

How I found Mr Smith on
 floor **REPORT** a machine
 for Schuyler built for sub-
 terranean telegraph in
 Garden tub. Smith had
COMMITTEE ON ORGANIZATION,
 taken contract & found he
 would use money unless
 by mechanical contrivance
 Master & he could. Cornell
CORNELL UNIVERSITY. Cornell
 & he would do it. Would
 to go where they would pay
 for the machine & pay 100
 100 dollars. They made a
 blow with a steel belt &
 +c. While horses were - took
 fight & ran over a
 - lost sight of them. Cornell
 looked & saw they whole they
 had been put into the ground.
 Cornell began to think and advised
 to string it through the air.

PRESENTED TO THE TRUSTEES OF THE

CORNELL UNIVERSITY.

OCTOBER 21st, 1866.

ALBANY:

C. VAN BENTHUYSEN & SONS' PRINTING HOUSE.

1867.

He made enemies. They took
the books away from Patent
Office Library: he got
them Congress. He stole
address books &c. Every day
the debtors escaped in
the lead tubes. Morse
(a leading member of company
portrait painter) consulted
& said we have got 30000
from Congress: we need
more. ~~stamps~~ How to stop
without alarming public
Coulter drove his horses into
rock & purposely smashed
the whole affair in
order to get all changes
plain. He rec'd. his part
in telegraph stock, worth but
little then - now null.

REPORT.

In establishing a college on the ordinary basis, and with the ordinary scope, there are few difficulties which earnest men and moderate means will not readily surmount. The course required is simple and single; the equipment is compact; instructors are readily found for every department; precedents at every point are abundant.

But the work committed to the Trustees of the Cornell University is far larger, far more complicated. In most cases it has few available precedents, in many it has none. The committee upon organization, therefore, cannot hope to present a plan which shall cover every point likely to arise in carrying on the institution now to be commenced; but they hope to present a plan which shall aid in setting the University in operation, and to suggest ideas which will aid it in developing healthfully and largely.

THEORY OF THE PLAN OF ORGANIZATION.

The theory on which the committee have based their plan is that throughout the national and State legislation preparatory to the establishment of the institution, and also throughout the ideas of the founder of the Cornell University, as explained to us by himself, are two leading convictions as to the educational needs of the country, and two corresponding ideas as to meeting these needs.

Each of these convictions, and its corresponding idea, is separate and distinct, yet each is necessary to the other.

The first of these convictions is that there exists a necessity never yet fully met, for thorough education in various *special* departments, and, among them, the science and practice of Agriculture, Industrial Mechanics, and kindred departments of thought and action. The corresponding practical idea is that institutions be founded where such instruction can be conducted with every appliance necessary in discovering truth and in diffusing truth; that such instruction be not subordinated to any other; that the agricultural and industrial professions be regarded as the peers of

every other; that access to these departments be opened as widely as possible, and progress in them be pushed as far as possible.

The second of these convictions is 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 the single traditional course have been considered to imply a lower caste in those taking them; that the higher general education has therefore lost its hold upon the majority of the trusted leaders of society, that it has therefore become under-estimated and distrusted by a majority of the people at large, and that therefore it is neglected by a majority of our young men of energy and ability.

The corresponding practical idea is that colleges of wider scope be founded; that no single course be insisted upon for all alike; that various combinations of studies be provided to meet various minds and different plans; thus presenting a *general course* to meet that *general want* which existing colleges fail to satisfy.

FUNDAMENTAL PLAN OF INSTRUCTION.

The labor imposed upon us then is two-fold.

First, we are to make provision for *special courses*—special instruction in the departments of agriculture, mechanic arts, &c.

Secondly, we are to provide a *general course*—a general course in which such instruction and culture be afforded as shall be demanded by the young men who come to group themselves in the different *special* courses.

Even if it should be claimed that the whole effort of the trustees ought to be devoted to agriculture and the mechanic arts alone; even if we were to construe away the plain words of the original act of Congress, which speaks of "other scientific and classical branches" as part of the object of the government grant of lands, still the oft-repeated declaration of our founder that he "wishes to make such provision that every person can find opportunity here to pursue any study he desires," would be our sufficient warrant in using at least his munificent gift in supplementing

the special instruction with general instruction, and rounding it out into the proportions of an university.

Again, even were we to found merely technical schools, giving instruction merely in special departments, the committee believe that we should be very soon obliged to supplement these special courses with a general course. Common sense, as well as general experience teaches that there must be some variation in mental labor. With rare exceptions, any man who pursues one science or art alone, devoting his mind entirely to that, though he may at first progress rapidly, soon shows that such progress is not normal. It is very firmly believed that the great majority of men who wish to attain a high place in any science or art, can rise higher, even in that, by enlarging the mind by some parallel studies, than by narrowing the mind constantly to their single pursuit. Such contracted study gives facility and accuracy, but it is too often fatal to the qualities which ensure eminence.

Your committee are therefore of the opinion that there should be two great divisions of the university.

The first division should comprise the separate departments devoted each to a special science and art. The second division should comprise the department of Science, Literature and the Arts in general.

In accordance with this division is presented the following plan:

ORGANIZATION OF INSTRUCTION.

I. *Division of Special Sciences and Arts.*

1. Department of Agriculture.
2. Department of Mechanic Arts.
3. Department of Civil Engineering.
4. Department of Commerce and Trade.
5. Department of Mining.
6. Department of Medicine and Surgery.
7. Department of Law.
8. Department of Jurisprudence, Political Science and History.
9. Department of Education.

II. *Division of Science, Literature and the Arts in General.*

1. 1st General Course.
2. 2d General Course.
3. 3d General Course.
4. Scientific Course.
5. Optional Course.

The character of each of the departments named in the first division is in the main, sufficiently explained by its title. Details of courses of instruction in each cannot well be arranged until the trustees shall have consulted with the faculty, and it is recommended that at periods previous to the commencement of active instruction, the Academic Senate be requested to convene for the purpose of discussing this subject and presenting plans.

But there is one department, regarding which, perhaps, some explanation is needed here : *the department of Jurisprudence—Political and Social Science, and History.*

We believe that although there will be some attention to these subjects in the general course, there is need of a separate department devoted to a study of them, wider and deeper. We believe too, that such a department should be established so soon as we approximate a full corps of professors.

In various connections with institutions of learning, and in various public employments, the committee have been convinced:

First—That great numbers of the most active young men long for such a department, would work vigorously in it, and would secure good discipline by it, and that these young men are many of them not attracted to the existing colleges.

Secondly.—We believe that the State and nation are constantly injured by their chosen servants, who lack the simplest rudiments of knowledge which such a department could supply. No one can stand in any legislative position and not be struck with the frequent want in men otherwise strong and keen, of the simplest knowledge of principles essential to public welfare. Of technical knowledge of law, and of practical acquaintance with business, the supply is always plentiful, but it is very common that in deciding great public questions, exploded errors in political and social science are revamped, fundamental principles of law disregarded, and the plainest teachings of history ignored.

In any republic, and especially in this, the most frequent ambition among young men will be to rise to positions in the public service, and the committee think it well at least to *attempt* to provide a department in view of the wants of these ; a department where there should be something more than a mere glance over one or two superseded text books,—where there should be large and hearty study and comparison of the views and methods of Guizot, and Mill, and Lieber, and Woolsey, and Bastiat, and Carey, and Mayne, and others.

There are among you, gentlemen of the board of trustees, representatives of every walk in life, of every important profession, of every party. There are among you, representatives of the highest state and national employments, and we appeal to you for corroboration of the statement, that whatever may be the opinion of cloistered men, the opinion of men active in the world at large, is decided, that there is a great branch of instruction here, for which the existing colleges make no adequate provision.

It may be said that the function of colleges is to give discipline, that knowledge is subordinate. We answer that they should give both, and that *as a rule, the attempt to give mental discipline by studies which the mind does not desire, is as unwise as to attempt to give physical nourishment by food which the body does not desire.* Discipline comes not by studies which are "*droned over.*"

Again, we believe that the knowledge given, is far more important than many would have us think. The main stock in political economy and history of most of our educated public men, is what they learned before they studied for their professions. Many an absurdity uncorrected at college has been wrought into the constitutions and statutes of our great commonwealths, and when we consider that constitution making for new states and old, is to be the great work in this country, of this and succeeding generations, surely, we do well to attempt more thorough instruction of those on whom the work is likely to fall.

One other department, needs, perhaps a few words of explanation—that of Commerce and Trade. Throughout the country have sprung up schools known as "commercial colleges." The number of persons attending them is such as to show that they meet a want widely felt, and the idea has suggested itself that at some future day it might be well to try the experiment of a department under the above name, in which a more thorough and large instruction could be given, than in those at present so numerous. Anything which will bring some university culture to bear upon those preparing to lead in commerce and trade, will be a benefit to the country. How far it can be done your committee will not venture to say. At least one great European university has kept up a course of this sort for many years.

In the *second division*, it is necessary to give a more detailed explanation of courses, and ideas upon which the courses are based.

The "First General Course" comprises a combination of studies mainly like the classical course at the existing colleges.

The "Second General Course," comprises a combination of studies like the first, with the substitution of the German language for the Greek. Giving, as such a course would, the two great elements of our language, the Romanic and the Teutonic, it is believed that it would be received with great favor by many of the best minds dissatisfied with the existing college courses.

The "Third General Course," comprises the same studies as the previous courses, except that the two languages studied are French and German.

The "*Scientific Course*," is combined in view of the wants of those who intend devoting themselves wholly or mainly to the natural sciences.

The "*Optional Course*" is one in which the student is required to choose three subjects of study from all those pursued in the University, and to pass examination therein. This it is believed, will add greatly to the efficiency of the institution. It is a course permitted in some of the great universities of continental Europe, and with excellent results. It has been tried thoroughly at the State University of Michigan, and to nothing in its organization is that institution more indebted for its acknowledged efficiency.

It is not recommended that all these departments be established at once. The Cornell University must have a *development*—a growth, though it is believed that its growth may be very rapid. But your committee do not hesitate to declare their belief that neither of these departments will attain full efficiency until all are established. They believe that each additional department and additional course will strengthen every other, by attracting more and more earnest minds among teachers and taught; by stimulating emulation among professors and students: by throwing light upon each science and art from every other; by presenting every element of the best culture.

The committee, however, recommend the immediate establishment only of so much of the first division as is embraced in the departments of Agriculture, the Mechanic Arts, Civil Engineering and Mining.

They recommend the immediate establishment of so many courses in the second division as shall be found necessary to meet the wants of the students presenting themselves at the beginning of the first term.

In the second division it seems advisable to present some ideas which have influenced them in determining the courses into which the division is separated.

UNIVERSITY LIBERTY IN CHOICE OF STUDIES.

The first question which arises in arranging general plans of instruction is as to the amount of liberty to be allowed the student in selecting his course.

On one hand are they who declare that students at the usual age of entering college are unfit to select a course, and that it must be chosen for them. Of those taking this view are some men held in deserved honor throughout the country.

On the other hand are they who declare that the usual imposition of a single, fixed course is fatal to any true university spirit in this country; that it cramps colleges and men; that it has much to do with that strange anomaly under the existing system—scholars stepping out of the highest scholastic positions in college classes into nonentity in active life; that it has been the main agent in bringing about that relaxation of the hold which colleges once had upon the nation, which all thoughtful men deplore.

The committee see much truth in the latter view. They think that the first view contains a fallacy in the virtual assumption that because a young student is not a *perfect* judge regarding his complete wants, therefore he is *no judge at all*, and shall have others to choose for him; and but one course opened to their choice.

We hold, indeed, that most students need advice as to details of study, and that probably none could construct the best possible course of study; but we also hold that an overwhelming majority of students are competent to choose between different courses of study, carefully balanced and arranged by men who have brought thought and experience to the work. By the aid 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. Certainly the results could not be more wretched under such a system than under the existing system, even by the confession of its most earnest advocates.

The committee have carried out these views by naming different courses, so that while the student may have the benefit of the experience of men older than himself, he may have some liberty of choice; and they have added one course, giving to more mature students complete freedom of choice.

LEADING DISCIPLINARY STUDIES IN A GENERAL COURSE.

The next question which arises regarding a general course, is as to the classes of studies to be relied upon for mental discipline, fundamental knowledge and general culture.

A large party unhesitatingly declare for the Greek and Latin classics. They believe that nothing else gives so valuable a discipline or so perfect a culture.

The committee declare here their belief in the great value of classical studies. They do not hesitate to advise those who have time and taste for them to study them—the Greek for its wonderful perfection—the Latin for its great practical value as a key to modern languages and to the nomenclature of modern sciences—and both Greek and Latin for their value in the cultivation of judgment. But while it is believed that these studies ought to hold an honored place, the committee are strongly opposed to the attempt to fetter all students to them, if for no other reason because this would be to defeat the plain intentions of those who framed the act of Congress to which the establishment of the university is due.

In the courses provided, the modern languages most in use, and the sciences which in theory and practice have in latter years attained such great importance, must be recognized at their full value in imparting instruction, and in securing mental discipline.

The committee cannot forbear noticing here a fallacy regarding mental discipline which they will endeavor to avoid in presenting courses of study.

That fallacy consists in the idea that the only mental discipline is that which promotes a certain *keenness* and *precision* of mind. We believe that there is another kind of mental 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 mental discipline. In American life there will always be enough keenness and sharpness of mind. But the danger is that there will be neglect of those noble studies which enlarge the mental horizon and increase mental powers in reaching out toward it—studies which give material for thought and suggestions for thought upon the great field of the history of civilization.

Happily no studies are more enjoyed by the best American students than those which give this mental breadth—historical and

political studies. This being the case, there need be no fears as to their value in mental discipline, for 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 kind of study not positively hurtful to mental power. Hence the great evil of insisting on the same curriculum for all students, regardless of their tastes or plans.

COMBINATION AND SEPARATION OF PROFESSORSHIPS.

In making provision for these different departments it will be seen that they interpenetrate each other, one professorship frequently extending through two or three departments.

So frequently is this the case, that it will be seen to be impossible to provide professors fully for any one department without at the same time, making almost sufficient provision for the others.

Of the professorships to be filled at an early day, we would present the following schedule :—

I. *Department of Agriculture.*

- 1st. Professor of the Theory and Practice of Agriculture.
- 2d. Professor of Agricultural Chemistry.
- 3d. Professor of General and Analytical Chemistry.
- 4th. Professor of Geology and Mineralogy.
- 5th. Professor of Zoölogy and comparative anatomy.
- 6th. Professor of Botany.
- 7th. Professor of Civil Engineering.
- 8th. Professor of Veterinary Surgery and Breeding of Animals.
- 9th. Physiology, Hygiene, and Physical Culture.

II. *Department of Mechanics.*

- 1st. Professor of Physics and Industrial Mechanics.
- 2d. Professor of Civil Engineering.
- 3d. Professor of Architecture.
- 4th. Professor of General and Analytical Chemistry.
- 5th. Professor of Geology and Mineralogy.
- 6th. Professor of Mathematics.

III. *Department of Civil Engineering.*

- 1st. Professor of Civil Engineering.
- 2d. Professor of Architecture.

- 3d. Professor of Physics and Industrial Mechanics.
- 4th. Professor of Geology and Mineralogy.
- 5th. Professor of Mathematics.

IV. *Department of Mining.*

- 1st. Professor of Mining and Metallurgy.
- 2d. Professor of Civil Engineering.
- 3d. Professor of Geology and Mineralogy.
- 4th. Professor of General and Analytical Chemistry.

V. *Department of Science, Literature, and the Arts.*

- 1st. Professor of Moral and Mental Philosophy.
- 2d. Professor of History.
- 3d. Professor of Political Economy.
- 4th. Professor of Municipal Law.
- 5th. Professor of Constitutional Law.
- 6th. Professor of Ancient Languages.
- 7th. Professor of French and South European Languages.
- 8th. Professor of German and North European Languages.
- 9th. Professor of English Language and Literature.
- 10th. Professor of Rhetoric, Oratory and Vocal Culture.
- 11th. Professor of Mathematics.
- 12th. Professor of Astronomy.
- 13th. Professor of Physics and Industrial Mechanics.
- 14th. Professor of Geology and Mineralogy.
- 15th. Professor of Zoölogy and Comparative Anatomy.
- 16th. Professor of Botany.
- 17th. Professor of Physiology, Hygiene and Physical Culture.
- 18th. Professor of Chemistry, General and Analytical.
- 19th. Professor of Æsthetics, and the History of the Fine Arts.
- 20th. Professor of Architecture.
- 21st. Professor of Military Tactics.
- 22d. Professor of Physical Geography and Meteorology.

The entire university, therefore, would comprise the following professorships:—

- 1. Theory and Practice of Agriculture.
- 2. Agricultural Chemistry.
- 3. Veterinary Surgery and the Breeding of Animals.
- 4. General and Analytical Chemistry.
- 5. Botany.

6. Zoölogy and Comparative Anatomy.
7. Geology and Mineralogy.
8. Physics and Industrial Mechanics.
9. Mathematics.
10. Astronomy.
11. Civil Engineering.
12. Physiology, Hygiene and Physical Culture.
13. Moral and Physical Culture.
14. History.
15. Political Economy.
16. Municipal Law.
17. Constitutional Law.
18. Rhetoric, Oratory and Vocal Culture.
19. English Language and Literature.
20. French, and South European Languages.
21. German, and North European Languages.
22. Ancient Languages.*
23. Æsthetics, and History of the Fine Arts.
24. Architecture.
25. Military Tactics and Engineering.
26. Physical Geography and Meteorology.

It will be seen, therefore, that there are twenty-six professorships needed at an early day. But it is not thought that it will be necessary to have so many separate professorships at once, nor to place all upon the same basis. Some professors must, to be efficient, reside permanently at the seat of the university, giving daily recitations or lectures, and conducting daily experiments.

Some will be perfectly efficient by a temporary residence, during which recitations are heard, or lectures given. Hence occurs at once, another division of a kind very different from any we have previously made—the division into resident and non-resident professors.

Having in view this division, the committee present the following schedule:—

Resident Professors.

1. Theory and Practice of Agriculture
2. Agricultural Chemistry.
3. General and Analytical Chemistry.
4. Botany.

*To be separated into two or more professorships when circumstances shall demand it.

5. Zoology and Comparative Anatomy.
6. Geology and Mineralogy.
7. Physics and Industrial Mechanics.
8. Mathematics.
9. Astronomy.
10. Civil Engineering.
11. Moral and Mental Philosophy.
12. History.
13. Rhetoric, Oratory and Vocal Culture.
14. French, and South European Languages.
15. German, and North European Languages.
16. Ancient Languages.

Non-Resident Professors.

1. Veterinary Surgery and the Breeding of Animals.
2. Physiology, Hygiene and Physical Culture.
3. Political Economy.
4. Municipal Law.
5. Constitutional Law.
6. English Language and Literature.
7. Æsthetics and the History of the Fine Arts.
8. Architecture.
9. Military Tactics and Engineering.
10. Physical Geography and Meteorology.

Temporary Modifications of the Plan.

The question now arises, how much of this plan can be made practical during the first year—how many of these professors can we employ to advantage while the university is beginning its operations?

Two plans suggest themselves. The first is to fill all these chairs immediately, to make a beginning which shall give us a reputation at once, to strike public attention on the first day of the first term, by a large programme fully carried out.

The second plan is to hold during the first year, some professorships in abeyance, and of the remaining departments to combine temporarily, several in one, thus commencing in a manner less striking, feeling our way somewhat at first, finding gradually what are the departments most needed.

The committee pronounce for the latter method. The policy of the Cornell University has not been to make much proclamation

of great purposes. Its founder has steadily gone on, always performing more than his promises, and there are goodly signs that the university authorities have caught his spirit. Two of the noblest buildings for university purposes in the United States have been reared; but there has been no pompous laying of cornerstones, no loud proclamations of new discoveries in the theory and practice of education, no publication of programmes out of all proportion to revenues, and it is to be hoped that we shall not begin an *ad captandum* policy now. The only question worthy of us is: What does the university practically need the first year? It is believed that the duties may be so arranged that during the first year eight or ten professors will be sufficient.

Possible Modifications of the Plan in Future.

Such is a general scheme offered as a point of departure in arranging professorships. The committee know well that in details it must often be departed from. The peculiar talents of a valuable member of the faculty, have much to do with the final shaping of the list of professorships. The demands made by students have also very much to do with it. A great demand upon the professorship of Physiology, Hygiene and Physical Culture, would make it necessary to change it from the non-resident to the resident list, and so with others.

The number of students too, must have a very great influence on this matter. As numbers increase, professorships must be subdivided. Thus, until the numbers are large, the professor of Physics can discharge the duties of professor of Industrial Mechanics, but afterwards the latter department would probably be detached.

As numbers increase, too, some departments will require assistants. In some departments one system must be pursued and the responsibility fixed on one man; it cannot therefore be divided. But when numbers are greatly increased, it will probably be necessary to appoint an assistant professor or instructor, who should be subject as regards their plan of instruction, to the head of the department. As any department develops also, it will be necessary to subdivide it, and increase the number of professorships in it. Thus, for example, the department of Civil Engineering, would be separated into three or four new departments, each devoted to a special part of the work, and then must be added instructors in geometrical and topographical drawing, &c.

NON-RESIDENT PROFESSORS FOR SHORT TERMS, OR UNIVERSITY LECTURERS.

But there is a feature in the full organization which the committee ask the trustees to consider especially. It is one which several educators have in the recent years arrived at independently of each other. It is one promising great results, but demanding great care. This is the establishment of a system of non-resident, short term professors, or university lecturers. The plan is as follows: Have the full equipment of full term professors above given, let the trustees elect each year a small number of short-term professors or lecturers, from among the most distinguished in their several departments, in this or other states; let no general rule as to term of service, number of lecturers or compensation be laid down, but let such special agreement be made between each person thus called and the trustees, as shall best secure the object desired.

Let the professors thus selected be either persons who are accepted as authorities regarding matters upon which they discourse, or persons whose talents, acquirements and reputations are of the highest. Let them deliver, each, a certain number of lectures, representing in a form and style as nearly suited to their audiences as possible, what they themselves, consider the highest results, or a summary of the main results of their labors. Let their course of lectures be fully announced in the public prints to the country at large. The advantage of such an addition to the regular means of instruction, are believed to be very great.

First, great good would doubtless result to the *Resident Faculty*. The great difficulty with bodies of professors remote from great cities, and centres of thought and action is, that they lose connection with the world at large, save through books; they become provincial in spirit; they lose that enthusiasm which contact with other leading minds in the same pursuits would arouse; they "breed in and in;" their whole range of thought becomes inevitably narrow. But, under this system now proposed, there would be a constant influx of light and life from the great centres of thought and action. The resident professors would be thrown into close relations at once, with the special professors thus called. Their views would be enlarged, their efforts stimulated, their whole life quickened.

Secondly, great good would result to students in regular attendance. A great difficulty among students assembled in college is

a regularity in routine, a dullness, a listlessness, a want of enthusiasm. The general result of this, as regards *study*, is that it is done mechanically; that most of the scholarly work is poor in quality and small in quantity. The general result as regards *conduct*, is that too often, in a spirit of reaction against this listlessness, the energies which would do great things if directed to study, are directed to dissipation. It is believed by your committee that if these special professors were men of the greatest ability and eminence, an enthusiasm might be aroused among the students in regard to various departments of knowledge, which would direct their energies mainly into channels of study and thought.

The objection has indeed been made that these special courses might cause confusion and dissipation in the minds of the students. It is believed, however, that this will be the result with comparatively few students, and even with these but temporarily. It is believed that in the great majority of cases, the enthusiasm created will far outweigh in good effects any evil effects arising from the disturbance of the regular routine.

Thirdly, great good would result to large portions of the public in general, which under ordinary circumstances would not avail itself of the ordinary privileges of the University. It is believed that such special courses of lectures by distinguished men would attract large numbers of citizens for brief terms, resulting in good to them and to society at large, by an immediate extension of the activity of the University among the matured minds and men already in active life.

Fourthly, great good would result to the University itself. It would enable the University to make a division of labor, selecting members of the Resident Faculty, for their energy and working ability; selecting men who have a name to make and ability to make it, and not selecting men for the resident professors—for the hard work of the University—who have attained eminence and so outlived their willingness to do hard work.

Again, it would greatly strengthen the University as to reputation. Let there be widely published each year, in leading journals, in addition to a meritorious Resident Faculty, a number of special professors or lecturers, whose ability in research, or in presenting the results of research, is acknowledged, and the institution would arrive in a very short time at a height of reputation which other institutions have failed to achieve during long years of ordinary administration.

Again, the system thus proposed would strengthen the University by attracting great numbers of students. The same simple reasoning which we have used to show that this system would give the University efficiency and power, also shows that it would draw great numbers of students.

Nor would such a result be merely gratifying to pride. There is an educating force of no mean value in the presence of a very large body of students—a means of education through large acquaintance, and through wide observation of character—a stimulus to effort through emulation, which in a small group can hardly be attained.

CHARACTER OF SCHOLARSHIP IN PROFESSORS.

The question next arises, what manner of men shall these professors be?

To maintain the efficiency and reputation of the University, its faculty must constantly keep in view two great objects: first, the discovery of truth; secondly, the diffusion of truth.

By a certain class of men deservedly in high repute, there has been fostered a spirit which tends not to the undue exaltation of the discovery of new truth in science, for that cannot be unduly exalted, but to the undue depreciation of the diffusion of scientific truth.

Your committee believe that in the selection of a faculty, neither of these two great functions of every professor should be exalted at the expense of the other. It is not doubted that in the largest minds devoted to science, the power of discovering truth and the power of imparting it, are almost invariably found together. Men should be sought for the faculty who can go on discovering truth and imparting it. But it should not be forgotten that in an institution of learning, facility and power in imparting truth are even more necessary than in discovering it.

WHERE CAN THESE PROFESSORS BE FOUND?

Many persons of high standing have answered this question much as follows: "Your endowment is large: select the greatest men in this country and other countries. Have perhaps fewer professors, but range the country through and take from the leading institutions their leading men, the men who give standing to science, literature and art in America. Have the best."

Other persons thoughtfully considering this problem have ans-

wered the question in a very different way: "Your endowment is indeed large, but it has to cover an immense field. The most efficient men for professorships are by no means necessarily those most frequently paraded in newspapers. Often a hard working man, who has never arrived at more than a local reputation, or a young man who has not arrived at any reputation at all, is practically better than men whose reputation is made, and who have out-lived the necessity of hard thought and work."

There are important elements of truth in both these responses; but your committee would answer this question as follows:

The division of the instructing body into the three great classes of resident, non-resident and special professors or lecturers, already recommended, suggests a solution of the problem.

To bring the University to the highest standard in science, literature and the arts, at once,—to get such general advantages as come from distinguished men and great names,—have a careful eye to the selection of special lecturers; secure men for courses of twelve or fifteen or twenty lectures, who, while they could not at any sum be engaged permanently, can be secured for so short a term by liberal compensation and the display of a promising field of labor.

If it be said that such instruction will be fragmentary and superficial, we answer, that we believe such an assertion to be a great mistake. The greatest course of lectures ever delivered before an University,—the one which remodeled the science of history, and which is felt to-day in every historical treatise of repute, consisted of but fifteen lectures. We refer to Guizot's renowned lectures on civilization; and there are multitudes of similar examples.

But for the steady hard work of the regular resident faculty, it would be vain to seek such eminent men. It would cost immense sums to take even a few of them out of the high places into which they have climbed; to tear them from the associations of a lifetime; to take them from the midst of their assistants, and to put them again into a fresh field to begin their life-work anew.

To take Agassiz permanently from Cambridge, we must outbid the Emperor of the French, who has already offered the most tempting prizes in vain.

To take Dana permanently from Yale, or Dwight or Lieber from Columbia, Guyot from Princeton, or Park from Andover, would require our whole income; and it is even then doubtful whether

these men would do our work well as resident professors, *building up a new institution*.

The opinion of the committee is, that the better course for filling the resident body is to find out the names and characteristics of of the most promising young men, who, under these distinguished professors, have already commenced a career. Select those who have a name to make, and who can make it. We can thus secure enthusiasm, energy, ambition, willingness to work, and without paying enormous salaries.

We do not, indeed, advise making up the faculty entirely of such young men. It would be judicious to select from the most successful instructors in the existing schools and colleges, men of more experience to give the faculty steadiness; but as a rule, the committee believe that for a time, at least, the University must rely upon young men for the hard work in building up this great benefaction to the State and Nation.

GENERAL CULTURE OF PROFESSORS.

But while the first thing to be sought in professors is ability to discover truth and to impart it, there is another requirement of hardly less importance—general good culture and manliness.

If, to secure some great genius in any special department, we have to bear with some lack of general culture, we ought perhaps to sacrifice the lower qualifications for the higher; but nothing short of such extreme necessity should lead us to place men of a low grade, as to general culture, among young men whose habits of thinking and living are just receiving the form and impress which they are to bear during life.

This University must not only make scholars: it has a higher duty; it must make *men*—men manly, earnest, and of good general culture. We must not make the mistake so common in older colleges—in selecting to govern and guide bright, high-spirited young men, tutors who do not and cannot know anything of the world and of what the world is thinking,—instructors who lead students to associate learning with boorishness or clownishness. We must make no man an instructor simply because he is poor or pious or a “squatter” on the college domain. We must have men who are what we would have our sons be, and we must have them at any cost.

And here the committee desire to say, that for instruction in modern languages, as a rule, our best course is to secure Ameri-

cans. The slight advantage in correct accent possessed by an instructor from a foreign country is almost always too dearly purchased by sacrifice of the qualities which ensure success in lectures or recitations. This suggestion is not made, of course, in any narrow spirit of dislike for men of foreign birth, but under the certainty that teaching American young men by foreigners has almost universally proved a failure, both as to instruction and discipline.

METHODS OF BRINGING THE GENERAL CULTURE OF PROFESSORS TO BEAR UPON THE STUDENTS.

One of the saddest deficiencies in existing colleges is want of free intercourse, and even of acquaintance, between professors and students. In most of the larger colleges the great mass of students know really nothing of either President or Professors. They are generally strangers, or worse than strangers. They have met in lecture rooms or recitation rooms, but they have met as natural enemies. Their only conversation outside the lecture room has been when the student made excuses, or the professor gave re-proofs; and in these the student is normally a culprit, and the professor a detective.

It seems all the more strange that such want of intercourse should exist under a system which deifies classic culture, when the Athenian ideal of that culture was obtained by frank, full, genial conversation between teacher and taught.

It seems all the more sad, when every reflecting man knows that hearty, manly sympathy in studies and pursuits established between a young man and a man of thought, learning, character and experience, is worth more than all educational programmes and machinery.

In excuse for this it is asserted that the number of students in college classes is generally so large that professors cannot know them. It is believed by your committee, that this difficulty is by no means insuperable. It has from time to time been overcome at various large colleges, and it is worth our trouble to try some experiments at least in bringing students within range of the general culture of professors, and keeping them within it.

It is therefore recommended that the duty of acquaintance and social intercourse with students be impressed upon the faculty, and that additions be made to professors' salaries expressly as an indemnity or provision for such social privileges to students. The

same principle which has led wise governments to make extra allowances to ambassadors, for the express purpose of keeping up genial social relations with the people among whom they are sent, is the basis of the experiment now suggested. The experiment can be tried, either by moderate additions to salary or deductions from rents of University houses.

It is also suggested that some provision be made for weekly or fortnightly reunions of faculty and students ; that at an early day pleasant rooms be allotted for that purpose, and that some small expenditure be made to render such gatherings attractive and profitable. Even if some little time is taken from the ordinary routine, the experiment is well worth trying.

RELATIONS OF PROFESSORS TO EACH OTHER.

The committee desire to impress here an idea which they conceive most essential to the success of the University ; simply this : *The University will tolerate no feuds in the faculty.*

It may seem strange that this should be alluded to ; but in view of the fact that more than one American college has been ruined by such feuds, and that very many have been crippled ; in view of the cognate fact that the *odium theologicum* seems now outdone by hates between scientific cliques and dogmas ; that as a rule it is now impossible to secure an impartial opinion from one scientific man regarding another ; and that these gentlemen, in their jealousies and bickerings, are evidently only awaiting some one with a spark of the Molière genius to cover them before the country with ridicule and contempt, we do not think that the Board is likely to give too much importance to this.

We advise that in the common law of the University it be a fundamental principle, that harmony and hearty co-operation in the work here are far more essential than any one or any half-dozen professors, and that in case feuds and quarrels arise, every professor concerned be at once requested to resign, unless the disturbing person can be identified beyond a reasonable doubt ; that if ever a general want of harmony be observed, and a rapid adjustment is impossible, the Gordian knot be *cut*, and that all concerned be replaced by others who can work together. Better to have science taught less brilliantly, than to have it rendered contemptible.

HOW SHALL PROFESSORS BE FOUND ?

Various methods of securing the best men have been resorted to, in the institutions already established.

One method is, to give notice quietly that a position is vacant ; to receive testimonials regarding candidates, consisting of their own statements and the written recommendations of their friends ; and to select the person whose recommendations are the most numerous or laudatory.

We believe such a method wretchedly delusive. A sad sort of common law obtains in our country, by which a candidate for any place has a right to demand that his townsman, neighbor or friend shall put his name to any statement necessary to secure an election. No man of recent experience can doubt that an immense array of petitions could be obtained for the rebuilding of the Tower of Babel, and that an immense array of testimonials could be obtained, attesting the fitness of the most knavish contractor to build it.

Considering this facility with which recommendations are obtained, they ought never to be considered final, though they ought always to be demanded.

It should also be laid down at the outset, as a fundamental law, that no testimonials are to have any weight, no matter how great the abilities of the giver, except as they are statements upon important qualifications from persons who are unquestionable authorities upon these particular qualifications. It ought to be fully understood that the vague testimony of the foremost lawyer in the State, as to attainments in organic chemistry or microscopic anatomy, or other branches of science in which the legal gentleman is not an expert, pass with this Board as so much blank paper.

Another method sometimes resorted to in Great Britain is, to advertise for candidates—stating duties, salary, with testimonials or tests. This has some advantages ; but after correspondence regarding this plan, with some leading men who have thought and wrought much for higher education, we do not recommend it.

The only safe method would seem that, by committee or otherwise, we make investigations for ourselves ; to obtain confidential statements as to the abilities of candidates—statements *sub sigillo confessionis* from those who desire our success and the promotion of the most worthy, and who can give us *real* information and not conventional praise.

It has happened that the papers of candidates have been thus

far referred to this committee, and so far as possible, in the absence of full powers, we have acted upon the plan here suggested. We recommend that some existing committee or some new committee be authorized to receive the testimonials of candidates; to make the investigations required, and to report to the Board at a very early day.

THE ADMINISTERING BODY.

Thus far the committee have occupied themselves with the Instructing Body. They now turn to the question of the Administering Body.

The immediate administering or governing body, subject to the trustees, is naturally, as regards discipline, details of instruction, &c., the Faculty. At the head of the Faculty should stand a President, and in so large an institution there are reasons why it might be well to name a Vice-President. These, while taking part in the instruction, should take the lead in the administration. The experience of all institutions of learning puts it beyond a doubt that such headship is necessary. The single attempt to dispense with it, is one of the most wretched failures in the educational history of this country.

The committee recommend that there be elected at an early day a President of the University.

METHOD OF ADMINISTRATION.

The question now arises, how shall the government or administration by the Faculty be conducted?

Two methods have been in existence :

First. The discipline of students, and, indeed, the great mass of ordinary business of the institution, is committed to the President. The Faculty, in this plan, merely, as a rule, present reports and give advice, leaving the initiation of measures and the final decision and action upon them, to the head of the instructing body. This is the method practiced in many colleges of New England, and generally, it is believed, in those of New York.

According to the other method, the Faculty occupy altogether a different position. They are not merely advisors, but legislators. They cannot throw the responsibility upon the head of the institution; they must take part in it themselves. This is the system adopted in a few of the American colleges, and, among them, in the State University of Michigan.

Your committee are decidedly in favor of the latter method. They believe that to the looseness of method incident to the former system, are due many of the difficulties which disgrace Faculties, and much of the bad discipline which ruins students.

Your committee recommend, therefore, that in each department of the University, the Faculty belonging to that department form a legislative body, with sittings at regular and short intervals, presided over by the President, Vice-President, or a Dean elected for that purpose; that rules of order be observed; that in cases of discipline, or conferring degrees, every resident and non-resident professor have a vote, and that such vote be by ballot.

The committee recommend that the combined Faculty of the whole University also have stated meetings at regular intervals not greater than once a month, presided over by the President, Vice-President, or a President *pro tempore*, for the purpose of conducting the general administration of the institution and memorializing the trustees; discussing general questions of educational policy; presenting papers upon special subjects in literature, science and the arts;—that this body be known as the Academic Senate; that its proceedings be conducted according to rules of order; that every person engaged in instruction, whether resident professors, non-resident professors, lecturers or instructors, have permission to speak, but that the right of voting be confined to the resident, non-resident professors, and to assistant professors representing complete departments in which no professor is appointed.

OFFICIAL TERM OF PROFESSORS.

As regards the term of office of professors, the committee ask your attention to the following considerations:

The usual, in fact the universal plan hitherto has been, to elect professors to serve indefinitely. The power of removal in such cases remains in the trustees; but practically it has been found difficult to exercise it, even where there has been great reason for it. In his work on University Education, Dr. Wayland alludes to the great difficulty under the existing system of removing incompetent or superannuated professors. It has been a great difficulty. Hardly a college which has not suffered from retaining men not sufficiently capable, because it required positive action to remove them, which action no one wished to initiate.

On the other hand, it is a matter of difficulty to engage good men for short terms of service in a Faculty. The acquirements

of a professor are not like those of a lawyer or physician, which, if not appreciated in one town, can be exercised in the next. His fields of labor are comparatively few, and he naturally hesitates greatly to commit himself to the chance of being cast out in a few years. He will be very likely, under such circumstances, to prefer a place of less honor and more permanence. To overcome this feeling, salaries would have to be much larger than under the usual system.

Again: It is not improbable that such reëlections might lead to cabals and intrigue, thus distracting the institution, defiling it, and thwarting the purposes of this provision.

The advantages of engaging professors for short terms are apparent. Incompetent men would easily drop out at the end of six years, if not before. Such a system, too, would probably inspire every member of the Faculty to constant exertion. It is a question, however, whether his exertion would be mainly directed to retaining his professorship by energy in instruction, or energy in intrigue.

Your committee are not prepared to make any recommendation regarding the term of service of the Faculty, leaving it entirely to the future discussions of the Board.

SALARIES OF PROFESSORS.

Another question arises, of much immediate importance, regarding the salaries of the Faculty.

Professors' salaries in the United States vary greatly. The salaries at Columbia College are generally about four to five thousand dollars per annum; at Brown University, Providence, they are fixed at about twenty-five hundred dollars; at Yale College, at about twenty-three hundred dollars; at Union College, at about eighteen hundred to two thousand dollars; at Hamilton College, at about twelve hundred dollars; at Hobart College, at about one thousand to fourteen hundred dollars; at the University of Michigan, at about seventeen hundred dollars.

Your committee would be glad to see their way clearly to a recommendation that each professor be paid according to an agreement with the trustees, having in view the value of services; but practically, they fear, this would be a matter of great difficulty.

The main value of one professor consists in his earnestness; of another, in his quickness; of another, in his eloquence; of another, in his reputation. The value of one professor is determined

by many hours, every day, of hard labor; the value of another, by a single hour, every day, of brilliant labor. To balance the claims of these is very difficult. To do it at all, without arousing jealousies which would be likely to interfere with the easy working of the institution, your committee fear would be impossible. The committee, however, recommend for trial, that grades of salary be established for resident professors and assistant professors, which grades, however, shall make no difference in the standing of such professors or assistant professors. The grade shall be determined in each case at the election of the professor, and the grade may be raised at any time by a vote of the trustees, regard being had to the amount and value of services rendered, or to the experience of the persons rendering them. In this view, they present the following

SCHEDULE OF SALARIES.

I. *Resident Professors.*

1st grade.....	\$2,250
2d grade.....	2,000
3d grade.....	1,750

II. *Resident Assistant Professors.*

1st grade.....	\$1,750
2d grade.....	1,500
3d grade.....	1,200
4th grade.....	1,000

The compensation of the non-resident professors, special professors and lecturers should be arranged by special agreement in each case.

In addition to the officers already named for administrative purposes, will be required a Steward, who should occupy an office upon the grounds, keep close watch of the grounds and buildings, superintend repairs, present certificates, receive dues, keep books, etc., etc. His salary also should be matter of agreement.

MODIFICATION IN THE OFFICIAL TERM OF TRUSTEES.

In considering the arrangement of the governing body, the committee cannot forbear to make a suggestion as to a modification of the present charter. By that, the Board of Trustees are a self-perpetuating body; each trustee elected for life, and the whole body form a close corporation. None can deny that while such

an organization has advantages as regards stability, it has disadvantages as regards progress and activity. Your committee believe that the history of great educational institutions, when fully written, will show that this method of electing trustees is the great cause why institutions of learning have so often been dragged on behind the age, instead of being recognized as leaders of the age. We are not prepared to present in all its details a plan for the change desired; but we recommend that as soon as it shall be deemed expedient, some legislation be had by which the term of office for trustees shall be six years; that the elected trustees be classified by lot, and that a certain number of trustees be elected each year. The committee would suggest that each year, three new members be elected into the Board by the trustees, to take the places of three who annually leave it. They recommend that this continue until such time as the graduates of the University shall number one hundred; that thereafter two persons be elected annually into the Board by the Trustees, and one be elected by the graduates. They also recommend that the elections of the Board of Trustees be conducted in every case by ballot, and that it require a two-thirds vote of the electing body to re-elect a former trustee.

The advantages of this plan in general are evident. *First*, it secures an influx of new life into the Board. *Secondly*, it does this without any jar or disturbance of harmony. *Thirdly*, it recognizes the fact that the alumni of the institution never lose their vital connection with it. *Fourthly*, it prompts every alumnus to maintain a deep interest in the institution.

The committee recommend that by the same legislation, the number of absences from meetings of the Board allowed by the Revised Statutes, be diminished. It is surely not too much to ask that men having the honor of a position in a Board of Trustees like this, should discharge the duties, or that if they cannot discharge them, they give place to those who can. On a full attendance upon the meetings of the Board, depends in a great measure the success of this noble enterprise.

THE EQUIPMENT AND ILLUSTRATIVE COLLECTIONS.

The next point to which the committee would call attention, is the EQUIPMENT.

For the department of Agriculture there are two sorts of equipments. *First*, some farm buildings and tools are necessary at an

early day to meet the demands of simple practical instruction. *Secondly*, to give the department the character and efficiency it deserves, there must be begun and carried on as rapidly as possible, a Museum of Agriculture, embracing collections of implements, productions, and matters generally relating to the department, in character similar to the State Agricultural collection at Albany.

In the department of the Mechanic Arts, your committee believe that the order of equipment needed is exactly the reverse; that whereas in the Agricultural department an experimental farm is first needed and the illustrative collection is secondary, in the department of Mechanics the illustrative collection is first needed, and the model workshop is secondary.

The reasons for this belief are as follows:

For the experiments in agriculture one farm is sufficient; the main outlines of procedure in practical culture and experiments are simple; a small range of implements is sufficient for the whole work.

To cover an equally extensive field in the mechanic arts would necessitate a very great number of shops, with scores of processes entirely dissimilar, with an immense range of machines and tools.

In agriculture one field will answer for nearly all the different processes and experiments; in mechanics, as a rule, one workshop will only answer for each single branch to which it is devoted.

But, in addition to this great difference between the two departments, in the ease of simple instruction in elementary practice, your committee conceive there is a radical difference between the necessities of the two departments. Scientific agriculture depends largely on experiments. Whatever may be the results of strictly scientific deductions, these results are not to be accepted until experiment has proved them useful. Thus, agricultural chemistry alone, as a science coming out of the laboratory, is inadequate. Its results must be submitted to practice on the farm. In actual practice a great number of elements constantly arise to disturb theoretical results.

In the department of Mechanic Arts, on the other hand, the results of strict scientific investigation are seldom modified by practice. Every calculation given by mathematical theory will be found to work in practice.

In machines, theoretical calculations of power, modified by calculations of friction will, as a general rule, express practical

results. There is, then, no such need of experimental workshops in this department as of experimental farms in the other.

There are other reasons which might be adduced, but the committee would pass them, and recommend at an early day that there be commenced in this department a general collection, embracing drawings, casts, sectional and working models, in general character like the "Conservatory of Arts and Trades" at Paris.

They also recommend that the Board take into consideration the establishment of a workshop, where young men may be employed in making sundry implements and machines for the agricultural department, and models for the collections illustrating various other departments.

In the department of Engineering, collections are necessary of drawings, engravings, models, casts, &c., in general scope like that at Union College; and among these the committee recommend at an early day, in the department of Mathematics, the acquisition of a collection of the Olivier models, similar to those at the Paris Conservatory, and at Union, Harvard and Columbia Colleges, and at the Military Academy at West Point.

In the division of Science, Literature, and the Arts in general, various collections are necessary. Of these, collections in Geology, Mineralogy, Zoölogy, Comparative Anatomy and Botany, are those most immediately needed. The University, by the munificence of its founder, possesses already one of the finest collections extant in Geology, only needing small additions in Lithology to make it sufficient. It is here submitted that much might be done in building up the collections, by employing active students in the work of collecting specimens most accessible, and in conducting exchanges. At the same time it will probably be advantageous to keep watch of the collections which are from time to time offered for sale in this country and in Europe, and thus secure, at comparatively small cost, such collections as the Ward collection at Rochester; the Lederer collection at Ann Arbor, and the Gibbs collection at New Haven.

PHILOSOPHICAL APPARATUS.

Another very important part of the equipment of any institution of a high class is its collection of PHILOSOPHICAL APPARATUS. It is undoubtedly true that a skillful professor, with little apparatus, is better than a bungler with much; yet as it is our ambition to have not only the best instructors, but also the best means of illus-

tration, it is our duty to look carefully to this portion of the equipment, and to decide upon a policy regarding it.

The committee believe that the trustees should make every effort to have the best; and that our policy should be two-fold: *First*, the professors in the department of General Chemistry, Physics, and kindred departments, should be furnished with the means of illustrating the latest results of research and initiating new researches. *Secondly*, they should have the means of publicly illustrating these brilliantly. We therefore hope to see, at an early day, in the collections of the University, such comparatively rare pieces of apparatus as that of Bianchi or Thilorier for the solidification of carbonic acid; the English apparatus for the direct generation on a large scale of electricity from steam; the Boston modification of Ruhmkorf's coil for presenting on a large scale the effects of electricity induced by the Galvanic current; the new French apparatus for experimenting upon light; and in general those aids to instruction and illustration proper to an institution which we hope to place among the first of this country.

The earlier the philosophical apparatus is put on this footing, the better; and while the committee do not urge an immediate outlay sufficient to compass all that these departments should contain, they earnestly recommend at an early day a liberal expenditure toward a worthy beginning.

COLLECTIONS ILLUSTRATIVE OF ART.

The University can never attain to the proportions we hope for it, without some collections illustrative of the great Arts of Architecture, Sculpture and Painting.

While galleries of statues and paintings by artists just now in fashion, are too expensive to be thought of, art-collections of far greater educational value can be formed at an outlay comparatively trifling.

The collections of casts at the German University at Bonn, and in the institutions at Boston, Ann Arbor and Toronto; the collections of photographs and medallions illustrating architecture and sculpture, and the collection of engravings illustrating the History of Painting, now forming at the University of Michigan, furnish examples of the equipment which ought ere long to be given to this department.

THE OBSERVATORY.

In the ordinary working of an ordinary college, an observatory can be dispensed with. But when an institution is to be made a centre for men of the highest intellect,—when it is sought to increase knowledge,—when the aim is to bring every appliance to bear in revealing the power of God and in developing the power of man,—those in charge will naturally think of the establishment of an observatory. So it has been almost without exception in the great universities of the old world. So it has been at Harvard College, at Yale, at the University of Michigan, at the University at Chicago, at the University of Alabama, at Hamilton College, and at Vassar College, in our own country.

It may be said that an observatory gives no part of what is known as practical instruction. Even if it did not, the investigations which it aids are so noble, that the most severely practical men have always held them in honor. But every man at all acquainted with higher education, will declare that the observatory does promote practical education. From the observatories have come some of the most practical benefactors of the race, and among them, Newton, LaPlace, Lalande, Oersted, Arago, Mitchell. No observatory was ever planned in a collegiate town, without stimulating greatly the study of the exact sciences, and thus promoting progress and achievement in the departments where the exact sciences bear practically upon the welfare of mankind.

We are sure that all the trustees join in our hope to see, at no distant day, standing upon our grounds, an observatory which shall be an honor to the State and Nation. No better gift could be made by any of our wealthy citizens, and no nobler monument could be reared by those who long to live in the memories of their fellow men.

The cost of a suitable observatory varies. To erect a building and place in it a telescope, meridian circle, astronomical clock, and chronograph, would cost from forty thousand to eighty thousand dollars, according to the size and perfection of the instruments.

The committee urge that this part of the equipment be not lost sight of, though at present they do not recommend any application of funds for it.

THE LIBRARY.

The part of the equipment to which the committee would call attention, finally, is the library. It is the culmination of all—touching all departments—meeting the needs of teachers and taught. In it all Sciences and Arts meet; from it they draw a vast part of their sustenance. We believe that, 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, our men of the highest ability will be frequently plodding in old circles and stumbling into old errors. Say what we may of the necessity of original investigation, the fact remains that science has never made great achievements save when its votaries have had a plentiful supply of books wherein to find necessary information and hints as to studies and investigations. The history of the progress of modern science is the history of development and accretion—development *out* of previous thought and work—accretion *upon* previous thought and work. The great progress in modern science is, to a very small degree, the result of the original investigations of men removed from access to the recorded labors of their predecessors.

This is the case with every science. To attempt either of the great functions of an university—the discovery of truth, or the diffusion of truth, regarding the two main branches of our instruction, Agriculture and Mechanics—without a liberal library, would be to cripple these departments; and to continue instruction long in the departments generally without an ample library, would be a farce, were it not so sad to see a body of professors, ambitious to render services to science and to the institutions with which they are connected, crippled by want of books.

What should be the character of the books? It has been suggested that a library should be of the newest and best; that it need only present the latest works as embodying the highest results of thought. There is a germ of truth in this, which ought to be borne in mind; yet it should not be forgotten that there is not a science or an art in which there are not some old investigations never superseded or surpassed.

There are multitudes of old works which must be within reach, in order to an understanding of almost any science or art. The general rule is, that a worthy library should possess the works of every man who has made his mark in literature, science or the

arts. This is true of different sciences and arts in different degrees, but it is sufficiently true even of the most recent sciences and arts, to show that no talk about old books and musty tomes should for a moment delude us.

How should these books be obtained?

Three methods suggest themselves: *First*, the different members of the Faculty might present lists of works in their several departments, with indication of those most needed, and after a collation of these lists by a committee, and a classification according to comparative necessity, purchases might be made from year to year. This is an approved practical method, and is recommended.

But this does not cover the whole want of the institution. There must be a reserved force of books. Very often a book necessary to the success of an important investigation is not thought of until the moment it is wanted. Very often a professor of great acquirements does not know where to find the record of an experiment; and that hint at a method or fact of immense value to him, he must seek in a full collection of works in his department, many of which he would not think of naming as those most immediately necessary.

The successful use of recent books, too, necessitates a large collection of those partially superseded. Partial quotations must often be known wholly; doubtful quotations must often be verified. A collection is needed as a centre to which men in all grades in every kind of investigation may gather.

This can only be obtained by other methods. One of these is, to take the catalogues of leading publishers and booksellers, and having marked their valuable works, receive proposals for their purchase. This is often a useful way, and is also recommended.

Another method of use in beginning a library, is the purchase wholly, or in part, of carefully gathered special collections of private individuals. Thus the University of Rochester purchased the Neander Library, and Yale College the Thilo Library.

When and how can this be done? Not in this country to any extent, for nowhere in the world are valuable books sought so eagerly and held so tenaciously. It is in foreign cities, and especially in London, that collections of works in every department, made by the most distinguished scholars, are brought under the hammer of the auctioneer. Hardly a number of the London Athenæum is issued without advertisements of such collections.

Within a very few years, the private library of Buckle, so full in all its departments; the private library of Lord Macaulay, containing vast stores in English history; the library of Humboldt, containing the accumulations of his life; and scores of others even more important, have been thus broken up in the London market.

Your committee find that the prices of books thus disposed of in mass are very low, except in the case of rarities competed for by bibliomaniacs, and these are the very things for which the University cares little or nothing. The solid material of a large library—the standard authorities and works of reference—the sets of Reviews, periodicals and Journals of Societies, with few exceptions, go at low prices. The committee are assured by one of its members, who has himself frequented, and bought largely in these sales, that collections of vast value, selected during a lifetime by the most eminent scholars in various branches, and enriched often with their notes, references and corrections, are constantly sold at prices astonishingly low.

The committee, therefore, without recommending any hasty action, would suggest that an eye be kept upon these frequent sales, and that at the earliest convenient season an attempt be made to avail ourselves of them.

It is also recommended that steps be taken to obtain for the library certain valuable works published by foreign governments; such as the wonderful Monographs upon the European Rural Population, by LePlay, published by the French government; and, above all, in the department of Industrial Mechanics, the great series of Patent Reports published by the English government, copies of which are in the State Library at Albany, in the Astor Library at New York, and in the Public Library at Boston. It is believed that a copy can be obtained of the English government at the mere cost of mounting the plates and binding the several volumes. A more valuable and appropriate work for that department could hardly be designated.

PREPARATION OF A CODE FOR THE UNIVERSITY.

To this committee was entrusted the preparation of a code of laws for the government of the University. A large collection of the statutes of different colleges has been made, but at the outset a question meets us: What shall be the theory of discipline in the institution? Shall it be after the military pattern; shall it be the ordinary collegiate discipline which has been in part inherited

from England; shall it be an adaptation of the free university system of continental Europe, where comparatively little is done by college police, and much is left to the students themselves? It will be seen at once that this question must be decided before any body of statutes is framed; for the radical difference between these fundamental systems involves an entire difference between the codes which express them. The first, 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 discipline. On the other hand, the uniformity in dress, which is admired by some as contributing to equality, deprives the professor of one of his best means of knowing who are before him in the lecture room,—how he shall deal with individuals, and what allowances are to be made. None acquainted with the best American colleges, will hesitate to declare that, as a rule, no student loses anything among his professors or his fellow students, by clothing indicating poverty and frugality. It is only in after life that this makes an important difference. 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. No collections of men were ever more democratic. The rigid military government, it is believed, could not possibly be applied to the whole University; for, by the fundamental theory of the institution, there will be students of a great number of different grades,—some attending merely courses of lectures for a single season; some in regular courses of several years; some men not far from middle age; some far below their majority; some residing in the college building; some residing in the town. While, therefore, military instruction must always form part of the courses, it is not recommended that the government be military, except, perhaps, in some single departments, where efficiency may be promoted by military forms.

As to the next system, the ordinary collegiate plan, although to a certain extent it may have to be adopted on account of our partial resort to dormitories, yet the system as a finality is not favored by the committee.

The system of university freedom of government is believed by the committee to be our 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. The attempt is to teach the students to govern themselves, and to cultivate acquaintance and confidence between Faculty and students. This the committee believe is possible. They believe that by rigid execution of a few disciplinary laws; by promotion of pleasant, extra-official intercourse between teachers and taught, in ways hereafter to be specified; by placing professors over students, not as police, but as a body of friends, this government may be made to work better than any other. The boundaries between government of students by university authorities and government by town authorities, will be discussed elsewhere.

The committee will, on a future day, recommend a simple pledge and ceremony of matriculation, having in view self-government by the students.

Having thus given a basis for a code, we think it best to defer details until a future report. The necessity for by-laws is not immediate, and much light can, it is believed, be gained from the Faculty about to be chosen.

REMUNERATIVE MANUAL LABOR BY STUDENTS.

One of the most interesting questions which arises in the establishment of our departments of Agriculture and the Mechanic Arts, regards the experiment of employing students at manual labor during a portion of the day.

The argument generally used of late against this experiment is, that it has been tried several times unsuccessfully.

This argument would have more force were it shown that the institutions where the manual labor system has failed, have had the means of trying the experiments fully and fairly. It is believed that such has not been the case, and that our country has seen no institution having such ample means of trying this experiment as has the Cornell University. Nor is it true, as is often loosely stated, that this experiment has uniformly failed. The reports of the State Agricultural College of Michigan, at Lansing, show that its success there, if not brilliant, is substantial. Several young men have supported themselves entirely, paying their fee of tuition, room rent, board, fuel, washing, clothing, books and traveling expenses out of their earnings upon the college property; and a very large number in the same way have paid their expenses partially.

Your committee are satisfied that the University ought to try

this experiment. We are not, however, prepared to recommend that every student in the University be *required* to do a certain amount of manual labor. This we think would *impose fetters* upon the student body, very dangerous to that character of breadth and freedom which we hope to establish.

If, as is certain to be frequently the case, a student advanced in years considerably beyond the usual student age, and who already has labored and accumulated means to defray his expenses, presents himself and wishes, in the shortest time possible, to fit himself for a place as engineer, superintendent of chemical works, or scientific miner, it would seem doubtful policy to force him to give those hours which he desires to crowd with study, to manual labor in which he has had full experience, and remuneration which he does not need.

True, it is often urged that the student can do more and better mental work, with deduction of two or three hours of physical labor, than without it. Though not one man in a million among men at large acts upon this belief, it may be so among students. But, until this theory proves itself by practice, we believe that it would be a great mistake to attempt to place the entire University rigidly upon this basis. When, in our progress here, this theory shall be substantiated, there will be ample opportunity to enforce this system in all the departments.

Again: Your committee are by no means certain that physical labor among young men can be made to take wholly the place of athletic sports and gymnastic exercises in giving restoration from mental labor. Even if it keep up bodily strength, it seems hardly possible that the minds of young men could be kept fresh, elastic and energetic, when the only relief from tension is the change from one form of labor to another.

We understand that even in manual labor schools it has been found necessary to give some time to free, manly sports and games.

But there is one practical objection which will doubtless be conclusive, even if theoretical objections are not.

If any such number of students as we expect, enter the University, we could not provide labor for all of them.

The State University of Michigan, with far less attractions than we hope to present, has fifteen hundred (1500) students. At two hours a day of manual labor by each student,—and this is an hour less than the usual allowance,—granting that the different divisions of working students succeed each other with perfect preci-

sion, one corps taking up the tools the instant the previous corps throws them down, there would be a constant force to be profitably employed and paid, equivalent to three hundred (300) laborers, and the University cannot employ any such force with profit for any long time.

But while we do not recommend general compulsory labor, we are in favor of organizing corps of laboring students, and holding out every inducement to join them; and we are not prepared to say that it may not be necessary to require manual labor from all the students in some special departments.

We believe that a system of manual labor, rightly organized, will work to the mutual advantage of the University and the students. There is a large amount of labor required at once upon the ornamental grounds and the farm. There are trees to be felled, roads and paths to be cut, depressions to be filled, elevations to be graded down. There will be much work requiring mere physical ability, and there will be much requiring the scientific guidance of the Professors of Agriculture, of Landscape-Gardening and Engineering.

It will also be of use to the students in their muscular development, and we believe can be made to give substantial aid to many pecuniarily.

PHYSICAL CULTURE.

Many plans of education have given goodly place to Physical Culture in *theory*; very few have given any adequate place to it in *practice*.

No mistake could be more unfortunate. Better the mere rudiments of knowledge with a body sound, firm and strong, than the best culture of the schools with a body permanently emaciated and debilitated.

It is one of the strange things in the history of education, that American votaries of classical scholarship have been so neglectful of that bodily culture which, in the ancient civilization they justly honor, was the main culture.

We cannot insist upon this part of an education too strongly. As long as highly educated men are dyspeptics, so long will they be deprived of their supremacy in society by uneducated *eupeptics*—and so it ought to be.

We recommend: *First*, that in all, except the Optional Course, attendance be required on a plain series of lectures upon Anatomy, Physiology and Hygiene.

Secondly, that there be provided, at the opening of the University, a well-equipped Gymnasium, and that training in it, or equivalent training in manual labor or exercises in the open air, be obligatory upon all.

Thirdly, that an instructor in Gymnastics be appointed, who shall conduct exercises at the gymnasium under some careful progressive system, with as much regularity and under as stringent rules regarding attendance and decorum, as are observed in any college exercise whatever.

Fourthly, that in arranging hours for study, recitations or lectures, physical training be regarded as equally entitled to consideration with mental training, and that a regular and sufficient time be always allowed for that purpose.

Fifthly, that grounds be set apart for the national game of base ball, and that the formation of clubs be encouraged; also that encouragement be given to the formation of clubs for boating upon Lake Cayuga.

Sixthly, that the experiment be tried of framing an university statute to the effect that deterioration in physical culture will be held in the same category with want of progress in mental culture, and that either will subject the delinquent to deprivation of university privileges.

Seventhly, in view of the importance and practical novelty of this whole subject, it is recommended that to the regular standing committees of the Board of Trustees there be added a "Committee upon Physical Culture."

MILITARY EDUCATION.

It is recommended that the requirements of the congressional law be met by careful provisions for teaching Military Engineering and Tactics, and that the Board of Trustees at an early day adopt some plan for encouraging military drill, or for making it obligatory.

ACTUAL COMMENCEMENT OF INSTRUCTION.

The committee would also report as to the actual commencement of instruction,—the practical beginning of general university operations.

A sufficient number of professors having been secured, it is recommended that at least three (3) months before the opening of the University, an advertisement be inserted in papers of wide

circulation, stating concisely the day when the examinations for admissions begin, the courses of instruction, the professors and their departments, the charges for instruction, the approximate charges for board and lodging, the number and character of free scholarships, the duties of school commissioners in examining candidates for them under the charter, and the names of persons to whom applications may be made for further details.

THE UNIVERSITY YEAR.

It is recommended that there be two terms in the University year; the first commencing on the second Thursday of September and ending on the third week-day preceding Christmas; the second term commencing on the third week-day following New Year's day, and ending upon the third Thursday in June, when shall be held the annual Commencement.

In order, however, to commemorate an event which the institution ought ever to hold in remembrance, and, incidentally, to give some intermission in the second term, which is much longer than the first, it is recommended that the ordinary exercises be suspended on the fourteenth day of May, the day when the act incorporating the University was passed, and that that day be forever known as FOUNDER'S DAY, and that exercises be then held expressive of gratitude to the benefactors of the University, and to renew the memory of their benefactions.

It is recommended that some inaugural exercises be held at or near the beginning of the first term.

FEES.

In nothing do American institutions of learning vary more than in the fees required of students. At Yale College the charges are as follows:

For tuition	\$45
rent and care of one-half room, average	20
expenses of public rooms, repairs, &c.	10
use of gymnasium	4
society tax	6
	<hr/>
	\$85
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Besides these, there are charges at graduation amounting to \$12; average price of board, \$5.50.

In the Massachusetts Institute of Technology, at Boston, the

fees in the first year are \$100; second year, \$125; third and fourth, \$150 each.

At Harvard College the fees are as follows :

Instruction, library and lecture rooms, and gymnasium	\$104
Rent and care of room, &c.	28
Special repairs	1
	<hr/>
	\$133

Board is said to range from \$4.50 to \$7 per week.

In the Lawrence Scientific School, at Cambridge, the student taking the courses of chemistry, engineering, botany, &c., pays in regular fees each year, from \$250 to \$300.

In the Cambridge School of Mines, the fees are, for the first year, \$150, and \$200 for each succeeding year.

At the State University of Michigan, by the catalogue of 1866, any student from without the State pays a matriculation fee of \$20, and an annual fee of \$5.

At Dartmouth College, tuition in the Scientific School is, per annum, \$36 in the third and fourth, and \$42 per annum in the first and second years. In the College proper, the fees are :

For tuition	\$51
room rent from \$6 to	12
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	\$57 to \$63

At Hamilton College the tuition is	\$45
Room rent	9
Sweeping and contingencies	21
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	\$75

At the State Agricultural College of Michigan, at Lansing, tuition to students from that State is free, but from all other States, per annum, \$20; room rent, \$4; matriculation fee, \$5.

From this great diversity no rule can be deduced. After consideration, the committee, although there are one hundred and twenty-eight (128) free scholarships already provided by law, and although it is believed that instruction of the very best kind will be furnished, have concluded to suggest that the charges for the first year be very low, and they present the following schedule :

Matriculation fee	\$15
Annual fees at \$10 per term	20
	<hr/>
	\$35

For room rent they have based their calculations upon the percentage which the dormitories ought to contribute upon the outlay for them, arranging the rents so as to give a return of seven (7) per cent per annum. The rent of a full suite of rooms in the main building would be 55 cents, 73 cents, 109 cents per week for each student, according as they have four, three or two occupants.

Arranging rents so as to bring a return of four per cent per annum, the charges would be 32 cents, 42 cents, 63 cents per week, according as the suites of rooms are occupied by four, three or two persons.

But it is not expected that any large number of the students can be accommodated in the University dormitories. There are provided in the first building, accommodations for from sixty-four to one hundred and twenty-eight students. But it is believed that these will fall short of the accommodations required.

It is not doubted that the citizens of Ithaca will do their utmost, even subjecting themselves to inconvenience, in providing rooms for students. And it is believed that they will do this at the lowest terms possible; for nothing could be more unfortunate for the town and University than at the outset to have the impression gain ground that student lodgings in Ithaca are costly.

BOARD.

In regard to board, the committee are decidedly of the opinion that the trustees should have nothing to do with furnishing it, unless events force them to do so. For this the citizens of Ithaca must be relied upon entirely. The same necessity for liberal treatment and low prices obtains in regard to board as in regard to lodgings. And in view of the great importance of a right beginning in this matter, it is recommended that the President of the Board designate a committee of the citizens of Ithaca, who shall bring the matter before their fellow citizens and obtain assurances which shall enable the trustees in their first announcement to offer, with the other attractions of the institution, the very decided one of cheap rates of lodgings and board.

The same citizen's committee should also be relied upon to furnish the University steward with names of persons willing to accommodate students, and with lists of prices, so as to provide at once for students on their arrival.

If, however, such appeal be unsuccessful, which is not believed possible, it is recommended that the executive committee be em-

powered to lease in the town, or erect upon the college grounds, a dining hall and kitchen, with the full understanding, however, that the University shall not undertake to manage it further than to lease it to the students. The students thus leasing it, shall choose their own stewards, employ their own servants, purchase their own provisions, and manage it in their own way, except that the trustees may vote to advance money to the clubs thus formed, to purchase leading articles of supply at wholesale, according to the system recently established in the Yale College dining clubs; and the University authorities shall take measures, in case of need, to preserve general decency and order.

FUEL.

It is strongly recommended that the University purchase fuel at wholesale, to be retailed to the students at cost. This plan is found to work beneficially at Yale, Harvard and many other colleges.

THE DORMITORY SYSTEM.

Two radically different ideas as to the function of an University have produced two different systems of lodging students and of supervision of them while not engaged in public exercises.

Under the first, the student is lodged in a dormitory and kept, or rather supposed to be kept, under surveillance of the University authorities. Under the second, lodging and any other than general surveillance are looked upon as outside the proper function of an University, and the student left to make arrangement for his lodging as any other person coming for a time into the town would do, subject to certain general regulations by the University. Care of him as a citizen is left to the town authorities; care of him as a member of a family, to the household with which he is lodged—the University, of course, reserving the right to inflict penalties for offences against University common law and statutes.

The committee believe the latter system the more sound in theory and the more satisfactory in practice. Large bodies of students collected in dormitories often arrive at a degree of turbulence which small parties, gathered in the houses of citizens, seldom if ever reach. No private citizen, who lets rooms in his own house to four or six students, would tolerate for an hour the anarchy which most tutors in charge of college dormitories are compelled to overlook.

But even were the discipline of dormitories thoroughly enforced, the system tends to put the professorial corps in the attitude of policemen. And the situation is made all the worse by the fact that the professor is armed with no authority under the law of the land, and so comes to be regarded not even as a policeman, but as a spy—not as a judge, but as an inquisitor. Nothing could be more fatal to hearty, kindly relations between teachers and taught.

The dormitory system, as it has existed at Oxford and Cambridge, has been carried out logically in the construction of quadrangles—great enclosures from which egress at unsuitable hours is supposed to be rendered difficult, and in which good order can be more easily maintained. That even this most costly plan has failed every one knows, who has at all looked into the subject; but even the poor merit of the English system seems wanting among us,

The reasons for adopting even temporarily any modification of the dormitory system in a new institution like ours, are two: *First*, the necessity of some check upon persons disposed to ask too large a price for student lodgings. *Secondly*, the necessity of observations, experiments and work upon the college land by large numbers of students. Of these reasons the first weighs little; the second, it is hoped, will weigh less and less as the village of Ithaca is extended nearer and nearer to the University domain;—but they have been strong enough to induce the Board of Trustees to erect a dormitory in which are provided tasteful and well-ventilated study and sleeping rooms for from sixty-four to ninety-six students. It is believed that no better accommodations are afforded in any college within the United States.

It is recommended, however, that at the outset the policy of the trustees be declared to be in favor of making residence in the college buildings a reward of good work and conduct, and that good order in every student hall be entrusted to the self-governing powers of the students residing in it, with a full understanding that the University authorities will enter into no inquisitorial process to discover the authors of disorder, but that if the tenants are not able to maintain good order, they must give place *en masse* to those who can. If this does not accomplish the purpose, the hall should be closed altogether.

It is hoped that ere many years accommodations for students may be mainly provided among citizens residing in neat, tidy

dwellings bordering upon the University property. In these a kindly, restraining family influence would be exercised upon students, never found in the prevalent poor imitation of the English semi-monastic system.

The committee are decidedly opposed to any large adoption of a dormitory system.

RELATIONS BETWEEN THE CORNELL UNIVERSITY AND OTHER INSTITUTIONS OF LEARNING IN THE STATE.

It is believed that the institution now to be founded can be brought into perfect harmony with the sister institutions of the State. While we hope for large numbers of students, it is highly improbable that the number at the other colleges will be any smaller than at present. Facilities for education, like facilities for travel, increase the number of those using them. In this great commonwealth of four million souls, there is work for all.

So far from injuring the existing colleges, it is hoped that we can benefit them in one way at least most gratifying to their officers. In the Faculties of these colleges are some of the best minds in the country—some of the noblest men. They are to-day, almost without exception, kept upon salaries wretchedly inadequate, and to a number of students far less than ought to enjoy the benefit of their teachings.

By our plan of Non-resident Professors, we can avail ourselves of the talents of these men—can give them a larger field and a newer, and can add to their salaries sums which will enable them to work more freely in the colleges with which they are immediately connected. This plan also offers an incentive to every active professor in every college, to distinguish himself as an investigator or instructor in some department, and thus will benefit science and education at large.

RELATIONS OF THE UNIVERSITY WITH THE SCHOOL SYSTEM OF THE STATE.

The provisions of the charter of the Cornell University show that its promoters recognized the necessity of a vital connection with the school system of the State. As that system is the substratum of all we hope to build, it cannot be left out of sight. It ought never to be forgotten that we are to draw life from it, and that we must return life into it. No scholastic traditions should lead us to slight or undervalue this relation. It will be a great

honor to us if we knit our work as an esteemed part, into the fabric of education for a commonwealth of four millions of people.

Pains have been taken to establish a relation such as has never existed between the system and any existing college. The Superintendent of Public Instruction is *ex officio* a trustee, and thus forms a vital link in the connection. The provision in the act of incorporation regarding the choice of students to scholarships in the different assembly districts, brings us directly into relations with the whole body of school commissioners throughout the State. Our labor should be to strengthen the ties thus established. Entering heartily into this vast educational work, so cherished by the people of this State, we are strong—holding ourselves aloof from it, we are weak indeed.

A SPECIAL TEST IN OUR WORK.

In the arrangement of departments and in provision for them, there is one test very simple and very effectual—the *original Law of Congress*. That law we must neither wrest nor warp. We must satisfy its requirements without mental reservation. We must never lose sight of that great body of men to whose mental needs the act makes special reference, and of whom it speaks as the “industrial classes.”

The munificence of our founder does, indeed, enable us to add to this provision; but nothing can allow us to take from it.

The monstrous perversion of trusts recently revealed by the Parliamentary Commission on Collegiate Education in England, must find no parallel here.

That original law will not fetter us in our endeavors to give the people of this State the most advanced university privileges. Having guarded us from a common error, and secured certain great branches of practical education, it gives us by express declarations the largest university scope—only insisting that we keep in view the real wants of this land and people.

THE GENERAL TEST IN UNIVERSITY EDUCATION.

The committee have now considered the practical questions most likely to arise at the beginning of our work. That all such questions have been met, is not claimed. In regard, however, to those which may hereafter arise, we desire in conclusion to present a general principle, fundamental and formative—a principle to serve as a test and guide;—it is the principle so admirably

enunciated by Wilhelm von Humboldt, and elaborated by John Stuart Mill: "*The great and leading principle is the absolute and essential importance of human development in its richest diversity.*" This we conceive to express the object of any really great institution of learning; this our founder proclaimed in his declaration already cited.

This principle we believe can only be made operative through the greatest freedom in study consistent with an University organization—freedom in choice of studies—freedom in range of studies. Development under this principle—moral, intellectual and physical—can only be normal and healthful in an atmosphere of love of truth, beauty and goodness, and adoration of the Centre of truth, beauty and goodness.

We have under our charter no right to favor any sect or to promote any creed. No one can be accepted or rejected as trustee, professor or student, because of any opinions and theories which he may or may not hold. On that point our charter is most carefully guarded, and made to conform to the fundamental ideas of our Republic—ideas which too many institutions of learning have forgotten. Fervor, valor and strength in labors for truth, goodness and beauty, are the qualities to be sought in those who are to work here; and if we secure men of this fervor, valor and strength, we may be sure that, whatever their individual theories on this or that dogma, their joint labors will be for the glory of God and the elevation of man.

Upon the members of the Board the committee desire to impress the necessity of earnest thought and energetic action. A trusteeship of this University will be no sinecure. Never was a nobler trust confided to any body of men. May we all feel our great responsibilities in this matter, and work earnestly to discharge them; and in laying these foundations may we have the blessing of Heaven, that all may be fitly builded.

(Signed.)

ANDREW D. WHITE,
For the Committee on Organization.

Cornell Univ. Jan 256 Am. glau.
Cabinet of palaeontology (10,000) books
to cost of 2 or 3000. All in
dition to 100,000 given for a
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