experts or practitioners of interested professions.

Fourth, the organized alumni are empowered to consider all matters relating to the institution and to make recommendations to the general faculty and governing body. Their suggestions are only advisory and without legal authority except in Oxford and Cambridge. Among the proposed reforms in these two institutions is the abolition of the veto power of this body.

Fifth, under the influence of the Scotch example the modern institutions have organized students' representative councils with the power of making representations to the authorities, and sometimes with a representative on the governing body.

Sixth, there is a large legislative and nominally "supreme governing body" of 100 or more members in national and State aided institutions. It is a device to represent and interest the State, local authorites, and contributors. The scheme is not without criticism as cumbersome and giving opportunity for mischievous persons or cliques to play their part at different points along the extended line. On the other hand, the latest reports favor the sixfold scheme for

State-aided institutions. It reconciles the many interests concerned and is democratic.

Greater precautions are used than is ordinarily the case in the United States to obtain a faculty, using the term in its broadest sense, of ability and to secure its academic freedom and tenure of office.

The greatest care is given to the election of professors. In case of a vacancy publicity is given by advertisement, and candidates are invited to apply, but the institution is free to give the appointment to some one it has sought out for itself.

Experiments have been made with every possible method of appointment to professorships. Appointments by the Crown, appointments by patrons, selection by faculties or by graduate bodies have left their traces.

In the modern universities the executive body appoints the teaching staff on the recommendation of the general faculty. There is a strong movement in favor of plans, like those of Cambridge and London, to have a board of electors. The members of the board have representatives of the executive body, of the general faculty, and of the related departments within and without the institution. It is a feature that distinguished specialists in the subjects, "external experts," outside the university staff concerned, are on the boards.

In the matter of qualifications for a professorship there is a growing insistence upon the combination of ability for teaching and research, and of some approved work done in them.

Security in the tenure of office is not forgotten in a country in which the older institutions make appointments for life. In view of the new pension system in modern universities it is likely that an age limit for retirement at 65, with possible reelections up to 70, will become universal. In case of misconduct or incapacity there are various regulations for notice, hearings, and sometimes for the right of appeal from the executive to the legislative body, the university chancellor, or the royal visitor.

In the matter of salaries, a change for the better is coming slowly. There is no attempt being made at absolute uniformity, but only to establish minimum standards.

The salaries in professional or technical chairs are higher than those of the academic professorships on account of the gains which may be obtained in practice.

The federated superannuation scheme for English universities and university colleges, in receipt of exchequer grants, is one of the most important developments which has been made in recent years in the sphere of university work. The scheme is being taken up by other university institutions. The plan requires an annual contribution of 10 per cent of the salary, normally 5 per cent by the beneficiary and

5 per cent by the institution. The ordinary means of financing the system is by arrangement with selected insurance companies[1] for endowment insurance policies, or deferred annuity policies. Every policy is held by the institution upon a discretionary trust in order to safeguard the interest of the beneficiary, and in case of his removal from one institution to another to facilitate the transfer of the policy. The policy matures when the beneficiary is 60, but that is not an age of compulsory retirement.

It is noteworthy that the Queen's University of Belfast, after long deliberation, has not joined in the federated and compulsory contributory scheme. It has adopted a noncontributory plan. The management and investment of the pension fund are conducted by the university instead of by an arrangement with an insurance company. The university sets aside annually a sum calculated at the rate of 10 per cent of the normal salary of the beneficiary. This action and similar steps contemplated in other institutions may mark a reversion to the standard "reserve plans" of great corporations.

All the universities and university colleges receive grants from the State.

The question of State aid and visitation and the dangers of State interference was debated anew in 1913–14 at Cambridge upon a vote to appeal to the Government for an annual grant. The testimony was that the institutions receiving them had been free from unfavorable results and interference by the State. This is effected by the happy method of giving State aid. The grants are determined on the report of experts in consideration of two facts—(1) the efficiency of the institution and the value of the work which it does; and (2) the extent of the local support which it receives. The Treasury, the Board of Education, or other board administering the funds constitutes, ordinarily quinquennially, "advisory committees," consisting of the most eminent educators and experts, who serve without salaries. This method of distributing State aid in lump sums, together with the broadly representative membership of the autonomous governing body of each institution, prevents the evils of State interference and combines the benefits of State relationship with efficiency and freedom in the institution. It is hardly conceivable, if the educational institutions in Britain were wholly State owned and supported, that they would make them departments of the State in the hands of salaried officers subject to political changes. The fact that institutions of higher learning, whether privately endowed or otherwise, are public institutions in their nature and by charter is recog-

[1] President Pritchett reflects the scheme but substitutes for a selected insurance company a proposed subagency controlled by the Carnegie Foundation, to be called the "Teachers' Insurance and Annuity Association," in his proposed "A Comprehensive Plan of Insurance and Annuities for College Teachers." The Carnegie Foundation for the Advancement of Teaching. Bulletin, No. 9, 1916, p. 50.

nized by the office of visitor and other provisions for visitation by advisory committees and occasional royal commissions.

The war promises to introduce a new epoch of increased State aid to higher education.[1] The dependence of all the institutions, including Oxford and Cambridge, upon fees to meet a considerable proportion, in some cases two-fifths, of their current expenses would otherwise threaten disaster.

The vexed problem of securing economy and efficiency by the coordination of institutions of the same or different types, and especially in different localities, affords a variety of instructive experiments.

The unique confederation of colleges in Oxford and Cambridge is a growth which can not be reproduced elsewhere.

The varieties of the modern federal universities like Victoria, London, the National University of Ireland, and the confederation of colleges in the University of Wales deserve careful study by the student of the problem in America.

The debate upon the federal system is being rehearsed anew in the proposed reconstruction of the University of Wales. Amalgamation of two independent institutions is not, strictly speaking, coordination. So persistent is institutional life, so potential are historical associations, and so sacred are inherited trusts that amalgamation by intervention of the State is only justified in extreme cases.

Coordination through a single educational corporation without complete financial incorporation has been evolved at Durham and Newcastle, and at St. Andrews and Dundee.

Happy examples of coordination by means of cooperation secured by voluntary agreements between independent corporations occur in the case of Heriot-Watt College and the University of Edinburgh, and the Royal Technical College, Glasgow, and the University of Glasgow.

Coordination by a coalition of universities to insure common standards in fees and examinations is illustrated in the four Scotch universities and in the joint examination board of the four new northern English universities.

Affiliation and recognition of other institutions by a university are well-known initial degrees of coordination.

The manifold experiments in coordination impress upon one several outstanding features. Financial unity is kept subsidiary to educational unity. True to the idea of a university as a society of

[1] Cf. First Annual Report of the Privy Council for Scientific and Industrial Research, Aug. 31, 1916. "It needed the shock of war to make manifest the need for additional State assistance. The universities must be the main sources of research in pure science, the discoveries in which lie at the root of all practical and technical applications. But they will not be able to do their fair share unless they can attract more students and larger funds."

teachers and scholars, "a corporation not conducted for financial profit," in any coordination cure is taken not to commit the institutions to a predominantly financial board of control, least of all a paid board or a paid committee of a board. Indeed, there is no case of the kind in education, high or low, in Great Britain and Ireland. A common educational council of some kind is the supreme bond of union. The history and genius of each institution are respected. Representation is given in the council to the governing body and the faculty of each.

No such thing as a separate graduate faculty exists in any British university.

The variety and differences in standards of admission and the general acceptance of a higher and lower grade of preparation are suggestive as over against the present American standardization with the terminology of "units" after the fashion of an exact science. Admission to the university has been determined more by the general development and character of the pupil and his fitness for university education than by intellectual tests. The idea of the Briton is that a liberal education does not consist in sampling all kinds of knowledge, but in liberalizing the mind and producing culture by the human touch which Principal Shairp defined as "sympathy with intelligence." It is this spirit, together with the commingling of teachers and students, and of the arts and professional studies, which prevents the last two or three years of intense specialization in the university turning out narrow men. The "public schools" (most nearly corresponding to the American college) and secondary schools are supposed to give the liberal and general education.

The university curricula open with a transitional stage presupposing a general and liberal education in the lower schools. Ordinarily within a year, in the second stage introduced by an examination, opportunity for specialization is given preparatory to the third and professional stage. We have purposely used the word stage instead of year, for within certain limits one may take his examinations sooner or later when he is ready for them, and take his bachelor's degree in three, four, or more years.

The double standard for a degree plays an important part—the first known as a pass, poll, or ordinary degree, and the second as an honors degree. These are quite different from the American degrees with or without distinction or honor which only record the standing or "marks" of students who have been through the same courses. The British lay out different curricula for the two kinds of degrees and types of students.

The pass or ordinary degree "represents a moderate degree of proficiency in a considerable range of subjects and an honors degree represents a much higher proficiency in a special subject or group

of subjects." The pass degree is ordinarily taken in three years and the honors degree in four years. The temptation for the brilliant student to shorten his course to three years is prevented by the provision of the separate honors curriculum and higher standard of examination.

The professed aim of the British university is to provide for the recognition of the quality of work, and for men of ability, rather than for a carefully measured quantity of work, and for the average man.

With the introduction of the new studies, group after group of honor schools budded off the old curriculum. The courses of instruction were divided and organized into subjects, or groups of cognate subjects, to be elected by the more serious students. The variety and flexibility of the curricula, the attempt to recognize the quality as well as the quantity of the student's work, the elasticity in the time requirements in covering distinct stages rather than years in the curriculum, and the freedom of the student to choose his curriculum, gave a preeminence among the methods of instruction to a tutorial system.

The Scotch and the new English universities feel the need of some adaptation of the tutorial system.

The tendency everywhere is to supplement the lecture system by paper work, and by some adaptation of the seminar, as well as by laboratories and practice work in the sciences.

The curricula in the professional faculties from the nature of the case are largely fixed. They are anchored also by the recognition of their preliminary courses in the arts and science faculties and degrees, and justify within certain limits the combined courses of some American universities.

The spirit of the old and latterly of the new British universities to educate the student by the corporate life is evinced by the move in all the universities to build hostels in order to approximate the residential system of Oxford and Cambridge.

The appointment of advisers of studies and students points to the revival of the tutorial system.

The prominence of students' unions and students' societies and clubs of all kinds promotes the social life. The spirit of true sport, of team work, and camaraderie in athletics has been complemented by military training and officers' training corps. The war has brought out the value of these things. The officers' training corps have sent thousands of volunteers into the present war and are regarded as a chief source of supply to meet the terrible loss of officers.

Surely the lesson from British experience is not to multiply West Points, but to make more efficient the military departments in American colleges and universities.

The extra-mural work of the universities in the original form of university extension teaching continues to flourish.

The Workers' Educational Association represents a movement for years flowing side by side with university extension, and at length, in 1907–8, joining it in forming tutorial classes, which has given the latest and most promising development of university extension. It is a missionary organization working in cooperation with education authorities and working-class organizations. It is definitely nonsectarian and nonpolitical. In conjunction with the colleges and with Government aid "tutorial classes" have been organized. These classes, with which every university and every university college in England and Wales is now associated, numbered 153 in 1914 and contained about 3,000 working men and women pledged to a three-years' course of serious study and the writing of 12 essays in connection with each year of the course.

The university tutorial classes have stood the test of the war, though diminished by enlistments. Subjects cognate to the war or arising out of it, judiciously studied, have cultivated the "historic sense and steadied men in the midst of this unprecedented cataclysm." The marvelous growth of the association, its maintenance in the crisis of war, and its success in the federation of labor and learning, mark it as a phenomenal sign of the times.

The occasional attendance of Americans from the earliest days at British universities was rapidly increasing, to say nothing of the Rhodes scholars at Oxford, before the war. It is likely to increase after the war, provided that the universities welcome American graduates to advanced degrees as German and French institutions have hitherto done.

On the other hand, some British graduates might do well to avail themselves of the "Opportunities for Foreign Students at Colleges and Universities in the United States,"[1] to which the Commissioner of Education has called attention.

An exchange of professors like that which has been inaugurated between some continental universities and institutions in the United States might be adopted to advantage. An interchange also of a few representative students is desirable between the centers of English-speaking peoples, with institutions and ideals fundamentally the same, but with independent developments which it is to the interest of each and of civilization they should mutually understand.

Who will found American scholarships for Britons corresponding to the Rhodes scholarships for Americans?

[1] Bureau of Education. Bulletin, 1915, No. 27.

INDEX.

O