SCIENCE

A WEEKLY JOURNAL DEVOTED TO THE ADVANCEMENT OF SCIENCE, PUBLISHING THE OFFICIAL NOTICES AND PROCEEDINGS OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

FRIDAY, DECEMBER 15, 1905.

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MSS. intended for publication and books, etc., intended for review should be sent to the Editor of SCIENCE, Garrison-on-Hudson, N. Y.

RESEMBLANCES AND DIFFERENCES AMONG AMERICAN UNIVERSITIES.[1]

THE American colleges and universities seem to the public and to their own constituencies to be very different; but as a matter of fact they are much alike, and what is more, they exhibit in a striking degree the same tendencies. In durable institutions tendency is quite as important as actual condition. It is my purpose in this lecture, first, to point out the fundamental similarities among the higher institutions of learning in the United States, and then to indicate briefly the nature and probable outcome of the differences they exhibit. (I ought to premise, however, that my remarks will have no application to the group of American institutions which derive from the Roman Church their form of government, their discipline and their program of studies. This firmly established group of colleges, which are chiefly under the control of the Society of Jesus, breathe the American atmosphere, and are not wholly inaccessible to the spirit of modern science; but being essentially ecclesiastical in structure and methods, they bear little resemblance to the ordinary

[1] An address given by President Eliot, of Harvard University, at Yale University, on November 15. Last year a graduate of Harvard University gave anonymously to Yale University a fund of $10,000, the income of which is to be devoted to the promotion of friendly relations between the two universities. The Yale authorities decided to appropriate the income for a series of lectures from representatives of Harvard University. President Eliot's address was the first of that series.

American college, which is historically Protestant in origin and development, and distinctly secular, though not irreligious.)

I.

The first likeness I wish to point out is the likeness in the constitutions of the bodies which own and govern the American institutions of higher education. At first sight these bodies seem unlike, and there are certainly many diversities among them; but there is a strong tendency toward the same constitution—a tendency which is due to like desires or objects, and to like experiences in the actual working of the bodies originally set up. When the general court of Massachusetts Bay created in 1642, by a natural inventive process, the first governing board for Harvard College, the act prescribed that it should be composed of the governor and deputy governor, the magistrates of the jurisdiction, and the teaching elders of six adjoining towns, with the president of the college. That is, the general court entrusted the infant college to a large group of the leading persons in the little colony. This same sort of thing has since been done all over the country. By skipping 225 years and 1,000 miles westward, I can take an illustration of this truth from the University of Illinois, which was established in 1867. This university was placed under the control of a board of trustees, consisting of the governor, the superintendent of public instruction, the president of the state board of agriculture and twenty-eight citizens appointed by the governor. The twenty-eight citizens appointed by the governor have since been changed to nine elective members; but the idea of the original structure was much the same as that underlying the first Harvard governing board, except that the churches had no representation as such. Going on to the Pacific, we find the University of California governed by a board of regents, seven of whom—including the president of the university—are *ex officio* regents and sixteen are long-term appointed regents, representing the various professions and business occupations, and to some extent the most important California communities. When Cornell University was incorporated in 1865 a very similar collection of men was set up as trustees, eight of them—including the president and librarian of the university—being *ex officio* members of the board, and the other thirty being leading representatives of the various professions and business occupations mostly within the state of New York. The original governing board of Yale University was composed exclusively of Congregational ministers, and remained in that condition for ninety-one years; but in 1772 there were added to this original board the governor, lieutenant-governor and six senior assistants in the council of Connecticut. These six senior assistants were subsequently changed to six senior senators. Thus, more than one hundred years ago the governing board of Yale University was brought into close resemblance to the original Harvard board. These few illustrations really cover all the essential varieties in the single boards of trustees.

Within eight years of the act that established the overseers of Harvard College the general court of Massachusetts established a smaller board under the title of the president and fellows of Harvard College, without repealing the act that had established the overseers of Harvard College. The new board consisted of but seven men, including the president and the treasurer of the university; and to this small board the general power of initiation and all money powers were committed, the overseers becoming a reviewing and examining body whose consent was required to important measures, but which had little power to

originate measures. Thus early Harvard University acquired the double-headed or bicameral organization that has proved invaluable in political constitutions, being in this respect the most fortunate of all the American institutions of learning. The same motives, however, which determined the general court of Massachusetts to charter the president and fellows of Harvard College have prevailed in all subsequent cases, though not expressed as at Harvard through the preferable method of establishing a separate governing board. The large body of trustees of an American college or university can not meet frequently. The members are too numerous, and their residences are so widely scattered that meetings are costly and troublesome. Moreover, they are too large for active executive functions. They have, therefore, as a rule, given large powers to an executive or prudential committee, the members of which can be conveniently brought together, and can give much time and thought to the affairs of the university. In this way many of the advantages of the bicameral organization of Harvard have been secured by the other American institutions. The initiating body is the executive committee, and the trustees inquire, examine and approve or consent.

The composition of the first Harvard governing board—the overseers—has been repeatedly altered by the legislature. The original composition was altered in 1780 to the governor, lieutenant-governor, council and senate of the commonwealth, with the president of Harvard College and the ministers of the Congregational churches of the six towns. Thirty years later the board was reconstituted as follows: The governor, lieutenant-governor, councilors, president of the senate and speaker of the house of representatives and the president of Harvard College, with fifteen ministers of Congregational churches and fifteen laymen elected by the ballots of the majority of the overseers. A few years later the senate of the commonwealth was incorporated in the board of overseers. In 1834 it was enacted that ministers of any denomination might be elected to the board of overseers. In 1851 the senate was dropped and the board was made up of the usual *ex officio* members and thirty persons elected by the senators and representatives of the commonwealth in six equal classes, each class to serve six years. Finally, in 1865, the power to elect these thirty overseers in six classes was conferred on persons who have received from the college the degree of bachelor of arts, or master of arts, or any honorary degree, voting on commencement day in the city of Cambridge. This series of changes in the Harvard board of overseers perfectly illustrates certain common tendencies in American institutions of the higher education which will ultimately bring them all to a great similarity so far as their governing bodies are concerned: in the first place, the amount of political control tends to diminish; secondly, the religious denominations lose influence; and thirdly, the graduates of an institution as such come into possession of some power over it. The state universities have steadily endeavored to diminish the influence of politics in the selection of their boards of trustees or regents; and they have also successfully excluded denominational control —not without effort, to be sure; for strangely enough, there was formerly a considerable amount of denominational control over some state universities, exhibited for the most part in the successive elections of presidents. Finally, many of the older American colleges and universities have succeeded in providing, sometimes by new legislation, and sometimes by tacit understandings, that a portion of the members of the single board of trustees shall be elected by the graduates of the

institution. Thus, ten of the trustees of Cornell University are elected by the alumni, and six of the members of the Yale corporation have been so elected since 1872, these six being graduates of the university. The tendency to exclude political considerations and influences from the government of all colleges and universities is strong, and will undoubtedly become effectual within a moderate number of years, with rare and temporary exceptions. The new Carnegie foundation, which provides pensions for teachers, except in institutions under denominational control, will help to induce institutions of learning to rid themselves completely of that control. It is so natural and proper to give some influence over the fortunes of a college or university to the body of its graduates, so soon as that body becomes large and strong, that the third tendency above mentioned is sure to be more and more exhibited. It can hardly come into full play, however, until the institution has been graduating young men for at least forty years.

II.

Another respect in which the American institutions of learning resemble each other is in the constitution and functions of the body of teachers called the faculty, and in the relations of that body to the governing board and to the students. In almost all cases the faculty has no legal powers, these powers residing in the governing board or boards, but is nevertheless entrusted with very important duties. It ordinarily has the control of terms of admission, of studies, of terms of graduation, and of rules of conduct. The teachers composing this body are paid salaries, which constitute their entire compensation, they deriving no income directly from the students. All American institutions are alike in this respect, and therein they all differ from most European institutions. At Oxford and Cambridge the tutor receives a fee for each student to whom he gives direct personal instruction, and the annual sum total of these fees may be larger than the highest salary of an American professor. At most continental universities a portion of the professor's income comes from the fees paid by the students who take his courses, and this portion of his income may be many fold larger than his fixed salary. There is no corresponding practise in the American institutions. The recent introduction of preceptors at Princeton University, inaccurately described in the newspapers as a copying of the English method, preserves the American custom that the college pays for all the instruction which the student receives —that is, the preceptors are to be paid fixed salaries, and are not to receive fees proportionate to the number of young men who take advantage of their instruction. This is a striking uniformity of practise in American institutions, which has grown up in a perfectly natural way through imitation of the earliest institutions, and because of the conformity of the practise to American needs and preferences.

The subjects of instruction which an American faculty will ordinarily deal with, unless the institution has very scanty means, are singularly uniform. Even a small and poor college will undertake to provide instruction in the classics and at least five modern languages, in mathematics, physics, chemistry, biology and geology, with some of their applications, and in history, political science, economics, sociology and philosophy. This list is much like the list of subjects that were to be taught in the University of Virginia, as declared in the act of the general assembly on January 25, 1819, except that Jefferson's list included the principles of agriculture, anatomy, medicine, the law of nature and nations, and municipal law, and was therefore much in advance of its time. It

should also be said that the University of Virginia contained in its eight independent schools of ancient languages, modern languages, mathematics, etc., the germ of the present organization of a university faculty into separate departments. There is now a large amount of consent as to the main topics a faculty of the liberal arts should teach; and the list is a decidedly comprehensive one. In all American institutions of any size the list includes many more subjects than any one student can pursue during the years of his residence.

The professors in an American institution are, as a rule, independent in their work, and themselves conduct the examinations in their several courses. They are not subject to outside bodies of examiners. Their instruction is not limited by the scope of an examination paper which another authority sets; and even the control of the faculty as a body over the work of an individual professor is so tenderly used as to be but rarely felt as a check on the individual teacher's will. The general assumption about the tenure of a professor is that his office is for life. Occasionally, in very new institutions, or in institutions over which political spoilsmen have won some control, exceptions to this rule come to the knowledge of the public; but the dismissal of professors is generally regarded by the public as evidence of an institution's inexperience, or of some temporary intrusion of forces or heats alien to the common university spirit.

The conduct of governing boards towards members of a faculty is generally marked by a high degree of respect and consideration; and great weight is attached to the faculty's advice on all matters lying within their recognized province. This is one of the reasons for the preference all American scholars exhibit for the service of colleges and universities rather than of public schools. Another reason for this preference is the departmental organization of instruction in all American colleges and universities. This organization began at Harvard College in 1766, and was then an invention of great novelty and interest. Previous to that time one tutor had given instruction in all subjects to the whole of a college class during the four years of its residence, a few lectures by the two or three professors being added to this large body of instruction given by one man. The departmental method in one hundred and forty years has spread all over the country, and has become universal in the institutions of higher education. It has also pretty well penetrated the secondary schools, and is on its way into the lower grades. Even during the last fifteen years the departments of instruction in the large universities, like Yale, Columbia and Cornell among the endowed institutions, and Michigan, Wisconsin and California among the state universities, have gained much in influence and power, because they have been organized better and better, and their membership has become more numerous and more united in the pursuit of common ends. At Harvard University the development of the department in merit and power as a working body has been one of the most striking internal improvements of the last ten years. A peculiarity of this development at Harvard has been that the chairman of a department is ordinarily changed every few years, and that in the choice seniority is not much regarded. Even an assistant professor may be chairman.

III.

An American faculty almost always feels a strong sense of responsibility for the conduct of their students, and give much thought to the effects of their teachings and rules and of the common academic life on the character of the student. Not every professor feels this responsibility; but

nevertheless a sense of duty towards the students in respect to the formation of character may be said to be characteristic of all the American faculties; and in this respect they all differ widely from similar bodies in Europe. The German professor, or the French professor, desires to impart to his students instruction and inspiration. He wishes to command their respect, rouse their ambition, and open their minds; but he seldom feels much responsibility for the conduct of university students. The old English universities inherited some monastic habits and a purpose to control the conduct of their students by physical means, such as requiring their habitual presence in chapel and dining hall at fixed hours, and the regular occupation of their chambers at night behind bars and gates; and to this day college buildings at Oxford and Cambridge are constructed with reference to these survivals of an antiquated discipline. The American college professor or instructor, in whatever part of the country he works, feels his responsibilities, but of course has none of the archaic English means and methods of exercising a physical control over his students. He trusts to example, to good traditions, and to that exhortation or guidance which rules supply, even when it is notorious that they can not be uniformly enforced. The faculty is generally reenforced in the exercise of their moral control by the public opinion of the alumni and by the *esprit de corps* of the students; but these supports are rather influences than forces. Hence the great importance in all the institutions of higher education, where large numbers of students congregate, of the transmissible spirit of the place, or the body of traditions handed down year by year from the older to the younger students. This spirit of the place is a compound of transmitted sentiments, manners and customs. There are numerous varieties of it; and yet the resemblances between the spirits, tempers or atmospheres of different institutions greatly exceed the differences. The sentiments nourished at all the American seats of learning are partially indicated by the few words which find place as mottoes on their seals, such as truth, light, learning, knowledge and training, labor, the people's safety and freedom through the truth. Baccalaureate and commencement addresses of exhortation, congratulation and hope are astonishingly alike at all the colleges and universities, for the reason that the institutions cherish the same aspirations and ideals. They are all ardent believers in the possibility of increasing human efficiency and happiness. When they study evils and abuses, it is in hope of discovering remedies or preventives. When they give much attention, as most of them have lately done, to studies in history, economics and government, they are looking for guidance to feasible reform and sound progress. The same altruistic spirit actuates them all.

The sense of responsibility for the conduct of the students and for the reputation of the university leads naturally to the devotion of an appreciable proportion of an American professor's time to matters of administration. The growing authority of the department as an organization has a similar tendency. The group of teachers that constitute a department are naturally ambitious to promote the study of their subject, to increase the amount of instruction offered by it, to improve the quality of that instruction, and to win for their department the increasing respect of the faculty and the students. They are always conferring with each other and with the older students for the promotion of these ends; and an appreciable proportion of their working time is spent in these administrative ways. The general welfare of the institution and its position among the neighboring or kindred institutions are sub-

jects of discussion in the faculty and its numerous committees; and these discussions take time and tax vitality. On many professors who are by nature attractive and sympathetic the students make exhausting demands for counsel and encouragement. The prosperous and progressive American institutions are all alike in expecting services of this nature from professors and other teachers, both old and young; so that the despatch of some administrative duties is a common part of the function of an American professor.

Another call often made on the American teacher is to create or care for collections, and to conduct the business of laboratories. These business-like functions are not unwelcome to professors who are fit for them. Indeed, some professors like these functions better than any others, and make themselves more useful in these directions than they could in any other; but, welcome or unwelcome, they fall to the lot of a large proportion of the higher teachers of a university, and take their time away not only from teaching but from research. To the creation and care of collections some of the most eminent American scientists gave a large proportion of their time, as, for example, Asa Gray, the botanist, and Louis Agassiz, the zoologist, at Harvard; James T. Dana, the geologist, and O. C. Marsh, the paleontologist, at Yale; James Hall, the geologist, at Albany; and Joseph Henry, the physicist, who was for thirty-two years secretary of the Smithsonian Institution at Washington. Innumerable lesser men have devoted to administrative work, or to libraries, collections and laboratories very significant portions of their total working time.

The governing bodies of American universities being generally composed of men not themselves experts in any of the university activities, the real direction of those activities devolves on the professors and other teachers; and there is no avoiding this delegation of power. For an American professor, or an American faculty as a whole, such questions as these are always open—how much administrative work shall fall to a professor? to what extent may administrative work, including museum work, be safely entrusted to special officials who are not teachers, but devote themselves almost exclusively to administration? and to what extent should scientific investigation and literary productiveness be made the function of men separated from the large class of university teachers, and expected to devote themselves to original research? Thus far, the expectation of all the American colleges and universities has been to combine these three functions—teaching, administration and research—or at least two of them, in the single person of the professor; and to-day this remains the commonest expectation, especially in the sciences, both pure and applied. Of late years the demand for men as professors who are capable of original research has been rising; that is, in selecting professors more account has lately been taken of proved capacity in this direction than used to be; but still there are very few positions in the United States where the prosecution of scientific investigation is made the chief business of a professor. In the thought of American college trustees, research and literary production are not separate functions, but accompaniments of teaching, to be maintained all the time, like bodily exercise, in connection with other stated occupations. The Germans have done more than any other people to create positions for investigators; and they have invented and put into force certain regulations for such positions which tend to secure the continuous activity of their incumbents. These regulations prescribe a moderate amount of public teaching by lectures or periodical reports, and the instruction and training of

some small number of assistants and advanced students who are frequently replaced. They really effect a combination of investigation with teaching, under the expectation that the greater part of the vital force of the professor will go to investigation. The triple function of the American professor and the American faculty illustrates perfectly the community of ideals in the institutions of higher education. American colleges and universities are unanimously of James Mill's opinion that to propagate the truth and to serve mankind are the only worthy objects of ambition, but with them to propagate means to seek, discover and bring forth truth, as well as to diffuse it. To accomplish these—the only worthy objects—requires direct teaching, conscientious administration, and eager research—all three.

IV.

All the American colleges have now adopted the elective system of studies, though not all to the same degree or extent. In general, a college or university teaches as many of the subjects for which there is a visible demand as the pecuniary resources of the institution permit; or, in other words, it maintains as broad an elective system as the number of teachers it is prepared to pay for can provide. There is, however, one other important limitation of the application of the elective system in the American colleges. Most of them receive their pupils from the secondary schools in such a condition that they feel obliged to devote one year, or even more, to studies appropriate to the secondary schools but not pursued there. They combine with these belated subjects a few of the most elementary subjects appropriate to colleges, and thus make up a prescribed freshman year, or, in some instances, a prescribed course for the freshman and sophomore years. This policy is, of course, a temporary one. It has already disappeared in some of the strongest institutions; and its complete disappearance in the American colleges and universities is only a question of time, for its evils are considerable. It reduces undesirably the number of years which the student can devote to the subject or subjects of his choice. It will make, for example, a great difference in the attainments of a young student of economics, or government, or physics, whether he can take a succession of courses, one or two at a time, in his chosen subject during four years, or three years, or only two years. The third or the fourth year given to advanced courses in his chosen subject is vastly more profitable than either of the underlying years. The ambition of departments, and their steady pursuit of their departmental interests, are sure to contribute powerfully to the remedy of this defect in the application of the elective system. Every department is always trying not only to increase the number of courses it offers, but also to prolong the series of courses which it offers in succession to persevering students. This departmental action tends to extend the instruction offered by the university, and to broaden and enrich the intellectual life of the institution. The advanced students who are attracted to a department which offers a long series of consecutive courses will contribute largely to make the university a place of research as well as of instruction. It is needless to remark that this expansion of advanced teaching is costly; it is worth all its costs.

Few people seem to understand how long and slow has been the growth of what is now called 'the elective system' in the American colleges and universities. It is eighty-one years since the University of Virginia was opened, with no general curriculum, the students selecting their classes or schools for each year. It is eighty years

since the beginnings of what is now the elective system appeared in Harvard College. It is more than sixty years since Francis Wayland published his 'Thoughts on the Collegiate System of the United States,' a work which led a few years later to the temporary adoption of a voluntary method at Brown University. For the first forty years of this long period the progress in liberty of choice for the student was slow; but for the last forty years it has been rapid, partly because of the great number of new subjects which have forced themselves on the attention of the educated public and the business world, and partly because the resources of the institutions of higher education in the United States have increased during the last half of this period very much more rapidly than they did during the first half.

In the long discussion of the effects of the elective system disproportionate attention has been given to the effect on the student of the liberty to select his studies from a large number of various courses. The most far-reaching effects of the elective system are its effects on the profession of teaching as a whole, and on national scholarship. Through the working of the system, the range of studies in the American universities, not for undergraduates only, but for graduates and professors, has been greatly widened. The standards of attainment for both teachers and taught have been much raised; intellectual efficiency has increased and the expectations and duties of the universities with regard to their own productiveness and influence have been exalted. The academic world of to-day hardly remembers the intellectual poverty of the American college of fifty years ago, when the entire amount of instruction offered by most colleges was the amount which a single student could absorb in four years—most of it being, of course, strictly elementary in quality, as well as thus closely limited in quantity. The titles of some of the older professorships in Harvard College indicate the expectation that one professor could occupy satisfactorily several large fields; thus, the professor on the Alford foundation, which dates from 1789, was expected to cover natural religion, moral philosophy and civil polity, and down to 1871 that small part of his time which this one professor could give to civil polity provided all the instruction there was in Harvard University in the subject of economics. The Hollis professorship of mathematics and natural philosophy was founded in 1727; and no other professorship of mathematics existed in the university for one hundred years, the one Hollis professor having charge of mathematics and of the entire subject which now goes under the general name of physics. There are still in the United States some colleges where the professors occupy not chairs but settees, as Dr. Oliver Wendell Holmes said of himself when he taught anatomy, physiology and microscopy; but these settees are fast falling to pieces. The change from a uniform prescribed curriculum, through which the college undertook to carry on to graduation almost all the young men who entered together in any given year, to a range of studies so wide that no two students need pursue precisely the same course between entrance and graduation has been very wholesome all over the country in another respect—it has made the college less an administrative machine for turning out an average routine product, and more a living fountain of individual scholarly interest and ambition.

V.

The large and strong universities in America are alike in their general purpose to provide good training for all the professions or intellectual occupations. It was two endowed institutions—Harvard and

Yale—that started scientific schools almost simultaneously in 1846–7; and this purpose characterizes the great endowed institutions to-day quite as strongly as it does the state universities. To this general proposition there is only one important exception; the state universities and many of the endowed institutions give no direct training for the ministry. For law, medicine, teaching, engineering of all sorts, mining, agriculture, manufacturing, the mechanic arts, and business, the American universities, so far as they discern the needs of the country, make the amplest provision which their resources permit. Several of them have lately added architecture to the list of their professional subjects. The training of professional musicians in a large sense has been taken up by a few universities. As soon as forestry was recognized as a needed profession in the United States, several universities began to provide instruction in that great subject. It is obviously the purpose of the American institutions of learning to train young men for all intellectual callings, making no distinction among them as regards their dignity and serviceableness.

The one exception in the case of the ministry has been made by the state authorities, because the states can not well admit single denominations to the control of theological instruction in their universities, and until recently undenominational theological instruction has not been recognized as a possibility. Many of the endowed institutions have so dreaded denominational control that they have preferred to omit altogether the department of divinity from their organization. Even institutions expressly created to spread a knowledge of the gospel and to prepare missionaries and schoolmasters, like Dartmouth College, for example, have omitted to establish a school or department of theology, preferring to send their graduates in search of theological training to special schools, or to other colleges which maintain a department of divinity. In this respect the case of Dartmouth College is particularly interesting, for it maintains a medical school, a school of science and the arts, a school of civil engineering and a school of administration and finance, but no school of theology.

The University of California very well illustrates the comprehensive purpose of American universities with regard to professional training. In addition to colleges of letters, of social science and of natural science, it maintains colleges of commerce, agriculture, mechanics, mining, civil engineering and chemistry, an institute of art, a college of law, a medical department, a dental department and a college of pharmacy. This purely state university is well matched by Cornell University on the other side of the country, a university governed by a board of trustees, and enriched by many private benefactions, but also by the bounty of the United States and the state of New York. This institution comprehends, in addition to the college of arts and sciences, a graduate department, the college of law, the medical college, the New York state veterinary college, the college of agriculture, the college of architecture, the college of civil engineering and the college of mechanical engineering and mechanic arts. It is clear, therefore, that the American universities intend not only to train men for the professions long called learned, but to 'promote the liberal and practical education of the industrial classes in the several pursuits and professions in life,' to quote the act of Congress approved July 2, 1862, granting to the several states public lands for educational purposes. Of course, many American colleges and universities are at present unable to furnish this great variety of professional instruction; but they all wish to do so, and all press that way as fast

as possible. It is also true that separate schools have been set up in many parts of the country to train young men for the technical and scientific professions; but in time these schools are likely to be transferred to neighboring universities, or to content themselves with training men for the lower grades of these professions, the universities all over the country being sure to appropriate the training of young men for the higher walks of the scientific professions and of business. The same forces which have carried the separate law schools and medical schools into the universities will carry the technical schools in the same direction, unless indeed these schools accept a lower function, like the training of foremen, draughtsmen, surveyors, assayers and the like. In respect to this comprehensiveness the American universities differ widely from the English Oxford and Cambridge, in which training for the professions has always had but a small place, unless indeed such preparation as these universities have long given for admission to orders in the Anglican church can by courtesy be called professional training. It is obvious that the policy of the American universities now under consideration has had, and is going to have, a strong effect to uplift the relatively new professions, like those of engineering, applied chemistry, architecture, music, mining, forestry, the public service, transportation and large scale manufacturing. These are highly intellectual occupations not yet universally recognized as on a level with divinity, law and medicine. The American universities will, in a few generations, put them all in their higher grades absolutely on a level with the older callings.

VI.

The American colleges and universities are alike again in their confident expectation of gratitude and support from their graduates; and the American public cordially sympathizes in this expectation on the part of the institutions and in the grateful and affectionate feelings of the graduates. For example, the public expects its own servants to exhibit a frank affection for the places of their education, and to show partiality for the graduates of their own particular institutions. It rather likes this partiality, as the natural result of youthful friendship and association. Every American institution of higher education counts on services to be rendered to it by its graduates, when they have come to places of influence and power, and esteems the success of its graduates in after life its own best asset, and its surest ground for public confidence and support. The endowed institutions rely on pecuniary support from most of their graduates who prosper in business or in the professions; and this reliance seems to be sound, in proportion to the age and merit of the respective institutions. The older they grow, and the greater their success in teaching and in scientific and literary production, the surer is their reliance on the disposition of the alumni to contribute substantially to the enlargement and improvement of their resources. This is one of the reasons that the American colleges and universities are so eager to train young men for the highest efficiency in all the professions and other intellectual occupations. Efficiency leads to success in all walks of life; and the success of its graduates is sure to contribute to the prestige and prosperity of any institution of the higher education, and to improve its material resources.

It is now time to consider briefly some of the differences among the American colleges and universities. It is certain that they have many strong and deep resemblances. What are their differences; and are they as well marked as the resemblances? The resemblances spring from a

similar historical development of policies and ideals; the differences are largely external, though not without importance. Thus, the sites of the American colleges and universities vary greatly in their natural beauty and their artificial surroundings. Some, like Columbia, Pennsylvania, Tulane and Chicago, have thoroughly urban sites, and those unlovely surroundings which are inevitable in the midst of a dense population. Others have suburban sites, capable of presenting some pleasant aspects of trees, shrubs and flowers, and lying within easy reach of the real country, or of public parks and forests. Others again are situated in small towns or villages where they possess considerable estates of their own, and are surrounded by the open country. These small college or university towns sometimes possess great natural beauties, such as hills, lakes or wooded glens near by, or mountains in the distance can give; while others have been placed on sites singularly devoid of natural beauty, or of interesting objects in their landscape. These differences of situation undoubtedly affect considerably the sentiments of the students towards their respective colleges, and in some degree the turn of their minds towards natural beauty. One can not but believe that such a prospect as that which the University of Virginia commands towards the Blue Ridge, or the University of California through the Golden Gate, must have a life-long effect on the mental habits and outlook of the young men and women who learn to love it. The ideal university ought to have a seat as beautiful as that of the Academy of Athens.

The American colleges and universities are situated in very different climates as regards summer heat, winter cold, dryness or dampness and exposure to malarial influences; and those most favorably situated for the promotion of health and hard work at all seasons of the year will doubtless prove to possess some permanent advantages over those whose situations are less desirable in this respect; but after all the main differences among these institutions as regards situation will in the long run be found to consist in their relative detachment or isolation from large concentrations of population. There will probably always be families or parents who think that young students should be separated from the temptations and distractions of city life, while other equally careful and conscientious people will think that music, the theater, the pleasant activities of polite society and the artistic interests which cities develop are essential accompaniments of the higher education.

The colleges differ widely in the use of dormitories, or halls of chambers, for the students. In an institution like Harvard or Yale, where these halls of chambers are numerous and large, the student life differs somewhat from the student life of a university like Michigan, where there are no such buildings; but the fraternity houses, which have become common in most of the American institutions, diminish considerably this difference in college life which results from the use or non-use of dormitories. The social student life in the different institutions is also affected by the homogeneousness, or heterogeneousness of the students. In most of the eastern institutions the students represent a great variety of family conditions. Some are rich men's sons, and some are poor men's sons; but the majority come from families that are neither rich nor poor. The bread-winners of the families follow an extraordinary variety of occupations. The eastern colleges in general—particularly those that are urban—have therefore had very heterogeneous bodies of students. On the other hand, some of the newer colleges and universities, situated in regions where agri-

culture is the principal occupation of the people, have remarkably homogeneous bodies of students, the fathers of the students being for the most part independent farmers, mechanics, and professional people who themselves live in the country, and are in moderate circumstances. This agreeable homogeneity tends, of course, to diminish, if strong differences of condition are developed among the population on the natural water-shed of the institution, or if the college site, once thoroughly rural, becomes citified through the advent of successful manufactures or of active trade.

There are certain more subtle differences between the American colleges, which it is easy to feel but hard to describe. Some of them have a characteristic tone, or common sentiment, towards some particular religious organization or institution, as for instance, towards the Protestant Episcopal, or the Congregational, or the Presbyterian, or the Methodist church; in some there is such an amount of agreement among teachers, graduates and students on some political dogma, like protection, for example, or bimetallism, or state rights, as to make rejection of that dogma a real difficulty for any discordant individual. Some exhibit a predominant interest in the applications of science; others maintain a strong interest in literature and history—an interest manifested in a striking degree by former generations of teachers and students at the same place, and also by eminent graduates. Others continue to exhibit an affectionate respect for some ethical or religious movement of former times. There is no doubt that the institutions of the north, the south, the east and the west respectively have somewhat different effects on the manners and bearing of their students, just as these students show slight common differences of voice and speech. These local differences are tolerably persistent; although there are now many American colleges to which students come from all parts of the country, bringing with them their own local manners, voices and pronunciations. In spite of these recognizable differences, it is to be observed that the American speech from Canada to the Gulf of Mexico, and from the Atlantic to the Pacific, presents no such strong local variations as little England presents, or as distinguish the north German from the south German.

There seems to be a considerable difference among the American colleges and universities in regard to charging a tuition fee; but this difference is really not so great or so important as it seems. To be sure, some of the state universities charge no tuition fee, while most of the endowed institutions charge a tuition fee varying from $50 to $200 a year; but it is to be observed, on the one hand, that many of the endowed institutions remit tuition fees with liberality, or possess numerous scholarship funds, the income of most of which is sufficient to meet the tuition fee and leave a balance applicable to board or lodging, and, on the other, that the state institutions have established the custom of charging various fees for entrance, incidentals, graduation and laboratory courses. Some of the state universities make a distinction between the college and the school of agriculture and mechanics arts, on the one hand, and the law school and medical school on the other, charging no tuition fee in the first group, but an ample tuition fee in the second. In the state institutions fees for some of the objects just mentioned are invariably collected; and the older the institution the larger these fees are apt to be. Thus, in the University of Michigan the matriculation fee is $10 for a citizen of Michigan and $25 for a person who comes from any other state or country; the fee for incidental expenses in the department of literature, science and the arts is $30 for Michigan students and $40 for all others; and in the

departments of engineering, medicine, law, pharmacy and dentistry this fee is $35 for Michigan students and $45 for all others. Fees are also required from all students who pursue laboratory courses; and in all departments there is a fee of $10 for graduation. The state universities which maintain summer sessions habitually charge a tuition fee for that session. At the University of Michigan this fee is $15 in the department of literature, science and arts. In the University of Illinois fees analogous to those of the University of Michigan are charged; and in addition there is a regular tuition fee of $50 a year in the college of law, and of $120 a year in the college of medicine. The state of California has been liberal to its university and to its schools, and tuition in the colleges at Berkeley is free to residents of the state; but non-residents of California are charged a tuition fee of $20 a year, and there is the usual charge for laboratory supplies, this charge amounting to from $5 to $30 a year. The law school has a fee of $10 a year for incidental expenses, and the medical department has a tuition fee of $150 a year, beside a matriculation fee, a graduation fee, and large fees for dissecting material, the rental of microscopes and laboratory breakage. When we consider, further, that the tuition fee, even where it is large, is seldom more than one third of the total cost of remaining one year in college, and that foregoing the productive labor of the boy is the real difficulty to be met by a poor family in sending a boy to college, we shall perceive that the varying amounts of the annual fees charged for tuition do not present a very serious difference among the American institutions of the higher education. Moreover, the tendency in the state institutions is to enlarge their annual fees under various names; and in the endowed institutions the tendency is to provide more and more scholarships and other aids for poor students, and to offer to competent undergraduates who need to support themselves during their college life better and better opportunities for earning money. Such opportunities are, of course, more easily procured in colleges situated in or near large cities. There they are so abundant that hundreds of young men go through these colleges chiefly on resources which they themselves earn, and graduate without having incurred debt. It is hard to do as much in an institution situated in a village or small town, even though no tuition fee be demanded of the student.

The American colleges and universities differ among themselves considerably in regard to admitting women to common residence and equal standing with men; but here again the differences are not as great as they at first sight appear to be, and they are diminishing. One may say, in a general way, that the leading eastern institutions are not coeducational, and that the leading western institutions are coeducational; but many of the eastern institutions, even those considered most conservative, are partially open to women, and others have entered into more or less intimate association with separate colleges for women placed in the same town or city. Among western endowed institutions there are several that have ceased to be thoroughly coeducational and have decided to segregate the women apart from the men. Leland Stanford Junior University, one of the newest and now one of the richest of American universities, has given notice that it will not, under any circumstances, admit more than a specified number of women. In the eastern part of the country the wholly separate college for women thrives, and gives evidence of present strength and increasing vitality. The probability is that, with the growth of educational resources and the increasing heterogeneousness of the population in the newer parts

of our country, the practises of the west will be assimilated to those of the east in regard to the education of young women with young men—that is, some institutions will remain frankly and throughout coeducational while others will detach the groups of women more or less from the groups of men, and others again will be coeducational in their graduate schools and summer sessions, but not elsewhere. Moreover, both separate colleges for women and colleges for women affiliated with universities for men will probably arise in the west.

A significant distinction among American colleges is based on their terms of admission, some requiring examinations, but the great majority admitting on certificates from secondary schools. Almost all the colleges use each method in some measure; but there is an important group of eastern colleges which admit regular students only on examination. Both methods have been improved and extended in recent years; so that there is now a good chance to test fairly the relative merits of the two methods. That method will ultimately be preferred by schools and colleges alike which delivers to the colleges the ablest, best trained, most ambitious and most efficient boys and girls. Between the two groups of colleges the decisive test will be the success of their graduates in after life. The differentiation among colleges on this basis may turn out to be quicker and more decisive than most experts have imagined, or on the other hand the results may be obscure and hard to demonstrate. Again, a third method, like that of Germany, may supersede both of the existing methods.

Another distinction among the leading universities of this country depends on the proportion which the work they do for undergraduates bears to the work they do for young men who already hold a bachelor's degree. The graduate schools in arts and sciences are increasing rapidly in number and in size; but the number of universities which require a bachelor's degree for admission to their other professional schools is still very small. Here again a sound experiment is in progress under fair conditions, and in ten years more it may be possible for judicious observers to determine what the interest of the universities is in this matter, and what the interest of the community. At any rate, it is certain that preparation for the professions is growing more and more elaborate, and that the influence of the professions steadily increases.

There is an important difference in the organization and management of the American institutions of higher education which has not attracted much public attention, but which really affects strongly the present management of these institutions and their future prospects. In many of the institutions, particularly the older and stronger ones, the president of the college or university is a member of the governing board, or boards, with the full powers of a member. In others, the board of trustees or regents elects its own chairman; and the president of the university, though invited to attend the meetings of the board, is not a member thereof, much less its head. The position of the president who is a member of the governing boards is, of course, stronger than that of a president who is not, provided that his personal quality and his experience are such as to give him influence with the boards. A board of trustees, which invites the presence of the president who is not a member by right, is inclined to look on the president as one of its numerous employees, with whose service they can dispense, if they like, as they would with the services of a professor, instructor or secretary. Such a relation to the governing board impairs the dignity and stability of a presidency, and there-

fore the influence of the incumbent. This is not a local or sectional difference in American universities. Some of the newer endowed institutions in the east have a president who is not a member of the governing board, while some of the state universities of the west have made the president invariably a full member of the board of regents. As the American institutions have grown, the function of the president has become more and more important to their prosperity and progress. In early times the president was the principal teacher. Down to the early part of the nineteenth century he was almost invariably a minister. In most of the larger institutions the president no longer teaches, and in many he is a layman. Common experience during the last fifty years teaches with certainty that the efficiency of any corporation—financial, manufacturing or commercial—depends on its having one responsible head who has knowledge of all its concerns, and gives guidance and inspiration in all its principal activities. A university corporation can not be an exception to this rule for securing efficiency. Again, the experience of the last fifty years teaches clearly that in all fields of human activity it is the trained expert who must invent and give direction. The president of a university must be either an expert himself in educational administration, or he must be a man who thoroughly understands how to utilize expert service. And thirdly, experience proves that long service gives accumulating value to well-selected officials; so that universities which give their presidents an honorable tenure, and get from them long service, will be likely to win great advantages over those who do not.

The American universities are obviously divisible into two groups, the endowed and the state supported, although the endowed may sometimes receive aid from government, and the state supported may possess some endowments. This difference in respect to the sources of their income, however, affects the policies and tendencies of the two groups much less than might be imagined. At present the leading endowed institutions are richer, and have larger annual budgets, than the leading state supported institutions; but, of course, this comparative condition may any year be reversed. It would be hard to prove that any important difference in discipline, educational policy, or scholarly ambition and aim, corresponds with or accompanies this division by sources of income. On the whole, the policies and aims of the two groups are extraordinarily similar. The division is not a strict geographical one. Most of the strong state universities are west of the Alleghenies, but in that vast region strong endowed institutions have also arisen, while in the south both groups exist side by side. California supports the state university of largest annual budget, and is also the seat of one of the richest of American endowed universities. The state universities are all young—Michigan not yet 70 years old, Wisconsin not yet 60, and Illinois, Minnesota and California not yet 40. Their future is very bright; but not brighter than that of the leading endowed institutions. The two sorts of university will both serve the country greatly, maintaining a fine rivalry in scholarship and in serviceableness, making common cause in promoting national intelligence, righteousness and efficiency, and illustrating the best results of the American passion for education. If, then, the American colleges and universities are strikingly similar, in spite of local and unessential differences, it is because they express and illustrate the fundamental convictions, beliefs and aspirations of the American people.

Charles W. Eliot.