he had incurred an expense of more than $200,000, in selecting ing lands, fees for entering the same, taxes, interest, and the various expenses that were involved in such undertaking, and that the State was in no wise responsible for what he had expended. If repayment were ever made to him, it would come from the increased profits upon the sale of the land, but the actual market value of the land when donated to Cornell University was secured to the State by his bond. "Feeling a deep interest in the question of practical education in agriculture and the mechanic arts, for which this fund was voted by Congress, I volunteered to undertake to create a fund three or four times as large as that which the State could produce for the same object that Congress intended, and at my own request and expense, without charging a single dime to anybody for my services. And this I undertook for the Cornell University only after the friends and founders of other colleges declined to join a united effort, in which I proposed to be responsible for one-tenth of the risk and expense of creating this larger sum for the endowment of those colleges. This is all there is of it; this is the sum total of my offending. Whether it will realize as much or more than I anticipated, whether it is three millions or thirty millions, it will be all paid over to the comptroller of the State of New York for the purposes specified in the agreement, and the State of New York will appropriate the proceeds of the fund as stipulated in the bond, whether the fund is protected by the organic law of the Constitution or not." Misconceptions of his motives and ingratitude for the services which he had rendered the State did not induce Mr. Cornell to swerve from his generous and self-sacrificing purpose. Of Mr. Cornell's answer to this charge, the Hon. William Kelly wrote: "I cannot refrain from expressing my gratification with the style and matter of your letter to the Rochester Union. It is so simple in style, so direct, so able, so conclusive, as to fully meet my hopes. I am delighted with it. No sensible man will again assail you as to your management of the finances of the university or your motives of action. Your vindication from the slanderous charges is complete and final."

The unselfishness of Mr. Cornell's services in behalf of the university had not attained a final vindication with this letter. In 1873 a bill was presented in the Legislature to facilitate a settlement between Ezra Cornell and the State with reference to the college land grant. Charges were made in the debate, by a political opponent of Mr. Cornell, of breach of trust in the execution of his contract with the State,

of using the power entrusted to him to add to his own wealth, of not depositing with the State Comptroller adequate bonds and securities, and that the university as administered did not comply with the conditions of the law under which it was established. Mr. Cornell requested promptly that a committee be authorized by the Legislature, and appointed by the governor, the Hon. John A. Dix, a majority of which should consist of members of the party opposed to him in politics, to investigate the whole question: whether the laws for the sale and disposition of the college lands had been complied with, whether the securities received for its sale were adequate, what contracts had been made and upon what terms, the value of the lands held by Mr. Cornell in behalf of the university, what charges had been made for his services, whether the law of Congress had been complied with by the university, and to report upon the present condition of the same. A commission of the highest character was appointed to conduct this inquiry, consisting of the Hon. Horatio Seymour, former governor of the State, the Hon. William A. Wheeler, later vice-president of the United States, and the Hon. John D. Van Buren. The report of this commission, which was presented after a most thorough and comprehensive investigation, was a noble tribute to Mr. Cornell's integrity, his lofty purpose, his almost unparalleled generosity and sacrifice in behalf of the university, as well as to the sagacity which had reserved this part of the national land grant and made it possible to realize, as no other State had done, the objects of the law. Changes in detail of the form of the financial relations of the university to the State were suggested, with the view of the absolute protection of the land grant fund, and, at the same time, securing facility of administration in the sale of the land by Mr. Cornell. The commission was divided upon the question whether the State or the university was the owner of the proceeds of the sales of lands above the sum, at which it had been purchased by Mr. Cornell. The Hon. Horatio Seymour, the minority of the commission, held that all such proceeds constituted a personal gift of Mr. Cornell to the university, and were not subject to the conditions of the act of Congress, a view afterward sustained by the United States Supreme Court.

Mr. Cornell's adherence to his conviction of the final value of the land to the university was often not received kindly by members of the Board of Trustees who desired to realize at once the whole of the endowment and did not share Mr. Cornell's faith. Even the president of

the university wrote, December 5, 1872: "Better a million added to our endowment now than three millions five or ten years hence. The only way is to go on developing rapidly, showing that we are strong and progressive and do not ask favors before the favors come. Then men think it an honor to give. We must go ahead promptly. We must show that we are not standing still; that we are not looking forward vaguely; but that we know what we want and are marching straight toward it. Then gifts will come. Then it will be worthy of any man's ambition to aid in developing our plans. To push on vigorously now is to conquer. To work slowly until our active men get sleepy and easy-going is not what we ought to do. I want to see the Cornell University the foremost in the land during our lifetime; it can be so, but only by prompt, vigorous strengthening and extension. Most earnestly, I say, if you can lop off the lands at a million and a half or even less, I think it wise policy to do it. The simple reason why we do not call Tyndall and other distinguished non-resident professors, is because we cannot afford it. Our other necessities have forced us to cut off to a large extent that part of our original scheme. Now is the time to go on promptly with our policy. Hope deferred maketh the heart sick. Cure us by allowing us to spring ahead and to go on vigorously and promptly and let our university soon stand beside the greatest universities of the world, and for the conflict in which we shall triumph." Mr. Cornell possessed that quality of mind that could wait for results, having faith that the future would realize his far-seeing plans.

VI.

CONSTITUTION OF THE UNIVERSITY.

1. PLAN OF ORGANIZATION.—2. THE MILITARY DEPARTMENT.—3. MANUAL LABOR.—4. COEDUCATION.—5. THE NON-RESIDENT LECTURE SYSTEM.—6. THE UNIVERSITY SENATE.—7. ALUMNI REPRESENTATION IN THE BOARD OF TRUSTEES.

At the second meeting of the trustees, held in Albany, September 5, 1865, Mr. Andrew D. White was appointed a committee to draft by-laws. There is nothing to show that his election to the presidency was at this time contemplated, although it is possible, and under this

modest title of by-laws, the elaborate report on organization was included. At the fourth meeting of the trustees, held in the Cornell Library, October 21, 1866, this report was presented. As Mr. White was unanimously elected president of Cornell University at this meeting, his report has an authoritative value as embodying the fundamental ideas, which, in his judgment, should determine the form and scope of the new university. While criticizing at times established views, it defended the plan of instruction which the new institution of learning was to illustrate. In surveying these views after the lapse of a quarter of a century since the opening of the university, and in connection with the methods and subjects of instruction which prevailed at that time, we must recognize their freshness, their catholicity, their sympathy with all learning, and at the same time their powerful advocacy of the new education, which gave prominence to the natural sciences, the study of history and the fine arts, as well as of applied science. There was also an appreciation of past learning, such as we might expect from a scholar whose special study had been directed to the history of culture and the forces which constituted modern society. Much that was announced as to be tested in the new university has since become characteristic of modern education. Much that was incorporated in the original plan had been the subject of solitary advocacy, and even of agitation. The success of the ideas which lay at the basis of the university was due to the sagacity with which the importance of the new branches of study, and the demands of modern life upon a new institution of learning were recognized. To embody in a new university new views of education was far easier than to modify the conservative courses of study which were enthroned in the older institutions. Some features in the proposed university were personal to the author of the plan of organization, others had been tested successfully in institutions of narrower scope. The union and equality of various branches of study in classical and modern literature and science in one university and a recognition of the equal importance in society and modern life of applied science, were the striking features in the new university. In the national and State legislation which formed the charter of the university, and in the views of the founder, two convictions were prominent: first, the need of thorough education in various special departments, among them the science and practice of agriculture, of industrial mechanics and kindred departments of study, to realize which, institutions should

be founded with every appliance for discovering and diffusing truth,—that such instruction should not be subordinated to any other, and that the agricultural and industrial professions should be regarded as the peers of any other. At the same time, the liberal education of the industrial classes in the several pursuits and professions in life should be included. The second of these convictions was that the system of collegiate instruction, now dominant, leaves unsatisfied the wants of a very large number, and perhaps the majority, of those who desire an advanced general education; that although there are great numbers of noble men doing noble work in the existing system, it has devoted its strength and machinery mainly to a single combination of studies, into which comparatively few enter heartily; that, where more latitude in study has been provided for, all courses outside of the single traditional one have been considered to imply a lower caste in those taking them. General education has, therefore, lost its hold upon the majority of trusted leaders of society, and become underestimated and distrusted by a majority of the people at large, and, therefore, neglected by a majority of our young men of energy and ability. To meet this need it was held that colleges of wider scope should be founded; that no single course should be insisted upon for all alike; that various combinations of studies should be provided to meet the need of various minds and different plans. It was proposed to divide the university into two great parts, the first of which should comprise departments devoted to special sciences and arts. This was to include agriculture, the mechanic arts, civil engineering, commerce and trade, mining, medicine and surgery, law, jurisprudence, political science and history, and education. It is noticeable that the departments of law and medicine are included in the original plan, and that jurisprudence is not included under the department of law, but was evidently to be treated historically, and is, therefore, grouped with history and political science. The second division was to embrace science, literature and the arts in general, and was to include a "first general course," corresponding to the classical course in other colleges; a "second general course," in which Latin was to be retained and German substituted for Greek, corresponding to the course which bore later the name of the course in "philosophy." The "third general course" embraced French and German instead of Latin and Greek. At this time few institutions exalted English literature and philology to rank as a study equal to foreign literatures, and no provision was made for it. To these courses a scien-

tific course and an optional course were added. The latter course was practical, and permission was granted to properly qualified students to choose such courses of study as they were prepared to pursue, "in order to give to the student full and entire freedom in the selection of studies and freedom everywhere equal to that which prevails in the universities of continental Europe."

Special students were those who desired to pursue a definite line of study, as mathematics or chemistry, under the direction of a professor having charge of a department. A student who had spent the requisite time at the university and passed the proper number of trimestrial examinations was to be permitted to apply for a degree, which should bear a relation to the character of the subjects which he had pursued. If his studies were, in the judgment of the faculty, equivalent to either of the general courses, he could receive one of the usual baccalaureate degrees. Soon after the opening of the university the general courses were arranged in the order of scientific, philosophical, and arts, and the third general course based upon the modern languages was dropped. Four special or technical courses were recommended, viz., agriculture, the mechanic arts, and civil and mining engineering. To these were added courses in chemistry and natural history, for all of which courses the degree of bachelor of science was to be given.

Upon the question of the ability of students entering upon a course of study to choose wisely amid a multiplicity of courses those subjects best suited to his intellectual tastes and future needs, the report argues: The failure of college men of the highest standing in practical life is due to the existing system, but while the student may not be a perfect judge of the relative worth of the studies from which he may choose, or of their importance to him, his judgment still possesses value; and an overwhelming majority of students are competent to choose between different courses of study carefully arranged. By the advice of older friends and the faculty of the university, a young man ought to be able to make a choice based upon his previous education and means of future education, upon his tastes, position and ambition. No results could be more wretched than those of the existing system.

The plan of organization here proposed would make possible a practically unlimited number of courses, based upon a choice of the student or the advice of some individual. The report assumes competency on the part of mere beginners in knowledge, whose powers are

but imperfectly developed, who have as yet no vision of any other fields of knowledge, the goal of whose intellectual life is not clearly defined and whose future is in most cases undetermined, to select wisely and well among the variety of subjects presented in a great university. With adequate knowledge of the subjects necessary for their highest intellectual training and development, and for their future needs, men of the highest genius have frequently failed to recognize where they were strongest until late in life. The old education rested upon the harmonious development of all the powers of the youthful mind and the recognition of the varied value in life and culture of a sympathetic acquaintance with the world's knowledge. The aim of education was, by the study of natural science, to teach observation, and to introduce the student to a knowledge of the world around him; by language, to teach accuracy of thought and expression, and unlock the treasures of classical and modern literatures; by history, to enable him to know something of the world's intellectual, religious and political development; by the study of the science of the mind, to introduce the student to himself and to his immortal capacity and destiny; by mathematics, to make accurate thinkers and to show something of the methods of investigation into the laws of the physical universe. Even if some students were silent and uninspired in the chambers of knowledge, they might have been equally blind and insensible had their choice been free, but limited to a narrower horizon, for in many cases they would be obliged to choose without a motive. A self-direction which is possible to all, indeed essential to all, in a certain stage of growth, presupposes a certain preliminary training and maturity, and is only possible when it is the flower of a thorough antecedent culture in which talent as well as taste has been developed.

Upon the value of disciplinary studies the views of the committee are characteristic and suggestive. They advise those who have time and taste for the study of the classics should continue that study, the Greek for its wonderful perfection, the Latin for its value as a key to the modern languages and to the nomenclature of modern science, and both Greek and Latin for their value in the cultivation of the judgment. The modern languages, as well as the sciences, which, in in recent years, have attained such great importance, should be recognized at their full value in imparting instruction and in securing mental discipline. The idea that the only mental discipline is that which promotes a certain keenness and precision of mind is regarded

as fallacious; there is another kind of discipline quite as valuable—discipline for breadth of mind. For the former, such studies as mathematics and philology are urged; for the latter, such studies as history and literature. To say that the latter are not disciplinary is to ignore perhaps the most important part of discipline. In American life, there will always be enough keennesss and sharpness of mind; but the danger is that there will be neglect of those noble studies which enlarge the mental horizon and increase the mental powers, studies which give material and suggestions for thought upon the great field of the history of civilization. "Discipline comes by studies which are loved, not by studies which are loathed. There is no discipline to be obtained in droning over studies. Vigorous, energetic study, prompted by enthusiasm or a high sense of the value of the subject, is the only study not positively hurtful to mental power; hence the great evil of insisting upon the same curriculum for students regardless of their tastes or plans." It is not clear what mental injury is anticipated where the foregoing conditions are not met, as it is suggested rather than stated.

The report deals elaborately with the chairs of instruction which should be established, and concludes that twenty-six professorships would be needed at an early day. These professorships were: of the theory and practice of agriculture, agricultural chemistry, veterinary surgery and the breeding of animals, general and analytical chemistry, botany, zoology and comparative anatomy, geology, mineralogy, physics and industrial mechanics, mathematics, astronomy, civil engineering, physiology, hygiene and physical culture, moral and physical culture, history, political economy, municipal law, constitutional law, rhetoric, oratory and vocal culture, the English language and literature, French and the South European languages, German and the North European languages, the ancient languages (to be divided later into two or more professorships, when circumstances shall demand), æsthetics and history of the fine arts, architecture, military tactics and engineering, physical geography and meteorology. It was not, however, deemed necessary to fill all these professorships at once. The report elaborates at great length and defends a system of non-resident professors or lecturers and proposes that, of the preceding professorships, ten should be non-resident, viz., those of veterinary surgery and the breeding of animals, physiology, hygiene and physical culture, political economy, municipal law, constitutional law, the English language and literature, æsthetics

and the history of the fine arts, architecture, military tactics and engineering, physical geography and meteorology. It is interesting to examine this list at the present time, if for no other reason than to see the stress laid upon certain branches, and to note others which have become of commanding importance, for which no provision was suggested. Of the professorships first enumerated, a haze rests upon the one entitled moral and physical culture, as physical culture had been included under the head of physiology and hygiene. Possibly one professorship of physical culture was to be associated with morality, and the other was not. Later we find among the resident professorships one established for moral and mental philosophy, which was perhaps designed to cover the same field as that of moral and physical culture, which was first proposed. It was thought that eight or ten professors would be sufficient for the work of the first year.

The question of the character and qualifications, the terms of office and the salaries of the professors to be appointed was also discussed. It was recommended that the salaries of resident professors, who should be of equal rank, should be arranged in three grades, and should be relatively $2,250, $2,000 and $1,700; the salaries of assistant professors should be arranged in four grades, the first of which should receive $1,750, the second $1,500, the third $1,200, the fourth $1,000 per year.

The scheme of appointing non-resident professors was presented and argued with great earnestness. The university was to be fully equipped with regular professors, to whom it was proposed to add a class of non-resident, short-term professors, or university lecturers. For these it was proposed to select the most eminent men in various departments of literature and science who should present the "highest results or a summary of the main results of their labors." The advantages which were expected to come from this system would, in the first place, be favorable to the resident faculty, who, "remote from centers of thought and action, lose connection with the world at large save through books, and become provincial in spirit; they lose the enthusiasm which contact with other leading minds in the same pursuits would arouse." Under the new system "there would be a constant influx of light and life, the views of the resident professors would be enlarged, their efforts stimulated, their whole life quickened." There can be no question that the conception of a university faculty alert in the pursuit of truth, every member of which should be a master in some department of

knowledge, a center of light, discovering and diffusing truth, and himself an independent authority, is not here contemplated. The intimate communion of scholars, promoted by learned societies and scientific journals, by which fresh studies and investigations become at once the property of all, is overlooked in this somewhat cloistered conception of a university. The influence of non-resident lecturers upon students was especially extolled; in the case of men of the greatest ability and eminence, an enthusiasm would be aroused among students in various departments of knowledge, which would direct their energies into channels of thought and study. The public in general, which under ordinary circumstances did not avail itself of the privileges of the university, would be benefited, by the influence upon the minds of men already in active life. Such a system would contribute to the reputation of the university by associating with it in addition to a meritorious resident faculty a number of special professors or lecturers, whose ability and research were acknowledged, "the institution would arrive in a short time at a height of reputation which other institutions have failed to achieve during long years of ordinary administration." A resident faculty could in that case be chosen for its "energy and working ability," and not for resident professors—for the hard work of the university — men *who have attained eminence and so outlived their willingness to do hard work.*

The danger that scholars who have attained eminence might "have outlived the necessity of hard thought and work," and so be less valuable as teachers, is expressed repeatedly in the report—certainly, if true, a warning against eminence, and a frightful result to anticipate of a life devoted to true knowledge and the service of one's fellow-men.

The plan of securing as professors young men "who have a name to make and can make it," was recommended. "We can thus secure enthusiasm, energy, ambition, and willingness to work, *without paying enormous salaries.*" Great and proper stress is laid in the report upon general culture in the professors to be appointed, apart from mere scientific attainments. "The university must not only make scholars, it has a higher duty; it must make *men*—men manly, earnest and of good general culture." Young men were to receive the form and impress which they should bear through life.

A noble ideal of the character of the university teacher was presented here, and one worthy of the author of the report, who in his own person so well illustrated the refining influences of letters and of association with men.

For teachers of modern languages, Americans were recommended instead of foreigners. "The slight advantage in correct accent possessed by an instructor from a foreign country is always too dearly purchased by the sacrifice of qualities which ensure success in lectures or recitations."

To make the personality of the professors effective in exerting an influence upon the character of the students, the freest and most intimate intercourse between professors and students was advocated. The Athenian ideal of culture was to be realized by a frank, full and genial conversation between teacher and taught; for a manly sympathy in thought and learning between the pupil and teacher is worth more than all educational machinery apart from it. To make possible and promote this intercourse, it was even proposed that additions to the salaries of professors be made to enable them to meet the cost of social entertainments to students. It is proper to say that the relations of students and professors in the university have been, from the first, of the most frank and cordial character. Harmony and co-operation in the faculty were insisted upon; in case of feuds and quarrels between professors it was recommended that all concerned be at once requested to resign, unless the disturbing person could be recognized beyond reasonable doubt. It was affirmed, "better to have science taught less brilliantly, than to have it rendered contemptible."

The relation which the faculty should sustain in the administration of the university was so conceived as to give great dignity and importance to their deliberations. That system of college government was criticized, in which the president appropriates the main functions of administration, originates action, and is responsible to the trustees alone for whatever he may do, while the faculty have no share, or only a limited one, in determining the courses of study and the character of the work that shall be done in the university. The faculty "are not merely advisors, but legislators," they should have stated meetings for the purpose of conducting the general administration of the institution and memorializing the trustees, discussing general questions of educational policy, and presenting papers upon special subjects in literature, science and the arts. The entire faculty should constitute an Academic Senate, in which all members of the teaching staff should have the right to speak, but the right of voting should be confined to resident and non-resident professors, and assistant professors representing departments in which no full professor has been ap-

pointed. The division of the faculty into groups according to departments, each presided over by the president or a dean, was also recommended.

There is no specification of the distinct province of the faculty and trustees, the latter of whom have certain duties provided for in the charter, and a wide scope of undefined powers attaching by common academic law to their office. In order to avoid stagnation and lack of initiative which often prevails in bodies whose power is self-perpetuating, it was distinctly recommended that the term of office of trustees should be fixed at five years, and that it should require a vote of two-thirds of the electing body to re-elect a former trustee. The active interest and participation of the alumni in the government of the university, in accordance with the established usage at the English universities, and as had been recently done at Harvard University, by which the alumni chose the members of the Board of Overseers in place of the Legislature, was to be secured by permitting the alumni of the university, whenever they reached the number of one hundred, to choose one trustee.

From the formal discussion of the constitution of the new university, the report proceeded to discuss its equipment, and it was proposed that the agricultural department should include a model farm for the study and illustration of scientific agriculture, and that a museum of models of agricultural implements, products, etc., should be formed. The Department of Mechanic Arts should be equipped with collections of drawings, casts, sectional and working models, in general character like those in the Conservatory of Arts and Trades in Paris. The illustrative collection should be first, and the model workshop second. For the experiments in agriculture one farm would be sufficient, as the main outlines of procedure in practical culture and experiments are simple: a small range of implements is sufficient for the whole work; in mechanics, as a rule, one workshop will answer only for the single branch to which it is devoted. "There is then no such need of experimental workshops in this department, as of experimental farms in the other."

The vast development of shops for practical work in forging, casting, turning, and carpentry, was but dimly foreseen twenty-eight years ago.

For mathematics and engineering, drawings, engravings, models and casts were recommended; for natural history, collections in geology, mineralogy, zoology, comparative anatomy and botany; also the

acquisition of the best apparatus for physical and chemical investigation, especially that which would illustrate the solidification of carbonic acid gas; apparatus for the direct generation on a large scale of electricity from steam, the Boston modification of Ruhmkorf's coil, for presenting the effects of electricity induced by the galvanic current, and the new French apparatus for experimenting upon light. The author of the report regarded this apparatus as especially brilliant and most worthy of acquisition, as best illustrating the progress of science in the departments of chemistry and physics at that time. Mr. White's love of art, and interest in it as illustrating the history of culture, is shown by the proposal to found as soon as practicable a museum of casts, of which there were then few in the United States, and these of very limited extent.

Provision should be soon made for a library as the culmination of all —touching all departments, and meeting the needs of teachers and taught. From the first, the building up of a library suited to the wants of the institution and worthy of its aims should be steadily kept in view. A large library is absolutely necessary to the efficiency of the various departments; without it, men of the highest ability will frequently be plodding in old circles and stumbling into old errors. The history of the progress of modern science is the history of a development and accretion—development out of previous thought and work—accretion upon previous thought and work. The discovery of truth and the diffusion of truth—the two great functions of a university—will be impossible without a liberal library.

The government of the university in its relation to students, the manual labor system, the cost of tuition, physical culture, the dormitory system, the relation of the university to other institutions of learning and to the school system of the State, and the final general test of university education were then discussed. What was to be the theory of discipline in the new university? Should it be military, or the ordinary collegiate discipline, or an adaptation of the free university system of continental Europe? "The military system has undoubted advantages. It puts all students upon an equality in mere outward advantages of dress, style and living; it subjects students to a more perfect control; it gives from among the students officers to aid in enforcing rigid military discipline." On the other hand, uniformity in dress would lessen the individuality of students. The professor would be deprived of one of the best means of judging those who are before

him in his lecture room, and of knowing how to deal with the individual. A student loses nothing in the estimation of the university world by a dress which indicates frugality or economy. In no community on earth is man estimated so exactly by what is supposed to be his real worth, as in a community of college students. It was not believed possible to apply a rigid military system to the whole university. By the fundamental theory of the university, there would be students of various ages and grades, some attending courses of instruction for a longer, some for a shorter time, some residing in the university buildings, some in the town itself. Military science should always form a part of the instruction, but it was not recommended that the government be military except perhaps in some single departments, where efficiency would be promoted by military forms. The ordinary collegiate plan of government, although necessary from a partial adoption of the dormitory system, was not regarded as final by the committee.

It was believed that a system of university freedom would promote the best government. "In this system, laws are few but speedily executed, and the university is regarded neither as an asylum nor a reform school. Much is trusted to the manliness of the students. An attempt will be made to teach the students to govern themselves, also to cultivate acquaintance and confidence between the faculty and students. By the rigid execution of a few laws of discipline, by the promotion of extra-official intercourse between teachers and taught, by placing professors over students not as police but as a body of friends, a government would be secured better than any other."

A system of manual labor in connection with the departments of agriculture and the mechanic arts, by which students could defray a portion of their expenses, was recommended. While experiments of this kind had been made unsuccessfully in certain cases, it was thought that they had not been fully or fairly tried, or with such ample means as the university would afford. It was not proposed to make, as in most agricultural colleges, labor obligatory upon all students. One practical objection would be conclusive against it, if theoretical objections were not, it would be impossible to provide labor for all. It might, however, be necessary to require manual labor from all the students in certain departments. Labor corps would be organized and every inducement held out to students to join them. Such a system would be of mutual advantage to the students and to the university; it would promote the muscular development of students and give substantial

pecuniary aid to many. It was not, however, thought that physical labor could take the place of athletic sports and gymnastic exercises, in giving restoration after mental labor. The mind could not be kept fresh, elastic and energetic, when the only relief from tension was the change from one form of labor to another. It was therefore recommended that a fully equipped gymnasium be erected, and that gymnastic exercises under the direction of an instructor, or equivalent training in manual labor or exercises in the open air, be required of all. Boating, base ball and other recreations were to be encouraged, and deterioration in physical culture was to be held in the same category as want of progress in mental culture, and subject a delinquent to deprivation of university privileges. Attendance upon a course of lectures upon anatomy, physiology and hygiene was to be required.

The only additional reference to military drill was contained in the recommendation that provision be made for teaching military engineering and tactics, and that some plan for encouraging military tactics or making it obligatory be adopted.

In estimating the proper cost of tuition a comparison was made of the charges at various colleges; tuition at Yale was given as forty-five dollars per year; at Harvard as one hundred dollars; at the Institute of Technology in Boston as about one hundred and thirty dollars; at the Lawrence Scientific School, from two hundred and fifty to three hundred dollars. In the University of Michigan, students from without the State paid a matriculation fee of twenty dollars and five dollars per year thereafter; in the Agricultural College similar students paid twenty dollars, while in Dartmouth College and the Scientific School the fees were from thirty to fifty dollars. The committee recommended therefore a matriculation fee of fifteen dollars, and an annual tuition fee of twenty dollars. The matriculation fee was, however, never charged, and the tuition fixed at ten dollars per term or thirty dollars per year. Room rent in the university dormitories was charged at from sixty cents to one dollar per week, according as two or three students occupied one room.

While the dormitory system became thus a part of the organization of the university, its extension and permanent existence were regarded as undesirable. The residence of a large number of students in colleges had been the scource of fruitful evils; it made a certain oversight and surveillance necessary; it transformed the college officer into an agent of discipline and destroyed the friendly relations which existed between

teacher and taught. It was. however, deemed necessary at the opening of the university; the town was still remote, and its immediate capacity to afford adequate accommodations was doubtful. It was besides necessary that students should find homes upon the university grounds in order to conduct the experiments and carry out the labor system which was proposed.

MILITARY INSTRUCTION.

During the war, the need of thoroughly trained officers to assume commands in the army was strongly felt. The number of cadets graduating each year from West Point was too small to supply vacancies in the regular army. The existence of military schools throughout the South, in which a considerable portion of the young men were educated in military science and tactics, had given the Southern armies an especial advantage at the opening of the war. On April 4, 1867, Major J. W. Whittlesey, of the regular army, an experienced and skillful officer, was ordered by the Secretary of War to proceed to West Point and other colleges, and report a suitable method of instruction in military science for such colleges in the United States as might desire it, direct reference being made to the provision in the National Land Grant Act requiring military instruction in the new colleges. On November 25, 1867, Major Whittlesey presented an elaborate report to the secretary of war recommending the form of organization and instruction in military science in these various colleges. By a law passed July 28, 1866, it had been provided that, under certain circumstances, the secretary of war should be authorized to detail an officer of the regular army to instruct in military science and tactics in the colleges established under the Land Grant Act. This plan for national military education was not presented to Congress, but came before the House Military Committee. General Garfield was, at the time, chairman of this committee and deeply interested in the proposed bill for military education, which, it was expected, would receive the authority of Congress early in the year 1868. This report was referred to General Grant for his favorable recommendation to Congress. It was proposed to establish a bureau of the War Department in charge of a director-general of military education, whose duty it should be to inspect and supervise military academies, secure uniformity of instruction, and enforce faithful compliance with the laws and regulations on those subjects. Whenever such an institution should

have capacity sufficient to educate one hundred male students in a complete course of liberal studies, with grounds for military exercises, there should be detailed a competent officer of the army to act as military professor, with an assistant. The president of the United States was to have the right to prescribe the course of military exercises to be taught, and establish general regulations for the government of the officers so detailed, but without infringement of the rights of the institution to self-government. In case any college established such a course of instruction in military science, it was proposed that the necessary text books, ordnance and ordnance stores, camp and garrison equipage, with a detail of one ordnance sergeant and two musicians, should be provided at the expense of the United States. In order to create enthusiasm in these studies, it was provided that the faculty of arts of the college might recommend to the president of the United States each year one-tenth of the graduates distinguished for general proficiency in the college course, special attainments in military science and skill in military exercises, of good moral character and sound health, whose names should be published in the army register, of whom one from each college should receive a commission in the army, as in the case of graduates from West Point. It was thus designed to bring the colleges of our country into immediate relation to the army, and make them indirect aids in contributing to the training of officers. It was still further proposed that each college thus constituted should receive $2,000 from the United States treasury, to be expended under the charge of the director of military education, in the purchase of the necessary books of reference, maps, models and text books, and also $10,000 to be expended in constructing a suitable building for the purpose of an armory. The report presented an elaborate scheme of instruction in military engineering, the theory of ordnance and gunnery, the art of war, military history, the purpose of court-martials and the school of the soldier. The text books and mode of instruction were to be the same as those employed at West Point. The students were to be divided into companies of from fifty to sixty strong. The battalion staff and the company officers were to be taken from the Senior Class, the staff sergeants and the company sergeants from the Junior Class, the corporals from the Sophomore Class, with such modifications as may suit the case of students in shorter or longer courses. It was proposed that a uniform should be adopted to be worn by all students. It was thought that by this, economy would be promoted, since it

would save the expense of variety and change of fashion. It would secure personal neatness, and place all students upon a footing of republican equality; sons of the rich and the poor, meeting upon a common level, would have nothing in the apparel to stimulate the pride of the one or wound the self-respect of the other. It was believed that by wearing this badge, an honorable ambition to excel, refinement of manners, and a manly tone of character would be created, favorable to the reputation of the class to which the student belonged and to the honor of the institution which was in his keeping. Daily martial exercises were to be rigidly enforced, and only to be remitted by reason of conscientious scruples or physical debility. The discipline of the institution was to be placed under the care of the professor of the military department under the direction of the university authorities. The usual regulations of the camp as to exercise, recreation, sleep, the reveille, the roll call, the call to and from duty, the tattoo, all in their regular order, were to aid and direct the observance of college duties and discipline. Later, artillery and cavalry drill was to be added to that of infantry study and drill, and it was proposed to fix a high standard at the outset.

It is evident that so general an introduction of military studies could only have been recommended when the remembrance of the recent war, its perils and glorious achievements, were still vivid. The domination of a military system in literary institutions did not at that time seem impracticable. Many of the students of the university will recognize in this report some of the regulations of their early days.

The trustees at their seventh meeting resolved:

That while we would not require all students in the special courses to undergo military instruction, since this would be to do violence to the fundamental principles of the university, yet we believe that all general courses of study in the university should include rudimentary knowledge of military science and a good deal of proficiency in military exercises.

The trustees also approved the draft of the bill before Congress for the promotion of military instruction in the leading colleges, universities and institutions of learning established under the Land Grant Act, and expressed a willingness to co-operate earnestly in any plan to promote the most thorough special military instruction whenever such means should be placed at their disposal so as to enable them to do it.

At a subsequent meeting, held in Ithaca, October 6, 1868, a formal regulation, relating to the military department of the university, was passed:

Resolved, That the students of the university who reside in the university buildings, for discipline, police, or administration, shall be placed on a military basis, under the immediate direction of the professor of military science, who shall be recognized as the military commandant of the students. That the military commandant shall enforce the necessary regulations which may from time to time be established by university authority, to insure good order in the quarters and mess-halls, with precision, and regular attendance upon stated duties; and that all regulations so established shall be of binding obligation upon students, under such sanctions as the president, by and with the advice of the faculty, may determine. That an appropriate and economical uniform shall be fixed upon, which, after the current academic year, shall be the habitual costume for all students pursuing regular courses of study; and that thereafter attention to the instruction in military tactics provided for in the Congressional Land Grant endowment of 1862, shall be obligatory upon all such students, the president having authority, at his discretion, to grant special exemptions therefrom, for good cause shown.

These resolutions, with the exception of that portion relating to the uniform, were adopted. Later, this was also proscribed. It is evident that the trustees construed the obligation to require military service in the strictest manner. Under the terms of the law, it was necessary that provision should be made for instruction in military science and tactics, without prescribing that it should be binding upon all students. The irksomeness of these petty military requirements was soon felt. Students to whom military instruction was but an incident in a broad course of literary and scientific studies, did not submit willingly to these restrictions upon their personal liberty. The extent to which these regulations was enforced is shown by the first general order from the military commandant.

Students rose and retired at the beat of the drum; they marched to meals in military file; their officers kept watch and ward over their conduct at table; breaches of decorum or failure to comply with all the requirements regarding dress were reported and punished. Punishment consisted of arrest, confinement to one's room and other restrictions. The officers of the corps were made responsible for the enforcement of these laws and for a general oversight of the order in the different dormitories. One captain, who so far forgot his rank as to join some of comrades in hazing mildly an obnoxious student, was expelled from the university, and marched away amid vehement protests from the student world, and escorted by a procession of his fellow students. This minute oversight of student life was, after the departure of the first military commandant, greatly relaxed. The uniform was still continued, and stirring debates were held in the faculty upon the style

and fashion of various parts of the student's dress, which were brought before that body for approval.

As the remembrance of the war grew more indistinct, it was difficult to awaken or continue enthusiasm in military drill. Had military exercises been placed upon the basis of modern athletics, with the purpose of securing the health of the student and the benefits of military discipline in producing a manly bearing, less objection would have arisen and fewer petitions for exemption from what seemed a needless exaction on the part of the authorities of the university. The requirement that all classes should drill was lessened, military exercises on the part of the upper classes being reduced in number, or made voluntary in the case of officers, for which credit was given as for other university work. Drill was finally required only of the members of the freshman and sophomore classes during the fall and spring terms. The habitual wearing of the university uniform was dispensed with, and military costume was only required during the actual exercises of the student. One feature of the original report of Major Whittlesey is still carried out. The names of students who have shown special aptitude for military service are reported to the adjutant-general of the army and to the adjutant-general of the State of New York, and the names of the three most distinguished students in military science and tactics are, when graduated, inserted in the United States Army Register and published in general orders from the headquarters of the army. Such students are, under certain circumstances, allowed to present themselves for examination as commissioned officers in the United States Army, an opportunity of which several have availed themselves.

MANUAL LABOR.

One favorite theory of Mr. Cornell, which was prominent in the early history of the university, was that of manual labor, by which students during their studies could support themselves by working from three to four hours per day. He believed that the activity which is usually devoted to recreation and athletic pursuits might be directed to some systematic employment; and students who possessed skill in some trade would be able to find occupation as mechanics and laborers upon the farm, that the agricultural and mechanical departments would furnish opportunity for unskilled students to acquire a proficiency in some craft. No purpose lay nearer to Mr. Cornell's

heart in founding the university than this, viz., that poor boys and girls might, by devoting a somewhat longer period to their course of study, support themselves and graduate, possessed of an education and of some trade or profession, which would secure their future support. The remembrance of his own early struggles with limited opportunities gave a tender feeling to him regarding all young men similarly situated. He gave much thought not only to systematizing the opportunities for work upon the university buildings and the university grounds, but also to introducing in the vicinity of the university new and profitable industries, which should be operated in connection with it. He loved his native city; he desired its prosperity; he was willing to use his large resources to build up industries which should add to its wealth; but most of all, during the last years of his life, he loved the university which bore his name and which was destined, as he fondly hoped, to be the most practical means of blessing his fellow-men. In those early days, many students of very limited means flocked to the university, with the anticipation that their support would be secured by scholarships, and that they would be enabled by extra labor to obtain whatever else might be necessary to acquire an education. The labor of janitors in the care of the university buildings, of assistants in the museums and libraries, of workmen on the university grounds, was to be given to students. Mr. Cornell hoped much from the establishment of the University Press, by which students might learn the printer's trade, and which would afford means for the issue of university publications. It is probable that Mr. White, while sympathizing with these views, did not have equal hopes of the success of this experiment. The most useful labor, he believed, would be of a scientific character, by which the student acquired a knowledge of mechanical processes. There are two problems intimately associated with a plan like that proposed. The first, and most important one, is whether a student is able, in connection with his university work, to carry on an additional daily task sufficient for his support. The feature of teaching during the winter in country schools, which existed in New England colleges, facility for which was afforded by a long vacation, was here to be made continuous. Work was to be carried on incessantly and in connection with study, and the question naturally arose, how far the physical health would be sufficient to meet this double demand; how far study could be profitable when the strength upon which it depended for success was equally devoted to mechanical pur-

suits. The second, and more practical question is, how far it is possible to prosecute any industry profitably while relying upon student labor, which must necessarily be afforded in limited amount, and at intervals accommodated to the intellectual work of the student. If the opportunity for manual labor was furnished at a pecuniary loss, and at the possible sacrifice of the physical health of the student, why not make it a gift outright? These two factors have practically decided the possibility of success in this experiment. Competition is so keen, even with skilled labor, working with the entire time and under the most favorable opportunities on the part of the operative, that when brought into comparison with work relying upon labor at irregular intervals, the latter must necessarily suffer defeat, from the standpoint of mere business success. Looking back upon those early years, we see that many students who belonged to the labor corps, as it was called, were successful to an eminent degree in maintaining themselves during their university life, and in attaining a distinguished rank among their fellow students. It would be possible to enumerate many now occupying leading positions in the educational and scientific world, whose education was obtained by heroic sacrifice, by willing limitation of pleasure, and by lofty devotion to an ideal of learning. But, as a rule, we must confess that the limitations inherent in the system itself have been too great to be set aside. Many students who came here with exaggerated hopes of maintaining themselves were disappointed. The amount of work which the university could furnish, even at a loss, was not sufficient to support all students who came relying upon it. The plan, too, gave the impression that self-support, so far from being an incident in the university life, constituted an essential feature; and for many years, in spite of specific statements sent out calculated to avoid holding out undue hopes, the impression prevailed in educational circles throughout the country that the university was in large part a manual labor or trade school.

COEDUCATION.

It was a part of Mr. Cornell's original plan that the university should be open for the instruction of both young men and women. It was in accordance with his natural training and mode of thought; he was of Quaker ancestry, and was familiar with the traditions of that body in which an equal prominence is given to women in public meet-

ings. To the eloquence and pure moral sense of women who have advocated moral reform, education, and the abolition of slavery, the advance of our country has been largely due. It was, therefore, natural that in any conception of the university, he should include coeducation of the sexes. In a letter written from Albany to his only granddaughter, February 17, 1867, nearly two years before the opening of the university, he said: "I want to have girls educated in the university as well as boys, so that they may have the same opportunity to become wise and useful to society that the boys have." He even asked that his letter might be preserved, so as to show to the university authorities in the future what his wishes were. In his address at the opening of the university, he had distinctly stated: "I believe we have made the beginning of an institution which will prove highly beneficial to the poor young men and poor young women of our country." In a letter written a few months later to his wife, in which he paid a beautiful tribute to her sacrifices in his behalf, he expressed a hope that she may found a system of industry in connection with the university, by which girls through labor can secure the means of obtaining the highest and most useful education. He urged some plan through which this may be possible. President White in his inaugural address met the question with great frankness, when he said: "As to the question of sex, I have little doubt that within a very few years the experiment desired will be tried in some of our largest universities. There are many reasons for expecting its success. It has succeeded not only in the common schools, but what is much more to the point, in the normal schools and academies of the State. It has succeeded so far in some of the lecture rooms in some of our leading colleges, that it is very difficult to see why it should not succeed in all their lecture rooms; and if the experiment succeeds, as regards lectures, it is very difficult to see why it should not succeed as regards recitations. Speaking entirely for myself, I would say that I am perfectly willing to undertake the experiment as soon as it shall be possible to do so, but no fair-minded man or woman can ask us to undertake it now, as it is with the utmost difficulty that we are ready to receive young men. It has cost years of hard thought and labor to get ready to carry out the first intentions of the national and State authorities which had reference to young men. I trust the time will soon come when we can do more."

At the opening of the university, coeducation had already received a successful trial of more than thirty years in Oberlin, by the noble and devoted citizens of New England who settled the Western Reserve in Ohio. Horace Mann and his equally enthusiastic supporters had set on foot a similar experiment in 1853. Mr. Mann had declined the nomination to be governor of Massachusetts, in order to accept the presidency of the Antioch College, and to pass through the pathetic struggles which accompanied the foundation of that institution. Other institutions in the east had adopted the Oberlin plan, but the movement had occurred on so small a scale that its presence as a decisive factor in educational life had not been widely felt. Michigan, which possessed the largest State university, had felt the powerful demand among the people, and even in the Legislature, for the admission of women. In the years 1867 and 1868 the Legislature passed recommendations urging the regents to admit women to all the facilities of instruction in the State university. President White, while accepting theoretically the justice of the demand for the higher education of women, felt the limitations, both financial and otherwise, which would make immediate favorable action in that direction impossible. Upon the day on which the university was formally opened, the Hon. Henry W. Sage went to President White and said: "When you are ready to carry out the idea of educating young women as thoroughly as young men, I will provide the endowment to enable you to do so." With Mr. Sage, the higher education of women had become a thorough conviction, and the wisdom and naturalness of educating both young men and women in the same institution admitted of no question. He was not at that time a member of the Board of Trustees, to which he was elected two years later on June 30, 1870. During the first year of his connection with the university, he offered to erect and endow a college or hall for the residence of young women, and at the meeting of the Board of Trustees held in Ithaca, June 21, 1871, President White, in presenting his annual report, discussed and favored the admission of women to the university. His recommendations were referred to a committee consisting of Messrs. White, Weaver, Sage, Andrews, and Finch. The formal report of this committee was presented at the meeting of the Board of Trustees, which was held in Albany, February 13, 1872. The report was adopted unanimously, one member alone withholding his vote. The gift of Mr. Sage was formally accepted, and a special committee was appointed to decide upon the plans for the proposed building. In the mean time one soli-

tary woman student, Miss Emma Sheffield Eastman, who had attended lectures in the university, was formally admitted, constituting the first female student, although Mrs. Jennie Spencer had presented herself as early as September, 1870, with a certificate entitling her to a State scholarship, and passed with credit the additional examinations required.

The committee to which had been referred the investigation of the question, visited the leading institutions which had already admitted women students. They conducted an extended correspondence with eminent educators, seeking to obtain their views upon the principle involved. The majority of the responses to the committee were overwhelmingly against the admission of women. Some regarded it as contrary to nature, as likely to produce confusion, dangerous, at variance with the ordinances of God; on the other hand, several principals of normal schools reported in favor of the success of the experiment in those institutions. The testimony was most positive from those who had seen the experiment of coeducation tried. Some of the oldest and most venerated educators of the country, men whose temper would cause them to be ranked with conservative educational forces, favored the experiment. President Hopkins of Williams College believed that a continuation of the association in study which had begun in the common schools would present many advantages, and he hoped that the experiment would be tried. President Nott, in a letter to a committee of the Board of Regents, had said: "I would like to see the experiment tried under proper regulations, and were I at the head of the university in Michigan, and public opinion called for the trial of the experiment, I should not oppose obedience to the call. Corporations are conservative; it is their nature not to lead, but to follow public opinion, and often far in the rear. That it [coeducation] will not be approved by college corporations generally may be taken for granted." The testimony was, however, decisive from such institutions as Oberlin, the State University of Michigan, the Northwestern University at Evanston, the State Industrial University in Illinois, and Antioch College. The testimony as to the influence of the young women in contributing to a higher tone in university life, to the abolition of certain rudeness and uncouthness in student manners, was abundant and conclusive.

It was deemed best that a separate home on the university grounds should be provided for the young ladies, and there seemed to be a peculiar fitness in connecting the departments of botany and horticulture

with it. The committee, therefore, recommended that in connection with the new college there should be associated a botanical lecture room, conservatory, greenhouse and botanical garden. The question which has been variously settled in different colleges for women, whether the "cottage" system, by which separate attractive homes are erected upon the college grounds for a limited number of young ladies, or the system by which all are accommodated in one large building, was discussed. It was decided to erect on the university grounds a large college building, complete in all respects with lecture rooms, special recitation rooms, infirmary, gymnasium, bathing rooms, study and lodging rooms for from 150 to 200 lady students, a building which would form a striking architectural feature in connection with the university. The gift of Mr. Sage was formally accepted under the conditions named by him, and the establishment created under it designated as the Sage College of Cornell University. The corner-stone of this institution was laid on March 15, 1873. Among those who participated in this occasion were the Hon. Henry W. Sage, the Hon. Ezra Cornell, President Angell, of the University of Michigan; Chancellor Winchell of Syracuse University, Dr. Moses Coit Tyler, Professor Goldwin Smith, and Col. Homer B Sprague who had been the first professor of rhetoric and oratory in the university. The address of the Hon. Henry W. Sage upon this occasion is noteworthy, as it illustrates the noble purpose which he had in view in making his gift. He said: "We meet to-day upon this beautiful hillside to inaugurate an enterprise which cannot, I think, but have an important influence upon the future of this Commonwealth and of our race. It has been wisely said that 'who educates a woman educates a generation,' and the structure which is to be erected over this corner-stone will be especially devoted to the education of women, and will carry with it a pledge of all the power and resources of Cornell University, to provide and forever maintain facilities for the education of women as broadly as for men." He closed with the words: "When this structure shall be completed and ready for its use, let us look up and forward for results; and if woman be true to herself, if woman be true to woman, and both be true to God, there ought to be from the work inaugurated here this day an outflow which shall bless and elevate all mankind." The corner-stone was laid by Mrs. Sage with these words:

I lay this corner-stone, in faith
That structure fair and good
Shall from it rise, and thenceforth come
True Christian womanhood.

Among the articles deposited beneath the corner-stone was a letter addressed by Mr. Cornell to the coming man and woman, the contents of which were unknown save to the author. In closing his remarks he said: "The letter, of which I have kept no copy, will relate to future generations the cause of the failure of this experiment, if it ever does fail, as I trust in God it never will." The mysterious contents of this letter are reserved for the information of some distant generation. The college was formally opened for the admission of women at the opening of the fall term of 1874. From that date, women have been admitted freely to the university. They have attended recitations and lectures, and engaged in laboratory work in all departments. Some have entered in agriculture, and in architecture, and one or more even in mechanical engineering. The proportion of lady students during the first years of the university was about one-tenth of the entire number of students. Since then it has somewhat increased. The character of the scholarship which they have sustained, the scientific investigations which have been embodied in the theses submitted for graduation, and the high merit which has attached to their work as a whole, all bear witness to the wisdom of the policy by which young women were originally admitted to the university.

THE NON-RESIDENT LECTURE SYSTEM.

The non-resident lecture system which had been emphasized in the plan of organization was a characteristic part of the proposed university. At the meeting of the Board of Trustees held in Albany, September 26, 1867, six lecturers or non-resident professors were appointed. The most prominent of these were Louis Agassiz, in Natural History; James Russell Lowell, in English Literature; George William Curtis, in Recent Literature; Theodore W. Dwight, in Constitutional Law; James Hall, in General Geology; and Governor Frederick Holbrook, of Vermont, in Agriculture. Most of these lecturers had exhibited a general interest in the new university and had co-operated by counsel and suggestion as to the form which it should assume. Lectures of the character proposed, so far as they were substituted for systematic instruction in a given department, were necessarily unsatisfactory. They were either popular and general in character, or, if scientific; they stood alone, not supplementing, save indirectly, any given course of study. Of such general lectures, treating of detached authors or periods in literature, or presenting a popular outline of science but constituting

no distinct chapter in the curriculum of a given course, the number might be increased indefinitely. These lectures were delivered first in the spring of 1870. It is interesting to note the subjects. George William Curtis presented a Review of Modern Literature, the Novel, Dickens, Thackeray, Women in Literature, George Eliot, Carlyle, Robert Browning, Elizabeth Barrett Browning, Tennyson, American Literature, Nathaniel Hawthorne. Mr. Lowell discussed the Elements of Literature in three lectures, a Review of Literature, the Imaginative in Expression, Wit and Humor, the Troubadours and Trouvères, Piers Plowman's Vision, Dante, Chaucer, the authors between the time of Chaucer and Spenser, early English ballads, Pope and higher culture. Professor Dwight's course upon Constitutional Law embraced twelve lectures the subjects of which included a definition and explanation of terms; the sources of the constitution; mode of generating governments; difference between the State and general government; structure of the United States government, and powers of Congress and restrictions upon Congress. There is no doubt that the names of these accomplished lecturers were a brilliant contribution to the university at its opening, as they would have been at any subsequent time. The personality of Professor Agassiz and his enthusiasm for science not only interested the general students of the university, but incited some to an enthusiastic pursuit of science. His lectures were confined to a single course, as his engagements did not permit him to continue them. Professor Lowell's subjects, while more critical and remote than those of Mr. Curtis, possessed all that charm of composition, that ample knowledge, that grace and delicacy of humor which have made him one of the prominent figures in American literature. Mr. Curtis, whose graceful style and pleasant discursive criticism charmed for so many years the readers of Harper's Monthly, won an enthusiastic reception from the student world. The lectures of Governor Holbrook, who had a popular interest in agriculture, and of Professor Hall were never delivered. Professor Curtis delivered his lectures a second time during the spring of 1871. Mr. Bayard Taylor delivered a course of lectures upon German literature, first in the spring of 1870, and repeated them in 1875 and 1877. These lectures were held in Library Hall, which enabled the citizens of Ithaca to attend them, as well as the students. Mr. Taylor who was widely known for his books of travels, and later for his translation of Faust, although not in a technical sense an authority upon German, was a master work-

man in literature, and the lectures which he delivered, though popular in character and prepared expressly for the occasion, were suggestive from the interesting comparisons introduced, covering a wide range of reading, and from his sympathy with the writers whom he selected for treatment. The translations with which he illustrated his lectures were often very felicitous. Few American writers have possessed so remarkable a power to reproduce the words and metre, and to imitate the style of earlier and contemporary writers. The "Echo Club," which he wrote for the Atlantic Monthly, illustrates in a remarkable degree this peculiar gift.

Professor George W. Greene, the author of the elaborate life of General Greene, of the Revolutionary army, delivered several extended courses of lectures upon American History in the years from 1872–4. A bust of this distinguished scholar and delightful man, presented by his friend, the poet Longfellow, was placed in the library in 1879. Mr. John Fiske also delivered seven lectures upon the same subject in April, 1881. Mr. Froude, the English historian, delivered six lectures on the History of English Rule in Ireland, in October and November, 1872. Professor Von Holst, of the University of Freiburg, the eminent author of the great work on American Constitutional History, delivered ten lectures on that subject, May 19–30, 1879. Mr. Edward A. Freeman, the historian, also delivered several lectures, in November, 1881, in which he discussed the political institutions of Greece, Rome and Modern Europe, which, however, as they had been in part previously published, won but limited recognition.

The system of non-resident lectureships has proved a valuable feature in Sibley College, under the skillful guidance of the Director, Dr. Robert H. Thurston. Eminent specialists have been invited to discuss some subject in technical or theoretical science of which they are the acknowledged masters. These subjects have constituted brilliant illustrations of certain investigations, which have already formed a part of the instruction of the students, who had thus been qualified to understand the latest discoveries in applied science. Many of the most eminent scholars in America have during the last eight years lectured before the students of Sibley College, among them Professor Bell, the inventor of the telephone; Horace See, on modern marine construction; George H. Babcock, on the steam engine; Elihu Thompson, on electric distribution; Henry Metcalfe, U. S. A., on costs and manufactures; Thomas C. Clarke, on the construction of large railroad bridges;

Lieutenant Zalinski, on the pneumatic dynamite gun; R. W. Hunt, on the manufacture of Bessemer steel; B. F. Thurston, on the theory of patent law; C. J. Woodbury, on the modern mill; Charles E. Emery, on the governing proportions of steam boilers, etc., etc.

The first demand of a university lecturer is that he should be didactic. Other gifts, of philosophical generalization and description have also their place, and the ability to interest and inspire, even where the content of the lecture is less, is a quality of high value in a university teacher. Professor Dwight was a great teacher. He had the power to group his material and present it in the most effective manner. His lectures had unity in themselves, and the course which he delivered here in successive years, while not supplemented by the study of text books and recitations, constituted a valuable series, upon a subject of importance to every citizen, when the resources of the university were insufficient to equip the necessary chairs of instruction.

A university in which adequate provision has been made for instruction by eminent scholars in all departments of learning which form a part of its curriculum, will not need external assistance. If its means are not ample, and its teaching force inadaquate, the use of its resources for costly attractions from without is not justifiable. The province of all courses of extra lectures should be to supplement the established curriculum, and not in any sense a substitute for it. Superficial and merely popular knowledge cannot take the place of the accurate and scientific training required in a university. The most illustrious professors lecturing to minds unprepared would be a waste of intellectual power. Where students are specially prepared, the work of eminent scholars may be added to present brilliantly some phase of knowledge. Modern courses of study are, however, so crowded that the introduction of additional subjects can only divert, or be done at the expense of essential and systematic work.

UNIVERSITY ADMINISTRATION.

The plan of organization presented to the trustees two years before the opening of the university must be regarded as an expression of the views of a single trustee. It is signed by Mr. Andrew D. White in behalf of the committee on organization. There is no reference in the records of the trustees to the appointment of such a committee, and Mr. White himself states that the plan of organization as presented was

prepared at the suggestion of Mr. Cornell. Mr. Cornell studied it carefully, gave it his approval, and a copy with the notes in his own hand is still preserved. There is no evidence that at the time this report was prepared, Mr. White was even a prospective candidate for the presidency. He states that he did not know the purpose of Mr. Cornell to present his name for such an appointment until he was formally nominated for election on October 21, 1866, by Mr. Cornell. The report, however, was published under the authority of the trustees and may be regarded, in connection with the election of Mr. White as president at the same meeting, as receiving the endorsement of the board and as an expression of its views regarding the proposed form of the university. The charter was bestowed upon a corporation of ten persons, viz., Ezra Cornell, William Kelly, Horace Greeley, Josiah B. Williams, William Andrus, John McGraw, George W. Schuyler, Hiram Sibley, J. Meredith Read and John M. Parker, who were to constitute a body politic and corporate to be known as the Cornell University, having the rights and privileges necessary to the accomplishment of the object of its creation, and subject to the provisions, and with the powers enumerated in the revised statutes of the State of New York as regards college corporations. This is a general grant or bestowal of power, without the specification of details, such as is made in the charter of other universities in the State and elsewhere in the country. Similarly, there is no specification of the duties or province of the faculty in regard to the consideration and determination of important questions in the educational policy of the university. The question of the establishment and approval of courses, the requirements for admission and graduation, the settlement of questions of discipline, or any specification of the important functions, which, by common university law and tradition, are possessed by the faculties of other institutions of learning, were not specified in the charter. A delimitation of the respective powers and prerogatives of the two bodies was not made until a formal codification of the University statutes by a committee of the trustees, of which Judge Douglass Boardman was chairman, was adopted on May 19, 1891. We find in the early history of the university the executive committee exercising functions, which later, and naturally, were assigned to the faculty; such as changing the standard of requirements for admission, prescribing the uniform to be worn by the university students and even inflicting discipline. An amusing, but not serious, difference of opinion arose at one time between these two bodies as to the expediency of re-

quiring all students of the university to wear a military uniform. The faculty were by no means united in the belief that the university should be transformed into a military school. They saw that in the very nature of the university, it would be impossible, as well as undesirable in its future growth and development as a seat of advanced study, to enforce the universal obligation of military drill and dress. The expense of such a costume, as well as a reluctance on the part of students to invest themselves permanently in a costume which was without beauty or variety, raised serious opposition on their part. Finally, as a compromise, it was enacted that as a distinguishing badge, all students should wear a military cap. The faculty seems to have raised some objection to even this compulsory badge, but the trustees claimed authority to dictate and determine a general policy, and directed that the rule should be enforced.

THE UNIVERSITY SENATE.

At a meeting of the executive committee held October 30, 1889, it was provided that in the case of the appointment of a full professor of the university, no election shall be made except upon the nomination of the candidate by a committee composed of the president and all the full professors of the university. On November 4, 1889, it was provided that the professors thus organized should constitute a body to be known as the Academic Senate. On November 12, the name Academic Senate was changed to University Senate. On December 2, a formal statute was enacted, as follows:

"1. The University Senate shall consist of the president of the university and all the full professors.

"2. It shall be the duty of the senate to counsel and advise in regard to all nominations for professorships; to consider and make recommendations in regard to such courses of study as may pertain to more than one faculty of the university; and, in general, to consider and make recommendations upon any question of university policy that may be submitted to this body by the trustees, or the president, or either of the faculties.

"3. The meetings of the senate may be called by the president, or by the secretary upon the written application of any five members; and at such meetings the president, or in his absence the dean of the general faculty, shall preside. The senate shall have a secretary

whose duty it shall be to keep a record of proceedings, and call all meetings under the direction of the proper authority."

It was also ordered that on the reception from the president of any nomination for a full professorship, "the senate, after proper deliberation, shall vote by ballot yea or nay upon the recommendation; and their action, with any reasons for it which the senate may see fit to submit, shall be certified to the Board of Trustees."

On June 18, 1890, the statute regarding the senate was further modified by making it the duty of the president whenever a full professorship was to be filled to nominate to the senate the person whom he shall consider most worthy to occupy the vacancy The change thus made provided simply that the president should take the initiative in all nominations, such action in the original form of the statute having been overlooked.

On October 22, 1890, the constitution of the Senate was changed by the following statute of the Board of Trustees:

Resolved, That whenever any full professorship is to be filled, the president of the university shall, upon request of the Board of Trustees or of the executive committee, seek diligently and to the best of his ability, bearing in mind the provision of the fundamental charter of this university, which forbids him to take cognizance in any political or religious views which any candidate may or may not hold, nominate to the senate the person whom he shall consider most worthy to occupy the vacancy to be filled; thereupon the senate, after proper deliberation, shall vote by ballot yea or nay upon the recommendation; and their action with any reasons for it which the senate may see fit to submit, shall be certified to the Board of Trustees, who shall then confirm or reject such nomination. Said confirmation or rejection shall be by ballot, said ballot to be not by a single open vote cast by any one person, but by the ballots of all present and voting.

The reasons which determined this action are obvious. It was felt that in these important questions there should exist a responsible advisory body, which should take cognizance of the needs of the university as a whole and preserve a certain symmetry in its development. The pressure of individual departments for recognition and enlargement was a constant factor tending often to an undue expansion of any single field of instruction, at the expense of more important departments which demanded recognition. In the increasing field of the world's knowledge, it was necessary to take cognizance of new subjects, and a carful and deliberate judgment on the part of the senior professors was deemed of highest value as an aid in the deliberations of the trustees. Action, in itself admirable, might otherwise be taken without full con-

sideration of all the interests involved. The question which naturally arose was, how shall the university policy be directed to secure that intelligent and uniform administration, which shall enable it to develop in accordance with the advance of science? There could be but one answer to this question, and that was that all questions relating to courses of study, to the bestowal of degrees as well as the nomination of professors, should be entrusted to the appropriate faculty for decision. To entrust the decision of important legal questions to a body of artists, would be as unwarranted as to confer the control of questions of art upon a corresponding body of lawyers. Education is a science and has a history coincident with the growth of knowledge and the development of the human mind. It is, therefore, in itself a historical question as well as one of philosophy. The history of every particular science must be investigated in order to choose wisely the methods of study in that science. There was on the part of the trustees a profound conviction that the faculty of the university should be the active and responsible governing body, and that it should determine the character of the instruction and advise in the appointment of all instructors and professors. The trustees should form the permanent corporation, holding in trust the property, and confirm or reject all nominations and, in conjunction with the faculty, make all regular appropriations. It was felt that the faculty was alone competent to estimate the amount and variety of instruction required, preliminary to a degree, the number of departments and instructors, and the needs of the library, museums and laboratories. It might properly express an opinion of the expediency and character of all buildings which were to be erected. As regards the establishment or enlargement of departments, the resident instructors, who devote all their attention to an institution of learning are best fitted to judge of the wisdom of any change. A multiplication of departments may cause the regular and most essential courses of instruction to be neglected or deprived of the means of enlargement. The institution of a senate such as was contemplated exists in some of the most progressive institutions of our country, and is the established and historic mode of administration in Germany and in most other countries of Europe. In ignoring a system approved by the results of a thousand years, American colleges have made an experiment fraught with immeasurable loss to the efficiency of their development and to the progress of education. Two methods have been proposed for accomplishing this purpose: 1st, by authorizing

the faculty to elect annually two or more delegates to sit with the corporation, participating freely into its deliberations and expressing their views on all questions, becoming thus the medium of communication between the faculty and the trustees, or by establishing a university senate which may represent the authoritative voice of the faculty to the trustees upon such educational questions. The provision in the statutes of several States, which forbids professors in a college from becoming members of the corporation, is so framed as to exclude those who have devoted a lifetime to the study of educational questions from having any voice in settling the most important interests connected with academic culture. It is too often the case that the voice of the faculty is not heard in all questions affecting the welfare of the university, so that while sitting apparently in the place of authority, they are powerless to correct abuses and carry out important reforms. The law of this State, which formerly forbade professors in colleges from being members of the corporation, was repealed when the Hon. Samuel J. Tilden was governor; representatives of some one of the faculty of Harvard have served in the corporation and in the Board of Overseers repeatedly during the present century. The second method of attaining the end desired, by the establishment of the university senate, was that which was adopted by the trustees of this university. A profound and far-reaching wisdom was manifest in this action. It added dignity at once to the position of a professor and created an *esprit du corps* and sense of responsibility which were in the highest degree a contribution to the advancement of the educational interests of the university. A system so valuable in its results, winning at once the co-operation and enthusiastic participation of the faculty in supporting the executive of the university, and in promoting all interests which advance its welfare, could not have been otherwise obtained.

The expediency of the establishment of a senate was abundantly verified in practice. Previously, there had been no common organization by which the members of both faculties, viz., the Academic and that of the Law School, could meet together for mutual counsel or authoritative action. Many questions affecting the inter-relation of the Law School and other departments of the university demand such consideration in common. The provision establishing the Law School, which permits students in the Academic department to elect work in the Law School to a limited extent during the last two years of their course, as well as the qualifications and terms upon which such liberty

shall be allowed, as well as the question of a common calendar for the two faculties, demand an organization such as the senate. In practical operation, it abundantly vindicated its appointment. A conscientious effort on the part of professors constituting any group within the senate to secure candidates of the highest reputation and personal standing for the chairs which were to be filled, was manifested. All appointments during the period of the existence of the senate were made after a careful deliberation and comparison of the qualifications of all candidates named, and all appointments received the cordial support and endorsement of the faculty. Professors so elected came to the university with the consciousness of the approval of their appointment and a welcome to their new field of labor. The senate ceased to exist by action of the trustees October 6, 1893.

ALUMNI REPRESENTATION ON THE BOARD OF TRUSTEES.

A new element in university administration has been introduced, in giving to the alumni the right of representation upon the Board of Overseers or Trustees. It was expected that a double object would be attained by this measure, that new men having a personal interest in the university and a recent knowledge of its needs, would become a part of the government, and that the alumni would sustain a permanent relation to the institution, when directly associated in its management. This may be regarded as an adaptation of the English university system by which masters, in residence for a part of the year, at Cambridge form the senate, and at Oxford the convocation, legislative bodies to which all regulations are submitted for discussion and approval. Graduates who retain connection with the university are thus enabled to contribute the results of their learning to the decision of all matters affecting chairs of instruction, degrees and government. The contrast which exists in the scholarship of English and American students upon graduation makes the experiment in the two cases far from identical. The class to which authority is entrusted in the English universities is, in extent of study and experience, far in advance of our own graduates and is composed in most cases of professors, and resident masters pursuing liberal studies still further. In some colleges in this country, the right to participate in these elections is limited to graduates of five years standing, but if it is important to continue the relation of the alumni to their university, this delay in conferring the right of suffrage

until after a considerable period of separation from the college, has certain disadvantages. The fact that so large a portion of the alumni of our colleges are scattered throughout the land, and thus removed from an opportunity of voting in person at Commencement is obviated in some cases by a provision enabling a ballot for alumni trustees to be sent by mail, which is counted as if delivered in person. Any method which will retain the active interest of the alumni in their *alma mater* is worthy of examination, and possibly of trial. The first university in this country to introduce the principle of alumni representation in the choice of trustees was Harvard University. It was proposed as early as 1854, and a bill was introduced in the Senate of Massachusetts in that year which passed through most of the preliminary stages, but failed to be enacted owing, it is said, to the pressure of business at the close of the session.

On April 28, 1865, an act was passed by which the right to choose the overseers of Harvard College was transferred from the General Court or Legislature to graduates of five years standing, who should vote by ballot on Commencement day, in the city of Cambridge. The choice of overseers was at first limited to citizens of Massachusetts, but by a supplementary act passed March 5, 1880, persons who were not inhabitants of the Commonwealth, but otherwise qualified, were made eligible as overseers of Harvard College. In the act establishing Cornell University, no mention is made of the election of trustees by the alumni, but in an amendment to the charter, passed April 24, 1867, it was provided that whenever the alumni of the university should reach the number of one hundred, they were empowered to elect one trustee. By an amendment to the charter passed May 15, 1883, it was provided that members of the alumni who were not present at Commencement might send in their ballots in writing. The difference between the Harvard provision and that of Cornell consists in the fact that at Harvard there are two governing bodies, the fellows or corporation, and the overseers, who exercise the right of veto upon all action of the corporation. The graduates of Harvard have the right to elect the entire board of overseers consisting of thirty members. Their influence may thus be exerted at once effectively, in determining all questions of policy, through the overseers. At Cornell there are fifteen elective trustees, five of whom may be chosen by the alumni. The power thus conferred is limited, when compared with that of the alumni of Harvard. In further distinction from the Harvard system, all Cornell alumni,

wherever resident, may participate in the election of trustees. The system may now be tested by its results as nearly thirty years have passed since its introduction. It may be premised, that where there is a large and intelligent body of the alumni residing in the vicinity of a college, attendance upon the meetings of the trustees and active participation in the decision of all university questions are possible, and the results attained of a different order, from what occurs when the alumni are widely scattered. A choice of the ablest and most influential scholars and educators may be made whose residence will permit them to give the most careful attention to the interests of the university; but it may be questioned whether the results under the present system have fully equaled the expectations which had been formed. The character of the trustees or overseers elected by the alumni has not greatly differed from those previously chosen. In most colleges, a majority of the trustees have always been graduates of the college and the fact of an election by the alumni did not change their essential character. Where alumni trustees have been substituted for a long list of ex-officio members as at Yale or Harvard or elsewhere, there has been a real gain. At Harvard, however, the substantial power still rests with the corporation, which is in the main a self-perpetuating body, while the overseers have only the right of confirmation of its nominations, and do not originate action. An alumnus is chosen for prominence in social or political life, or for eminence as a lawyer or clergyman and not because he has any intelligent acquaintance with the history of education, or is qualified to judge of the demands of higher learning at the present time. Local considerations often influence the selection of candidates, and party interests are not always forgotten. Men are elected, who can snatch but a hasty moment from the pressing demands of professional life to decide upon questions affecting the permanent educational interests of the nation, and to judge of the standing and qualifications of professors in all departments of learning. The election is often determined by a small proportion of the alumni who are able to be present, or have an interest in voting. In such cases an active local interest or an aggressive partisanship may prevail, and a choice occur based upon some remote college or society popularity. The attendance of trustees so chosen has not always been secured, and only a measure of success under favorable circumstances may at present be considered as attained by the system.

On several occasions the influence of the alumni has been very advantageously felt in presenting their views in regard to questions of university policy. One of the most notable instances of this kind was in connection with the subject of honorary degrees. It had been the settled policy of the university from the beginning to bestow no honorary degrees. Soon after the beginning of the administration of President Adams, he recommended the bestowal of honorary degrees, believing that a time had been reached in the history of the university when such degrees might be properly conferred in recognition of distinguished attainments by our own graduates or others. At the second Commencement of the university, President White had stated publicly and explicitly that it was the policy of the university to bestow no honorary degrees. The University of the State of New York had bestowed upon Professor Goldwin Smith the degree of Doctor of Letters, in recognition of his high scholarship, and distinguished services to education both in England and America, and above all, of his generous identification of himself with the various educational interests of the State. This degree was formally presented at Commencement, 1870. Upon this occasion, President White stated that the trustees had decided to confer no honorary degrees, but he was gratified to have the honor of announcing that the Regents of the State of New York had delegated to him the pleasure of conferring the degree of Doctor of Letters on one whose labors in the field of letters the world is proud to acknowledge, Goldwin Smith. The trustees, under the impression that the faculty of the university favored the proposed change in policy, passed a resolution in favor of granting such degrees. This resolution was opposed by the alumni representative in the Board of Trustees, who, however, decided that the provision requiring the concurrence of two-thirds of the members of the faculty, would guard against any danger which might arise from an indiscriminate and unguarded bestowal of such degrees. Immediately after this action, four names were presented to the faculty for honorary degrees, whose merits the faculty would have been glad to recognize, had they not felt a pride in the honor of the university, which enabled them to say that every degree conferred had always been earned and established by satisfactory courses of study and confirmed by the requisite examinations and theses. Of the names presented to the faculty, one received twenty votes out of twenty-two cast, and one eighteen, in each case less than half the faculty. The question having been raised whether the resolu-

tion of the trustees contemplated the approval of any nomination by two-thirds of the resident members of the faculty, or by two-thirds of those voting, the question was referred to the trustees for decision, and the remaining names which had been presented were withdrawn. In reporting the action of the faculty to the trustees, the question of the interpretation of the law which had been raised, was not presented, and these two degrees were voted by the trustees, and stand alone as the only honorary degrees ever conferred by the university. Under these circumstances, a majority of the alumni presented a memorial to the trustees and faculty of the university, protesting against the adoption of the policy of bestowing such degrees as injurious to the university. It was shown that in eighteen years 1,122 first degrees and 82 second degrees had been conferred, and that for every advanced degree a certain specified amount of work under careful supervision, with residence, together with the presentation of the proper thesis and examination had been required; that if the policy of conferring advanced degrees without study and residence were pursued, the value of all degrees would be impaired and graduate students would have less incentive to pursue their studies in course for degrees which might be obtained *honoris causa*. It was believed that such a policy, involving as it did a distinction between different members of the alumni, would result in final harm and in an appreciable loosening of the bonds of loyalty. The various departments of the university were so numerous that it would be difficult to determine between the merit of students distinguished in different branches. To attempt to weigh, for example, the claims of an alumnus who has written a successful novel against the claims of one who has built a great bridge or made an important scientific discovery, or achieved marked success in any profession, was manifestly absurd. "You cannot," says D'Quincy, "affirm imparity, where the ground is occupied by disparity." Where there is no parity of principles, there is no basis for comparison. How, then, can any body of men determine the conflicting claims of the graduates of various and widely divergent departments? It was shown that in the year 1884, sixteen obscure colleges in this country had conferred ninety-nine degrees in course, and seventy-two honorary degrees; and that in the year 1883, five hundred honorary were conferred in the United States. President Barnard at Columbia College had recommended a most stringent policy "in consequence of the constant and annoying pressure upon the board by outsiders, by whom every form of social and even occasionally political

influence was brought to bear to induce them to confer academic honors upon persons doubtfully deserving." President Gilman had stated: "The whole system as at present maintained is full of fraud towards the public, unfairness towards men of letters and dishonor to the name of learning and to the thought of academic honor." Boston University had boldly adopted the policy and announced it in its catalogue. "The university confers no honorary degrees of any kind." The claims which might be brought to bear upon the university by successful politicians, who have risen to high positions in the State and National governments might not be easy to be resisted. This significant appeal to the faculty was signed by the presidents of all the alumni associations of Ithaca, New York, Central New York, Western New York, New England, North-Eastern Pennsylvania, Washington, Chicago, Minnesota and Ohio. Upon its presentation in the faculty, the faculty referred it to the trustees with a unanimous approval, where a resolution was likewise passed without a dissenting voice rescinding the vote concerning honorary degrees. On other occasions when the opinion of the alumni upon questions of university policy has been presented it has always received full and respectful consideration. Such occasions have occurred in connection with the choice of a president, with the questions of professors' salaries and the erection of buildings.

At the annual meeting of the alumni held on June 18, 1884, it was

Resolved, That the Trustee last elected by the alumni shall, at the end of the first year of his office, make a written report on the conditions and needs of the university, to the associate alumni at their annual meeting in Ithaca, said report to be submitted in writing to the other alumni trustees, and their dissent or approval to be endorsed thereon before presentation.

It was also

Resolved, That such report be printed by the alumni, but that the association shall not be considered as adopting the views presented.

Since 1885 the alumni trustee last elected has presented to the assembled body of the alumni at their annual meeting in Commencement week, a report upon the condition of the university, with a review of its condition and policy, accompanied by such recommendations as he deemed best. At the meeting of the alumni held in June, 1890, a resolution was passed establishing an alumni bureau, the object of which should be to promote the interests of graduates of the university. It was proposed to establish a central bureau where the names of all students desiring educational or other positions should be preserved, and

to which application might be made and information of vacancies in educational and professional positions given. This bureau has been in operation four years, during which time assistance has been freely given to all applicants, and every year a large number of students, upon graduation, and older alumni, have received positions through its instrumentality. A fuller co-operation on the part of the alumni is alone needed to enable this bureau to exert a beneficent and extended influence in behalf of graduates of the university. As it is, its influence has been widely felt.

At the meeting of the alumni June 19, 1889, the question of what constituted an alumnus of the university was raised. The trustees had adopted at their meeting on October 24, 1888, in accordance with a section of the charter of the university, which required them to interpret who shall constitute the alumni of the university and be entitled to vote for alumni trustees, a resolution that all graduates in any department with the first degree, and all persons who have been admitted to any degree higher than the first in the university shall be alumni, and as such entitled to vote for alumni trustee. The executive committee of the Alumni Association issued a circular asking for an expression of the views of the alumni, whether they favored the ordinance as it stood, or an appeal to the trustees to raise immediately the standard of admission and lengthen the course of instruction in the Law School until it should be equivalent to a four years course. In reply, answers were received from 660 graduates, of these 594 favored an appeal to the trustees to raise the standard of admission and lengthen the course of instruction in the Law School, 44 favored the ordinance as it stood, and 26 held conflicting views as to the course to be pursued. At the meeting in the following year, no favorable action having been taken by the trustees, the subject of the resolution was taken up and referred to the representatives of the alumni in the Board of Trustees to advocate and support the above views.

At the meeting of the alumni in 1888, a resolution was offered in favor of raising funds to erect an alumni hall. This committee reported at the above meeting on June 18, 1890, in favor of organizing a Cornell Central Club, the object of which should be to raise the sum of $50,000 for an alumni hall to be erected on the university grounds. Ex-President White had offered to add $10,000 to the above sum, in case the amount should be raised within five or six years. It was proposed to erect a building, the main hall of which should be utilized for the great

gatherings and entertainments of the club, and as a repository for memorials of former professors and students of the university. The effort to secure this fund is still in progress.

VII.

THE RELATION OF THE UNIVERSITY TO THE STATE: 1. SCHOLARSHIPS. — 2. THE CHURCH.

SCHOLARSHIPS.

THE question of providing State Scholarships in colleges founded under the National Land Grant Act was agitated very early. The State of Connecticut in the act establishing an agricultural and mechanical college in connection with the Sheffield Scientific School provided for gratuitous instruction to students especially selected under certain regulations to enjoy this privilege. "The number of pupils to be so received gratuitously into said school shall be in each year such a number as would expend a sum equal to one-half of the said interest (on the income of the National Land Grant) for the same year in paying for their instruction in said school, if they were required to pay for it at the regular rates charged to their pupils." The State of Rhode Island in bestowing the Land Scrip upon Brown University provided that it should educate scholars each at the rate of one hundred dollars per annum, to the extent of the entire annual income from such proceeds, subject only to the provision permitting one-tenth part of the income to be expended in the purchase of lands. The senators and representatives from the several towns in the State were constituted a Board of Commissioners to present to the governor and secretary of state the names of worthy young men to be educated as State beneficiaries, and the commissioners were instructed after one candidate had been presented from each town in the State, to select the candidates, as far as may be, from the several towns in the ratio of their representation in the House of Representatives and from that class of persons who otherwise would not have the means of providing themselves with the like benefits.

In New Jersey, students of agriculture and the mechanic arts were to be admitted to the proposed college upon the recommendation of the

board of chosen freeholders of their representative counties; and the number of students which a county should, at any one time, be entitled to have in the college, was to be equal to the number of representatives in the Legislature to which the county was entitled, or, in proportion to the same, and the trustees were required to furnish gratuitous instruction to pupils, the number of which each year should be such as would expend a sum equal to one-half of the said interest (on the National Grant) for the same year, in paying for their instruction, if they were required to pay for it at the regular rates. Some of the States in which agricultural colleges already existed provided for free instruction for all students from the State, as in the case of Iowa and Michigan. Others, like New Hampshire, provided for free tuition to indigent students. The provision which most nearly affected the charter of Cornell University was a section in the act assigning the Land Scrip to the People's College, passed May 14, 1863, which ante-dated all others, providing that, from the year 1868, or whenever in the opinion of the Regents of the University the income arising from the investments provided for in the act should warrant the same, the People's College should receive students from every county in the State, and "give and furnish to them instruction in any or all the prescribed branches of study pursued in any department of said institution, free from any tuition fee or any additional charges to be paid to said college; and the Regents of the University shall from time to time designate the number of students to be so educated; but they shall be selected or caused to be selected by the chancellor of the university and the superintendent of public instruction, who shall jointly publish such rules and regulations in regard thereto as will in their opinion secure proper selections and stimulate competition in the academies, public or other schools in this State." It was also provided that the Regents should determine from year to year in accordance with the income of the college the number of youth who should be exempt from any payment of board, tuition or room rent; but in the selection of students preference should be given to the sons of those who have died in the military or naval service of the United States. This provision regarding preference to be shown to the sons of those who have died during the war appears also in the charter of other institutions, as in the case of the States of Connecticut and Wisconsin, which provisions were adopted subsequent to this date. Cornell University, in receiving from the State the Land Grant Fund, assumed the obligation which had been

imposed upon the People's College, but with a more definite specification of the number of those who should receive gratuitous instruction, it being provided that it should receive annually students, one from each assembly district of the State, that such free instruction should be accorded to students in consideration of their superior ability as a reward for superior scholarship in the academies and public schools of this State. It differed further from the act appropriating the proceeds of the Land Grant Act to the People's College by providing that the school commissioners of each county, or the Boards of Education in each city should select annually the best scholar from each academy and each public school of their respective counties or cities as candidates for the university scholarship, which candidates should meet, and after a special examination, the best scholars, one from each assembly district in said county or city should be selected and receive certificates entitling the students to admission to the university, subject to the examination and approval of the faculty, which selection in the previous act was to be made by the chancellor of the university and the superintendent of public instruction or under their direction. Under this provision Cornell University entered into a direct obligation with the State by which it was bound to educate contemporaneously four students from each assembly district, should that number apply for admission, making a total of 512 students, who should be drawn from the public schools and academies of the State. The free instruction, thus provided, secured the education of a larger number of students than the entire number upon the catalogues of several colleges. This act placed an advanced liberal and technical education at the disposal of the most meritorious scholars from all parts of the State. It also brought the university into direct relationship to the courses of study in the high schools and academies of the State, and it has become indirectly, through its powerful advocacy, and directly by its standard of requirement, an important factor in elevating and directing the entire system of public instruction throughout the State. All parts of the State did not share at once and equally in the advantages thus presented. Owing to the indifference of educational boards, in many cases examinations were not provided for students who desired to avail themselves of the benefits of the State law. Some of the most populous cities of the State took no action for years to admit the pupils of their public schools to this important advantage. By an act amending the charter of the university, the immediate responsibility for the execution of this law was entrusted

to the superintendent of public instruction, by which it was further provided that, in case any county was unrepresented in the university, or the scholarship was not claimed by a student of that county, the State superintendent might, after notice had been served on the superintendent or commissioner of schools of said county, appoint a candidate from some other county, whose rank entitled him to such recognition. The superintendent was required also to prepare the examination papers upon which appointments were based, and also to retain the papers presented by the different candidates, and to keep a record of the standing of candidates, and to notify them of their rights under this act. He was also charged with the general supervision and direction of all matters in connection with the filling of such scholarships. Under the wise provisions of this act, the full quota of scholarships allotted to the State was filled, and the number of students availing themselves of the privileges of the university increased rapidly, the number admitted rising from 375 in 1886-7 to 442 in the following year, and 562 in the succeeding year. To these public provisions for scholarships should be added the fact that free tuition has been accorded to students who pursued the full course in agriculture, and also to graduate students, so that the number receiving free tuition at the present time is not far from 700 students.

On October 27, 1884, the trustees of the university set apart the income of a fund of one hundred and fifty-five thousand dollars for the establishment of scholarships and fellowships. The origin of this fund illustrates one of the noblest acts of generosity in the history of the university. The cost of administration and equipment had exhausted the income for successive years; a debt of more than one hundred and fifty thousand dollars threatened the serious embarrassment, if not the abridgment, of the work of the university; the large plan outlined in its establishment had been proved to involve an expense far in excess of the available funds. At a meeting of the Executive Committee, after serious debate respecting the financial difficulties in which the university was placed, President White made a proposal to pay a proportion of the university debt according to his property, provided the whole debt could be paid in the same manner by individual members of the Board of Trustees. Mr. Cornell offered to give fifty thousand dollars to discharge the debt, and finally increased his gift to seventy-five thousand dollars, provided the balance could be raised. The proposition awoke much enthusiasm, and confidence was expressed that the difficulties

which beset the university could in this manner be overcome. Messrs. John McGraw, Henry W. Sage, Hiram Sibley and Andrew D. White gave each twenty thousand dollars, which, with Mr. Cornell's generous gift, enabled the university to discharge its liabilities. There seems to have been an understanding at this time, or subsequently, that in case the university revenue should ever be sufficient, to devote the income of this sum to found scholarships and fellowships for meritorious students. It seemed possible, at the meeting of the Board of Trustees on October 27, 1884, to carry out the proposition which had been formed so long before, and it was voted to establish twenty-four scholarships, six to be awarded each year, of the value of two hundred dollars each, to be assigned to the students passing the best examination for admission, after special examination. Three scholarships were also established from the Sage fund, which were to be increased to twelve after the year 1887, three of which were to be open to each class upon entering. These scholarships were to be awarded to women, one of which was to be bestowed upon the woman passing the best examination for entrance to the Course in Arts, and two to women students entering the freshman class in any other course. It was provided that these scholarships should be tenable for one year, and at the end of the first year the faculty should decide who should retain or receive the scholarships for the remaining three years of the course, either by the record made by the students through the first year or by competitive examination, or in whatever manner it should be deemed best. There were also established at the same meeting seven fellowships of the value of four hundred dollars each, to be awarded to graduate students of Cornell University, or of some institution of equal rank, who had distinguished themselves in some special department of study. Since this time one additional general university fellowship has been established; also three Susan Linn Sage fellowships in philosophy and ethics, and six graduate scholarships in the School of Philosophy, according to the terms of Mr. Sage's endowment, and also two President White scholarships in History and Political Science, two fellowships in Political Economy and Finance, two fellowships in Latin and Greek, and one fellowship in American History. At the meeting of the trustees held October 8, 1893, ten additional graduate scholarships were established of the annual value of three hundred dollars each, and five additional fellowships of the annual value of five hundred dollars each were established. At the same time the value of each of the existing

graduate scholarships and fellowships was increased by one hundred dollars per year.

THE RELATION OF THE UNIVERSITY TO THE CHURCH.

In the act passed May 1, 1784, at the close of the Revolutionary War, changing the name of King's College in New York to that of Columbia College, and erecting a university within the State, it was provided that no professor should in any wise whatsoever be accounted ineligible for, or by reason of any religious tenet or tenets that he may or shall possess, or be compelled by any by-law or otherwise to take any religious oath. In the act of May 13, 1787, in the famous report recommending a revision of the charter of Columbia College presented by Alexander Hamilton, it was stated that the erection of public schools is an object of very great importance, which ought not to be left to the discretion of private men, but be promoted by public authority. On April 13, 1787, a law embodying the views of the Board of Regents was passed establishing a State university, the general provisions of which still remained in force, and which has formed the basis of the present system of collegiate and academic instruction in the State. This act repeated the provision of the original law in different words, stating that no president or professor shall be ineligible for, or by reason of, any religious tenet that he may or shall profess, or be compelled by any law or otherwise to take any test oath whatever. Under this clause it was held that it was impossible for a college to be converted to sectarian purposes. The men who formed the Constitution of the United States were resolute in upholding the separation of Church and State, and in making the educational system of this country as free as its political. In the petition for a charter for Union College presented December 18, 1794, the second provision of the proposed charter provided that a majority of the Board of Trustees shall never be composed of persons of the same religious sect or denomination. In the formal charter of the college this principle was fully incorporated. The first principle of religious equality contained in any college charter in this country is perhaps that in the charter of Brown University, which was adopted on the last Monday in February, 1764: "*Provided*, and furthermore it is hereby enacted and declared, that into this liberal and catholic institution shall never be admitted any religious tests; but on the contrary, all the members hereof shall forever enjoy full, free, absolute and uninterrupted liberty

of conscience, and that the places of professors, tutors and all other officers, the president alone excepted, shall be free and open for all denominations of Protestants, and that youth of all religious denominations shall and may be freely admitted to equal advantages in the emoluments and honors of the university, . . . and that the sectarian difference of opinion shall not make any part of the public and classical instruction." Views like these constituted hereafter a part of the educational system of the State of New York. Similar views received recognition in the University of Michigan, where the policy in matters of religion was declared to be identical with that of the common schools. Persons of every religious denomination were capable of being elected trustees, and no person, president, professor, instructor, or pupil, was to be refused admission for his conscientious persuasion in matters of religion. In the charter of Cornell University the principle contained in the charter of Union College was stated, with the additional limitation: "But at no time shall a majority of the board be of one religious or of no religious sect." This principle, therefore, corresponded to the enlightened provisions of the charter of our State University and to the broad and liberal spirit in matters of religion which pervaded the founder of the university. In the inaugural address of President White it was stated: "Into these foundation principles—that is, the union of the scientific and the æsthetic with the practical—was now wrought another at which every earnest man should rejoice: the principle of unsectarian education." Higher education in America had been begun and fostered in all institutions by Christian men, and had it not been for such support, no provision would perhaps have been made for many years for higher education in the United States. To education as a factor in social order was joined the desire to train men for the ministry and to Christianize the savages. A second provision was that persons of every religious denomination or of no religious denomination should be equally eligible to all offices or appointments. And further, President White in his inaugural address said: "We shall not discard the idea of worship. This has never been dreamed of in our plans. The first plan of buildings and the last embraces the University Chapel. We might, indeed, find little encouragement in college chapel services as they are often conducted,—prayers dogmatic or ceremonial, praise with doggerel hymns, thin music and feeble choir; the great body of students utterly listless or worse. From yonder chapel shall daily ascend prayer and praise. Day after day it shall recognize in man

not only mental and moral, but religious want. We will labor to make this a Christian institution; a sectarian institution may it never be."

This limitation upon the choice of trustees has probably never been seriously considered in the election of any member of the board; and doubtless at no time has it been possible for any one to state the proportion of trustees who were members of any particular religious denomination or of no denomination.

At the opening of the university, the large lecture room on the fourth floor of the south university building, now Morrill Hall, inconvenient as it was of access, was called the Chapel and religious exercises, to which attendance was voluntary, were held every morning at eight o'clock. Services were conducted by Reverend Professor W. D. Wilson, consisting of the reading of a passage of scripture, the Lord's Prayer and certain collects from the Prayer Book. These exercises were conducted with great faithfulness by Dr. Wilson for five years. As few of the students were accommodated in the university buildings, and many had no recitations upon the hill at the first hour, attendance upon morning prayers was very limited. The veteran chaplain, after continuing them for several years, stated with assurance that he had always had one present. Inquiry did not elicit the fact whether that one constituted the reader or a solitary worshiper.

In the erection of the Sage College, it was proposed that the present large botanical lecture room should constitute the University Chapel. The erection of the present chapel is immediately due to the pure and beautiful suggestion of Mrs. Henry W. Sage. As the plans for the new college were hastily examined in Brooklyn one evening, she inquired: "Is that the only provision in that great university which is made for religious services?" On the following morning Mr. Sage called upon President White and stated that, if he would go with him and select the site of a chapel, he would give the same to the university. This occurred in 1872. Professor Babcock was the architect of the new chapel, which was erected during the year 1874-5. It was designed to accommodate 500 students, the number of students then in the university being about that number. The small chapel was designed to be occupied for morning prayers, but prayers were only held there a few times if at all. The number of students who resided upon the hill had gradually become smaller, as the needs of the university made it necessary to use rooms in the two dormitories for purposes of instruction. The University Chapel was formally dedicated by the

Rev. Phillips Brooks, of Trinity Church, Boston, who preached from the text; "What I tell you in darkness, that speak ye in light," on June 13, 1875, in a memorable discourse. But after the erection of the Chapel, no funds were available for the support of preaching or of a university pastor. Under these circumstances, Mr. Dean Sage, of Albany, made possible the realization of the noble purpose of his father in the erection of the Chapel, by the gift of thirty thousand dollars, the income of which should be spent in paying the salary of a university pastor, or the expense of university preachers. The question of how the best results were to be obtained in the use of this fund was one which received serious consideration. President White was familiar in his own college experience with the institution of a college pastor, with obligatory attendance upon religious services. He opposed energetically the idea of compulsory attendance at morning prayers and at chapel services, believing that worship, to be acceptable and successful when associated with a university, must be voluntary. His own visits to the services connected with the English universities and his fondness for music led him to desire that the musical feature of the chapel service should be made prominent, and he has always advocated the establishment of a musical professorship in connection with the university, the holder of which should be musical director of the university. During the years past the most eloquent representatives of the various denominations have preached in the Chapel, and whatever eloquence and ability could contribute to make the present plan a success has been realized. The absence of a church organization in connection with the Chapel constantly leads large numbers of students to connect themselves with the churches in town, the services of which they attend. It is obviously necessary that preachers who are called to the university chapel should be gifted as pulpit orators, but above all that, that they possess the power to appeal to young men. Mere theologians who have appeared in the university chapel have, as a rule, failed to secure the attention of the students or produce a lasting impression. It is also necessary that the preachers should be known, men of recognized ability and reputation; for in no organization, perhaps, does the reputation of the individual preacher exercise so important an influence upon his audience as in the voluntary system of chapel services. Men of great excellence and ability, but unknown, have constantly failed to attract an audience. It must be admitted that a pulpit thus conducted, without a church, has the character of a religious lec-

tureship, and students are prone to regard attendance upon it as, in part, a matter of indifference. A chapel which will seat five hundred people has proved adequate, as a rule, to accommodate a university population which numbers at least two thousand. It may well be queried, after an experiment extending over twenty years, whether the system in vogue has been so successful that the Chapel has become, as it properly should, the center of the religious life of the university, and has acquired a constantly increasing hold upon the students? Preachers come, fulfill their engagement, and disappear; they are often unknown, and after a few hours return to the local eminence from which they came, leaving little or no impression upon the university world. On the contrary, preachers who are well known, and who possess a genuine sympathy with young men, seldom fail to meet a responsive audience and to receive cordial recognition. Peculiar gifts are demanded of those called upon to address students. The question has been solved of late in different ways. Harvard has probably attained the most satisfactory solution, with a resident college pastor of recognized ability as a preacher, who possesses an interest in all questions which concern thoughtful students. He is in permanent residence, to whom all students may go for counsel. To him are joined clergymen of different denominations, who are in residence for four weeks at a time. These are men of marked eminence, and chosen distinctly for their power to influence young men. These five preachers, in conjunction with the professor of Christian Morals, arrange and conduct the religious services of the university. Each one conducts daily morning prayers for about three weeks in the first half of the year and about three weeks in the second half of the year, and preaches on four successive Sunday evenings. The preacher who conducts morning prayers is in attendance every morning during his term of duty, and is at the immediate service of any student who may desire to consult him. This arrangement places at the disposal of the students a greater amount of pastoral service than most ministers can give to their own parishes. On Thursday afternoons, from November until May, vesper services are held in the University Chapel, largely musical, with full male choir of forty members and with an address from one of the staff of preachers. College conferences are also held, at which addresses are delivered by the professors upon the Bible, in its literary, ethical and religious aspects. Under this system there is a permanent pastor, and, at the same time, the pulpit services are conducted by

clergymen whom the students come to know, and who alike know their audience and can adapt their service to them. Its success has been so great that in many colleges where there is a permanent pastor the essential features of this plan have been more or less fully adopted. The University of Virginia, also an undenominational institution, has a college resident for a fixed number of years, and chosen in turn from several of the leading denominations of the State. Either system promises more success than a series of disconnected preachers, with varying subjects, arranged without consultation, and acquiring during the few hours of their residence in Ithaca slight acquaintance with the needs of the student world.

The absence of a dormitory system, through which students find a home upon the university grounds, has been a serious obstacle in the development of systematic attendance upon chapel services. An overwhelming majority of the students reside in the city, at a distance from the university, and thus are not favorably situated to attend daily services, and are nearer to the churches of the city whose able preachers prove a stronger attraction to them than unknown preachers in the Chapel.

The Christian Association was one of the earliest societies formed in connection with the university. The first number of the Cornellian, in a list of five hundred and seventy-one students, contains the names of forty members of the association. For many years, a devoted body of students met on Sunday, and for a Bible class or prayer meeting on week days, in the Society Hall in the north building, now White Hall. Later, under energetic leadership, it undertook the elaborate enterprise of raising funds to erect on the university campus a building for the use of the Christian Association. It had proceeded a certain distance in this enterprise, when Mr. Alfred S. Barnes of New York offered to give a sum sufficient to complete the proposed building. This building was designed to contain lecture rooms, Bible class rooms, reception rooms, parlors, library, and rooms for a permanent secretary and others. This beautiful structure, which was erected in 1889, has proved the center of the religious life of the university. Its rooms are freely at the disposal of all the religious societies. One recent feature of the religious life of the university has been the formation into societies, or circles, or unions, as they are variously called, of the students of the several denominations. Thus the Presbyterian, Baptist, Methodist, Unitarian, Episcopalian, Roman Catholic and other students have been

united into guilds or organizations, the main purpose of which is to cultivate mutual sympathy, and to perpetuate the associations with which they are familiar at home. The greatest catholicity exists in the relation of these various organizations to one another, and they frequently participate in receptions, lectures and excursions in common. The religious activity of the students manifests itself in very beneficial ways: in the reception and care of new students arriving at the university; in a watchful interest over sick students, and in holding religious meetings in various communities at a distance from Ithaca, where no other religious services are held. Systematic and classified schemes for Bible study are presented each year, and numerous classes for the study of different portions of the Bible, its antiquities, literature, history, and of practical ethics, are arranged. Special lectures and addresses from clergymen, and often from members of the faculty, are held during the winter term when there is no preaching service in the chapel. The number of members at the present time is about five hundred, making the association as it is said the largest university Christian Association in the country, possibly in the world. The association has supported for several years a graduate of the university in Japan, who is at work in that country in founding similar organizations in connection with the young men of the cities and universities of that country.

VIII.

THE OPENING OF THE UNIVERSITY.

THE CAMPUS AND BUILDINGS.

The university campus was originally bounded on the north by the Fall Creek road and on the south by President's Avenue. The square, lying between this avenue and Cascadilla Creek, and between East and West Avenues, containing fifty acres, forming now the most beautiful part of the university grounds, and having upon it Boardman Hall, the Chapel, the Sage College, the Armory, the Society Halls, and the professors' cottages along Central avenue, was obtained by purchase in 1872. By later purchases the university land was extended on the north to Fall Creek, and the territory on the south side of Cascadilla

Creek, on which Cascadilla is situated, was acquired. The original gift embraced two hundred and seven acres. The university domain now contains about two hundred and seventy acres. The university possessed only a right of way over the newly constructed road which now constitutes Central Avenue.

At the second meeting of the Board of Trustees, held in Ithaca on the 5th of September, 1865, various committees of trustees were appointed; among them was an executive committee, a building committee, and a finance committee. The committee on buildings was authorized to select a site for the university. The location chosen was at that time an uneven shelf of the hill which rose to the east of the city. Upon the level ground, where the Armory now stands, and on both sides of what is now Central Avenue, was an extensive orchard, and a second orchard, in the vicinity of a small farm house, existed on the northern portion of the grounds, south of the Sibley College. A considerable depression existed between Morrill and McGraw Halls, and also between McGraw and White Halls. To the north of White Hall the ground rose abruptly, almost to the height of the present second story. This land constituted the Hon. Ezra Cornell's farm at the opening of the university. From it a view extends following the winding lines of the valley to the southwest, and over the shores and waters of Lake Cayuga for many miles to the north. Westward across the valley rises a lofty line of hills covered with orchards and vineyards, beautiful in spring time with showers of blossoms, and at all times exhibiting an endless play of light and shade. Its square fields of forty acres are remnants of the early military survey of the State.

At the meeting of the trustees, held March 14, 1866, $500,000 were placed at the service of the building committee, a sum equal to Mr. Cornell's entire gift in money, which certainly was not available from the endowment fund nor from the proceeds of the government grant, the use of which was to be "inviolably appropriated to the endowment, support and maintenance" of the university, and "no portion of which fund nor of the interest thereof was to be applied directly or indirectly under any pretence whatever to the purchase, erection, preservation or repair of any building or buildings." In the original law of Congress it was enacted that every State, within five years from the date of the passage of the act, should provide for at least one college; and in the charter of the university, it was required that within two years provision should be made satisfactory to the Regents in respect to buildings,

fixtures and arrangements. Few universities have had a fairer opportunity to make all their buildings models of an intelligent taste in art. The future of the university was from the first assured. Unfortunately, the architecture of the new university in its initial and most important features was entrusted to a local architect in a neighboring city, unfamiliar with the finest results of collegiate architecture, and apparently unconscious of the new direction of art in the United States. A picturesque grouping of buildings under a skillful landscape gardener was possible, instead of the traditional arrangement of three buildings in a row, where, as in this case, the architectural front differed from the actual. The eminent landscape gardener whose genius has been manifested in the finest work in his department in America, and has been the admiration of foreign visitors in two international exhibitions, Mr. Frederick Law Olmsted, was so impressed with the influence which the national system of colleges should exert upon our entire industrial population and upon our educational life, that he published several papers upon how such institutions might meet, not only practical demands, but those of a genuine and refined art taste. In emphasizing this side of the proposed national scientific schools, he stated: "A similar scheme of education was never before proposed to the mind of man in this country or any other. Why not set ourselves about it like men, and institute such means, and only such means as are adapted to our ends?"

Owing to the limited time in which all preparations for the accommodation and inauguration of the new university had to be made, measures were at once taken to erect the necessary buildings. At the third meeting of the Board of Trustees, held in Albany, March 4, 1866, a report of the building committee was presented, and it was voted to commence the necessary building or buildings at the earliest day consistent with the interests of the university. The committee was authorized to procure by purchase or otherwise any building or buildings or land needed near the proposed location of Cornell University suitable for the purposes and uses of the university. Work seems to have been begun at once, for at the following meeting of the trustees, held in Ithaca, October 21, 1866, a contract for the building under construction was mentioned. In the records of the time we find the architecture of the new building described as Italian Renaissance. The boldness of this euphemism will be the admiration of future students of art. This building was designed mainly for a dormitory for the accommo-

dation of students, which the city could not at that time furnish. The dormitory system seems to have been from the first regarded with disapprobation and only adopted reluctantly, to provide for the needs of the university at its opening. It appears from the records that at this time a building four stories high and 165 feet long by 50 feet wide, with a basement, which had been begun in August, was now so far advanced as to insure the immediate roofing of one-third of the building, and the probable covering of one-third more, possibly of the whole before winter, thereby enabling the work of finishing the interior to go on, and insure completion for use in the coming summer. It is apparent that a purpose existed at this time to open the university in the fall of 1867. On February 13, 1867, the authority was given to erect a second building which should be a duplicate of the first, with rooms in the central division for the use of the faculty. This seems to have been the first provision made to meet the most essential feature of a university, a building mainly for lecture rooms, museums and laboratories. The construction of this building was delayed, for a vote passed November 11, 1869, provided that it be opened, as soon as students from the town should be found to fill it. About this time a building to be devoted mainly to the needs of the chemical and physical departments was begun, although there is no record of its early history. This was the original chemical building which stood west of the present building for dairy husbandry. It was intended to be temporary and was of wood, but admirably designed to meet the needs for which it was erected, and it remained standing until within a few years.

At the opening of the University, Morrill Hall stood alone upon the brow of a hill in an open field. There was no street across the university grounds, where Central Avenue now runs, and no bridge spanning Cascadilla Creek. At the exercises upon the university grounds, when the chimes were presented, the crowds of people ascended the hill through the cemetery or wound along the dusty way which passed the grounds of the present McGraw-Fiske house; or the bolder followed the bank of the creek beyond Cascadilla, to a place just north of the site of the present iron bridge, where by climbing half-way down the bank, they reached the top of a ladder which they descended; they then crossed the stream upon two or three boards supported loosely upon timbers, and climbing the opposite bank by a similar ladder, scrambled to the top through brushwood and forest until they reached the open orchard

north of the present lodge of the Psi Upsilon fraternity. They then followed the line of a rambling stone wall which marked the boundary of the university property to the west, along the crest of the ridge in front of the present row of professors' cottages on Central Avenue. Two ravines of considerable depth had to be crossed to reach the eminence where the Library building now stands, and where the bells had been mounted on a rough frame work of timber.

We have been permitted to use the accompanying contemporary account of the inauguration of the university, by George William Curtis, which, however, veils his own graceful participation in that event.

"In the very height of the presidential campaign, one bright autumn morning was hailed in the pleasant town of Ithaca, in New York, with ringing bells and thundering cannon, but for no political celebration whatever. Had the little town, dreaming upon the shore of the lake so long, suddenly resolved that it would justify the classic name with which Surveyor-General De Witt blessed its beginning, and as old Ithaca produced a wise man so the new should produce wise men? The surveyor who so liberally diffused so Greek and Roman a system of names through the hapless wilderness of Central New York half a century ago, would have smiled with delight to see the town decorated through all its broad and cheerful streets with the yellow and red of autumn, and ringing its bells of joy because a university was to open its gates that day. But old Paris, Salamanca and Bologna, Salerno and Padua, Göttingen and Oxford and Cambridge would surely have failed to recognize a sister could they have looked into Ithaca. Indeed they would have felt plucked by the beard, and yet they would have seen only their fair, legitimate descendant.

The hotels and the streets and the private houses were evidently full of strangers. Around the solid brick building, over the entrance of which was written "The Cornell Library," there was a moving crowd, and a throng of young men poured in and out at the door, and loitered, vaguely expectant, upon the steps. By ten o'clock in the morning there were two or three hundred young men answering to a roll-call at a side door, and the hall above was filled with the citizens. Presently the young men pressed in, and a procession entered the hall and ascended the platform. Prayer and music followed, and then a tall man, spare, yet of a rugged frame and slightly stooping, his whole aspect marking an indomitable will, stood up and read a brief, simple,

clear, and noble address. It said modestly that this was but the beginning of an institution of learning for those upon whom fortune had omitted to smile; an institution in which any person could acquire any instruction in any branch of knowledge, and in which every branch should be equally honorable. Every word hit the mark, and the long and sincere applause that followed the close of the little speech showed how fully every word had been weighed and how truly interpreted. But the face and voice of the speaker were unchanged throughout. Those who best know what he had done and what he was doing, knew with what sublime but wholly silent enthusiasm he had devoted his life and all his powers to the work. But the stranger saw only a sad, reserved earnestness, and gazed with interest at a man whose story will long be told with gratitude and admiration.

After a graceful and felicitous speech from the lieutenant-governor of the State, an ex-officio trustee, the president of the new university arose to deliver his inaugural address. Of a most winning presence, modest, candid, refined, he proceeded to sketch the whole design and hope of the university with an intelligence and fervor that were captivating. It was the discourse of a practical thinker, of a man remarkably gifted for his responsible and difficult duty, who plainly saw the demand of the country and of the time in education, and who with sincere reverence for the fathers was still wise enough to know that wisdom did not die with them. But when he came to speak to the man who had begun the work and who had just spoken, when he paused to deny the false charges that had been busily and widely made, the pause was long, the heart could not stay for the measured delay of words, and the eloquent emotion consumed the slander as a white heat touches a withered leaf. It was a noble culmination to a noble discourse; and again those who were most familiar with the men and the facts, knew best how peculiarly fitted to each other and to their common work the two men were. Ithaca had devoted this day to the opening festival of her university, and after dinner, through a warm and boisterous southerly gale, the whole town seemed to pour out and climb the bold high hill that overhangs it. The autumn haze was so thick that nothing distant could be seen. Only the edge of the lake was visible, and the houses and brilliant trees in the streets. Upon the hill there is one large building, and another rapidly rising. At a little distance from the finished building was a temporary tower, against which a platform was built. In front of the platform was gathered a great multitude,

and in the tower hung a chime of bells. The wild wind blew, but the presiding officer made a pleasant speech of welcome, and then the chime of bells was presented to the university in an address of great beauty and fitness. After a few words of reception from the lieutenant-governor the chimes rang out Old Hundred far over the silent lake and among the autumn hills. For the first time that strange and exquisite music was heard by the little town, "Ring out wild bells to the wild sky," and the heavy gale caught the sound and whirled it away. "Ring in the valiant man and free," and the wind was whist, and the heart of the multitude unconsciously responded Amen. Then Professor Agassiz—Louis, the well-beloved—fresh from the Rocky Mountains, magnetized the crowd with his presence and his wise and hearty words; and with two or three more addresses, and another peal of the chimes, the Cornell University was formally dedicated. The sun was sinking, a fire-ball in the haze, as the people dispersed. The hour and the occasion were alike solemn; and with meditative feet, his fancy peering into the future, the latest loiterer descended. . . . .

Professor Caldwell has thus described the inauguration of studies: "On the twenty-second day of September, twenty-five years ago, about a dozen men, of whom but three are now in the Faculty, assembled in a small room of the Cornell Library building down in the town, where the light was almost as scanty as in a photographer's dark room, and held the first meeting of the faculty of Cornell University. A little later other appointments were made, so that the first Register gave a list of twenty-three professors, of whom six are now here. On the sixth of October, the first entrance examinations were held in a large basement room of the same building, where the supply of light and air was not much more liberal than in the temporary faculty room, under the general direction of the first registrar, Dr. Wilson.

"The English examinations were held in one corner of the room, the examination in mathematics in another corner, the geography in another, and, when all the corners were filled, where there was light enough to write by, the lesser examinations were sandwiched in between. In these examinations all helped; a professor of chemistry had charge of the orthography. It might have been wise to have first examined the professor himself in that branch of English; indeed, the earliest records of the faculty present incontrovertible evidence that the spelling of at least one of its members was not altogether beyond criticism. But there was no time for any such test of the ability of the examiners to

do the work assigned to them, and they had to be taken on trust. A professor appointed to teach in one of the departments of natural history had, I believe, to look after the examination in algebra; and so one and another of us was temporarily drafted into this unanticipated service.

"The crudity of this arrangement for the entrance examinations, as compared with the present methods was no greater than the crudity of everything else in those days. Rickety barns, and slovenly barn-yards offended the senses where the extension of Sibley College is now going up; the second university building, now called White Hall, simply protruded out of an excavation, the top of which reached nearly to the second-story windows at one end. The ventilation of the chemical laboratory, in the basement of Morrill Hall, was partly into the library and reading room above it; readers there, not being chemists, did not find the chemical odors agreeable. An ancient Virginia rail fence traversed the site of this building and its neighbor, Boardman Hall; the minutes of the faculty show that before the end of the first year the modest request was made of the founder of the university, that he permit said fence to be moved 150 feet further to the south, in order that there might be a sufficiently large piece of level ground adjoining the campus for the military evolutions and for ball games.

"Bridges, side walks, and even a road between the one university building and Cascadilla, the one home where almost everybody connected with the university lived, either did not exist at all, or were only partially completed. It was a long time before the multitude of foot-tracks was obliterated, made by the passing of teachers and students down and up the banks of the ravine north of the site of the gymnasium; when snow, slush, and mud alternated with each other in November, even a professor sometimes forgot his dignity and slid down the bank, and by inadvertence not always all the way down on his feet either; the hearty sympathy bestowed upon such an unfortunate by student spectators can be imagined, if not believed in.

"What those teachers and students would have done without Cascadilla for shelter it would be hard to say; for the people of the town had apparently not then learned that there was money in taking boarders; nor were there hardly more than a dozen dwelling houses nearer the university than half-way up East Hill. So Cascadilla was full from basement to attic; and a professor who had not lived there at all was,

in later times, hardly considered by his colleagues as having fully earned his right to be a professor in the university."

THE UNIVERSITY LIBRARY.

The formal opening of the university may fitly be taken by the annalist as the beginning of the Library's independent existence; but the principles which were to guide its formation and growth had been clearly laid down in the "report of the committee on organization," and, of necessity, much had to done in the way of collecting books before the Library could be said to have an existence. At the sixth meeting of the Board of Trustees, held September 26, 1867, an appropriation of $7,500 for the purchase of books was made, which was increased to $11,000 at the meeting of February 13, 1868. To all who were engaged in the preparations for establishing a fully equipped university on what had been till then a mere hillside farm, the summer of 1868 was an exceedingly busy season. One of the first purchases for the new university—the classical library of Charles Anthon, numbering over six thousand volumes—had already been made. In the spring, President White had gone to Europe, armed with formidable lists of books and apparatus to be collected, and made large purchases of scientific and literary works, one of the most important of his acquisitions being the library of Franz Bopp, the famous philologist. Thus cases of books and apparatus began to arrive long before any place was prepared to receive them. A temporary shelter, however, was found for the books in the halls and attic rooms of the Cornell Library in this city.

At the opening day in October, the only university building under cover was Morrill Hall, better known to old Cornellians as the South Building. Of this building the middle section alone was available for library, lecture rooms and laboratories, both wings being wholly occupied as dormitories.

To the Library were assigned the two rooms on the ground floor, the present faculty room and the registrar's office. The walls of these rooms were lined with tall book-cases, extending to the ceiling. Some of these book-cases, it may be noted, had already done service in the library of the short-lived State Agricultural College at Ovid. These wall book-cases, however, were by no means adequate to contain all the books even then received, and when the university opened, thousands

of volumes were still stored away in boxes. Nor was there immediate prospect of obtaining more shelf-room. Indeed, so great and so urgent was the demand for more class rooms, it was found necessary to hold lectures and recitations in the rooms occupied by the Library, much to the inconvenience of readers, who were thus, during the greater part of the day, deprived of the use of the books. This state of things continued throughout the first two terms, and the greater part of the third. For though it was promised in January, 1869, that within a few weeks, at most, the new laboratory building would be completed, to which the lectures held in the library rooms would then be transferred, yet in this case, as in so many others, hopes proved delusive, and it was not until April that the laboratory building was ready for occupancy, and May was well advanced before the books were full in order on the shelves. Comparatively little use was made of the Library by the students in the first year.

In December, 1868, the librarian, Professor Fiske, arrived and took charge of the Library, which was under his direction from that time until his resignation in 1883. In the latter part of 1868, the British government presented to the Library a complete set of Patent Specifications, and estimates were obtained of the cost of binding them; but as it was found that the binding would cost about $6,000, a sum which could not well be spared just then, they were ordered to be stored in London until a more convenient season. There they remained until 1880, when a special appropriation was made for binding them, and finally, in 1881, this great set, numbering over two thousand seven hundred volumes, was received and shelved in the tower of the McGraw building. From a memorandum of a count of the Library made about the first of January, 1869, including, evidently, only the books then upon the shelves in Morrill Hall, it appears that the number of volumes in the two rooms was fifteen thousand four hundred.

About this time Goldwin Smith generously offered to give to the university his valuable private library, comprising some three thousand four hundred volumes. It is needless to say that the offer was joyfully accepted, and instructions were at once sent to the Library's agent in London to remove the collection from Mortimer House, near Reading, where it then was, and forward it to Ithaca. Towards the end of March the books arrived, but the task of arranging them upon the shelves, was deferred until the summer vacation. This, it may be observed, was but the beginning of Goldwin Smith's benefactions to the

Library. Later he gave two thousand five hundred dollars, and in June of 1870 one thousand dollars, to be spent in the purchase of books; in 1871 he gave a valuable collection of works on Canadian history, and from time to time since then has presented many important works.

Meantime, in February, 1869, John McGraw, seeing how urgent was the need of more room for library purposes, had offered to erect a library building to cost fifty thousand dollars. Archimedes Russell, a Syracuse architect, was commissioned to prepare the plans, and in the spring the excavations for the foundations of the McGraw building were begun. At the first Commencement of the university, in June, 1869, the corner stone of the building was laid with Masonic ceremonies, and addresses were given by Stewart L. Woodford and John Stanton Gould.

At the opening of the second year, in September, 1869, the Library still occupied its first quarters in Morrill Hall. The present faculty room was then the reading room, to which the public entrance was at the west end of the central hall. Upon entering, the student found himself in a room about fifty feet in length by twenty-five in breadth, lighted by three windows at each end, the walls lined from floor to ceiling with books. The central portion of this room, a space about thirty- six feet long and twelve wide, was surrounded by pine tables, painted a dark chocolote color, and surmounted by a low railing. In front of these tables stood benches of the sort then used in all the lecture rooms, a few specimens of which may still be seen in some of the smaller class rooms in White Hall. These benches afforded seats for not more than forty readers at the most. It is therefore not surprising that frequent complaints were heard of lack of accommodations for readers.

In this room the encyclopædias, periodicals, and the works on arts and sciences, philosophy, theology and law were placed. In the corresponding room on the south side of the hall were the books relating to philology, literature, history and geography. When, in 1870, President White gave to the university his valuable collection of architectural works, with a sum of money for its increase, as there was no space available for its reception in either of these two rooms, the collection was placed in the small room at the southwest corner of Morrill Hall, now the treasurer's office. In this year, too, the pamphlets and unbound periodicals had become so numerous that the room now occupied by the business office was also taken possession of for library purposes.

In the spring of this year an effort, which was all but successful, was made to obtain for Cornell the mathematical library of W. Hillhouse of Hartford, but, owing to an unfortunate delay in transmitting the decision of our trustees to purchase the collection, it was secured by the Sheffield Scientific School. President White generously offered to subscribe for the acquisition of this library, and to give, in addition, his entire architectural library—at that time richer than the entire corresponding collections in the Astor, Yale and Harvard libraries. A little later in the year, however, William Kelly, of Rhinebeck, one of the trustees of the university, gave $2,250 for the purchase of mathematical works to make good this loss. With this fund over fifteen hundred volumes were obtained, to which the name of the Kelly Mathematical Collection was given. For this collection a place was found in the room now used as the ladies' waiting room. In December, 1870, the Reverend S. J. May, of Syracuse, an early and devoted champion of the abolition movement, presented to the university his collection of books and pamphlets relating to slavery. This was the beginning of what is now known as the May Anti-slavery Collection. A few months later, it was largely increased by gifts from R. D. Webb, of Dublin, and Mrs. Elizabeth Pease Nichols, of Edinburgh, both well-known supporters of the anti-slavery cause in the mother country. Since then the collection has received many additions from persons who took active part in the great struggle against slavery in this country, and to-day it is one of the largest and most complete collections on the subject. For this, and the rapidly growing newspaper collection, temporary accommodation was provided in the room now occupied by the Horticultural department, in the northwest corner of Morrill Hall.

In June, 1871, according to the report of the librarian, the number of volumes in the Library was twenty-seven thousand five hundred, and, notwithstanding the increased number of rooms which were occupied, the evils of overcrowding were keenly felt. Meanwhile the walls of the McGraw Building had been steadily rising, and by November it was so far advanced toward completion, that it became necessary to decide just what portion of it should be occupied by the Library, in order that the needful fittings might be prepared. The original intention seems to have been to lodge the Library on the second floor, in the space now occupied by the museum, but wiser counsels prevailed, and it was finally decided that the large room on the ground floor, which had at first been intended for a great lecture hall, should be made the home

of the Library, leaving the second floor with its galleries free for museum purposes.

At the beginning of 1872, thanks to the timely aid of Henry W. Sage, who advanced money for its purchase, the university fortunately succeeded in securing the Spark's collection of American history, numbering over five thousand volumes. In April the books began to arrive, but as the new quarters were not yet ready and there was no room to spare in the old, cheap accommodation was found in the south attic room of the new building and there the collection found temporary shelter. It is evident that the Library at this time was most inconveniently situated, occupying, as it did, six widely separated and unsuitable rooms in Morrill Hall, and one room in the upper story of the McGraw Building. It was hoped that the summer of 1872 would see these *disjecta membra* brought together, and the whole Library made readily accessible to students. But again our hopes were disappointed; the summer passed and autumn was well advanced before the new quarters were ready for occupancy. At last, on the 5th of October, the task of moving the books was begun, and for several weeks the Library was closed to readers while the books were being transported from the old building to the new. The work was mainly performed by students, who carried the books in boxes from the various rooms in Morrill Hall to the new quarters, where they were speedily arranged and placed on the shelves in substantially the same order as at present. On Monday, November 18, the Library was opened to students in its second home, a large room, with alcoves on either side and reading tables in the central space. A memorandum of a count of the books made in June, 1873, shows that the number of volumes on the shelves was then thirty-four thousand and one hundred, exclusive of eight thousand pamphlets.

Up to this point in its history, the growth of the Library, though somewhat irregular and spasmodic, had been rapid, and its career prosperous. But not long after its removal to the McGraw Building, the university entered upon a period of financial distress, and one of the first departments to feel the pinch of poverty was the Library. One after another, important periodicals and transactions were perforce suffered to fall into arrears, and purchases of new books became fewer and fewer. In 1873, the librarian made an appeal for a large appropriation for immediate use, pointing out that though the acquisition of several collections had made the Library comparatively rich in some