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PRESIDENT'S REPORTS
OF THE
DEPARTMENT OF ARCHITECTURE,
MASSACHUSETTS INSTITUTE OF TECHNOLOGY.
1871 - 1916.

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REPORT OF THE DEPARTMENT OF ARCHITECTURE, 1871-1872.

At the close of the fourth year in which this Department has been in active operation I beg to present the following account of its present condition, of what it has thus far accomplished, and of what had previously been done by way of preparation for this work.

This preparation had consisted chiefly in such examination as I had been able to give to foreign schools of architecture, with some personal consultation with architects both in this country and abroad, and in the collection of casts, photographs and drawings, and other materials, which the generosity of some friends of the school had given the means of purchasing. Some unusually favorable circumstances rendered these collections much more extensive and valuable than was reasonably to be expected, especially in respect to mediaeval sculpture and carvings and architectural drawings. A large and almost unique collection of casts from Lincoln and Southwell fortunately fell into my hands, which I was afterwards able to supplement by considerable additions from French Gothic work of the same period. At the moment of returning home I was also enabled, by the generosity of Mr. Ernest Benzon, of London, formerly a resident of Boston, to purchase an unusually good collection of school drawings, made by students in architecture at the Ecole des Beaux-Arts in Paris, and at the French Academy at Rome.

These collections were largely augmented by the kindness of many gentlemen, mostly architects, who, both in England and on the continent, evinced a lively interest in our undertaking and contributed not only photographs of their works but tracings and lithographic copies of working drawings, with specimens of specifications, estimates, bills of quantities and various forms of business papers. Our thanks are specially due to Mr. Waterhouse, Mr. Withers, Mr. Keeling, Mr. Norton, Mr. Nash, Mr. Rickman, Mr. Edis, and the late Mr. Papworth in London, and Mr. Bryce in Edinburgh, and to M. Viollet-le-Duc, M. Charles Garnier, and M. Lesoufacher in Paris, for their generous contributions. M. Cesar Daly also presented to the department his valuable work illustrating the domestic architecture of the Second Empire, and the French Minister of Public Instruction, M. Duruy, acting through our Minister, Gen. Dix, put at our disposition a number of illustrated works relating to the architectural history of France, among which were the magnificent monograph of the Cathedral of Chartres and the two volumes entitled "Statistique Monumentale de Paris." The Secretary of the Institute of Scottish Architects in Edinburgh also gave us a nearly complete series of the publications of that Society, the Architectural Publication Society of London added their miscellaneous publications, and the Royal Institute of British Architects not only presented us with a complete set

of their valuable Proceedings, but were good enough to put us upon their books, so that we have continued regularly to receive the papers they have published.

Altogether, besides these books and papers, the collections comprised, at the moment of opening the school, about 2000 photographs, 500 prints, 400 plaster casts, 200 crayon drawings, 40 water-colors, mostly of architectural subjects, and 30 manuscript architectural drawings, large and small, besides 100 sheets of working drawings, mostly tracings, and some specimens of tiles, pottery and stained glass.

These various objects were classified and arranged in the rooms of the Architectural Museum during the spring and summer of 1868, and wall-catalogues giving the names of a chief part of the plaster casts were printed for the convenience of visitors, of whom several hundred visited the Museum during the next year. On the opening of the Department at the beginning of the school year in October, sixteen pupils presented themselves, four of whom were special students in architecture within the school, spending their whole time over their school work. The others were students or draughtsmen in offices, coming to the school only to attend lectures.

During this year the lectures were mostly historical and critical, as a part of the Course in Design, the Course in Construction not being undertaken. A course

of lectures upon Perspective, however, was given in the course of the winter, which was attended by the whole of the Third Year's class. The work of the year, after some preliminary exercises in the use of India ink and color, consisted of a series of problems in design, of gradually increasing difficulty, originated and worked out by the students under my advice and supervision; such as, among others, a Balcony, a Bridge, a Triumphal Arch, a Swimming Bath, a Mausoleum, a Chapel, and some problems of ornament, such as a Honeysuckle frieze, a four-leaved Corinthian capital, etc., etc.

The second year, beginning in October, 1869, I was fortunate enough to secure the services, as my assistant, of Mr. Francis W. Chandler, now Assisting Supervising Architect of the Treasury Department at Washington. Mr. Chandler had formerly been a student and draughtsman in my office, and had then just returned from the completion of his studies in Paris. He continued in the school until the first of April, spending his whole time in the drawing room, giving the class just at the moment each might need it the benefit of his advice and assistance. The marked improvement made by the class under this arrangement convinced me, of what indeed hardly to my mind needed this proof, that the only way to secure rapid progress in this work is to have personal instruction from a highly accomplished teacher constantly at hand to save the students

from the loss of time and trouble, which, in the beginnings of so difficult and complicated a study must otherwise be very great. During the last part of the year the class were strong enough to get along without more constant supervision than I could myself give them.

I, however, engaged the services of Mr. Langerfeldt to give them lessons in water-color drawing, and of Mr. Virgil Williams, who for several months gave them lessons in crayon drawing several times a week.

During this year there were twenty-two students attached to the Department, of whom twelve were students in offices, and only attended lectures. The other ten spent their whole time at the school as special students in Architecture, many of them taking in addition to their professional work some of the mathematical or other studies open to them in the school.

My own work comprised, besides the instruction given to the class in Design, of the same general character as the year before, a course of lectures in Construction, in which the ordinary detail of office work was gone over in connection with the specifications and working drawings. The work of the class, in like manner, comprised, besides the series of problems in design, the working drawings of a small frame house, with details and specifications, according to designs of their own. The problems in design embraced, among other things, a Campanile,

employing the Doric, Ionic and Corinthian orders; a Hospital and Alms House for 40 pensioners, with Chapel, Refectory, Hospital, etc., all with open roofs; a set of church furniture, font, pulpit, etc., etc.; a half-timbered house; a school and library building, with passage to a church beneath; a summer-house between two bridges; and a number of minor subjects. A considerable number of the drawings embraced in these series were drawn in perspective. Much of the work was in the Gothic style.

The Boston Society of Architects, "wishing to do its part in the work of architectural education," established this year two annual prizes, consisting of books, of the value of fifty dollars each, to be given to the students who should exhibit at the end of the year the best year's work. A committee consisting of Mr. Cabot, Mr. Cummings and Mr. Van Brunt, awarded the prize for the best work in the class of Design to Joseph A. Pond, of Allston, and a committee consisting of Mr. Hartwell, Mr. Preston and Mr. Brigham awarded the prize for the best work in the class of Construction to William M. Woollett of Albany, N. Y.

The third year, from October, 1870, to June, 1871, the class numbered fourteen special students, many of whom were the same as the year before, with only two or three from the offices. Indeed, experience had shown that it was almost impossible for young men actively employed as

draughtsmen to command time for any other stated avocation, by day. The attendance of this class of students had in the previous years been very irregular, ceasing almost altogether towards the end of the year.

The work resembled very closely that of the previous year, except for accidental reasons, although the lectures in Construction were carried on, the work done by the class under this head was but slight. The prize in construction was accordingly not awarded. That in design was given to Frank Spinning, of Dayton, Ohio. Mr. Langerfeldt and Mr. Williams continued their lessons in water-colors and crayon drawing, and towards the end of the year the class had a course of a dozen lessons in modelling under the care of Mr. Alexander Johnston.

Mr. Chandler's engagements were such that, to my regret and that of the class, he was obliged to relinquish part of his work at the school in January, and on the 1st of March gave it up altogether. It proved impracticable to supply his place either for the remainder of the year or for the year to come, very few young men in this country having the sort of training that fits them for school work, and those few being in great demand for other work. In this case there seemed to be only one course left, and as soon as Paris was open to the mails I wrote to my correspondents both there and in London, begging them to employ their good offices to find among the young men about

to leave the Ecole des Beaux-Arts some one competent and suitable for our vacant post. It was not until the month of December, however, that any definite result was reached, and it was January before I had the pleasure of welcoming my new assistant, Mr. Eugene Létang, and the satisfaction of sharing with him a labor which I had borne almost without assistance since the preceding March. 7

This somewhat adventurous step, which from the circumstances of the case I was obliged to take almost upon my sole responsibility, has met with a success even greater than I had hoped. In professional attainments, I knew that of course a student of the Première Classe, a pupil of so eminent an architect and successful instructor as Mr. Vaudremer, could not but be a thoroughly accomplished architect, and one thoroughly versed in the best methods of the best system of architectural discipline. Still, it is not without anxiety that one invites a foreigner to take part in our own undertakings, and in the present case there was cause to fear that the obstacle of language might prove an insuperable one. The event has proved, however, that these fears were unfounded. The awkwardnesses of the position have been met with tact and good sense, and as the young men have for the most part some knowledge of French, and are glad to practice what they know, what promised to be a source of embarrassment has been, in fact, a positive advantage. But of late

English has again begun to prevail in the drawing rooms.

The year's work has been of substantially the same character as before, except that during the last half of the year a considerable number of small problems, each occupying only a couple of days, or at most a week, have been introduced. The subjects of these have been, for instance, a Porch, a Portico in a Garden, a Peristyle, and Mantel-piece, etc., etc. The crayon or charcoal drawing has also, in Mr. Létang's hands, assumed a more prominent position, and the class have made good progress in it. I have also required the class every morning to bring in in their sketch books a pencil-sketch of some building, a plan, or an architectural detail, an exercise in every way salutary. A considerable part of the class have also done a fair amount of work in Descriptive Geometry, and in shades, shadows and perspective, partly under my own instruction, and partly in connection with other departments of the school. The study of Detail Drawings has also been pursued with very satisfactory results, though to but a limited extent, in connection with lectures upon Carpentry and Joinery. It is impossible to go very thoroughly into these subjects without an entire interruption, for the time, of everything else. But in view of the fact that a chief part of the class were looking to spend a portion, at least, of their four months' vacation in architect's offices,

it seemed best to do what could be done in preparation for that work.

The different topics embraced in the Lectures have been chosen so as to illustrate as far as possible the work the class might have in hand. These have been on Construction, on History and Criticism, on Shades, Shadows and Perspective, and the Perspective of Shadows, on the Composition of Mouldings, of Details, and of masses; on the Orders, on the Topography of Rome, on the Tuileries and the Louvre, making about seventy-five lectures in all, delivered two or three times a week, and occupying an hour and a half or two hours each in the delivery. It has been necessary to give a good deal of information, viva voce, that might better have been obtained from text-books, if proper text-books were to be had. Indeed, a chief part of my own labor has consisted in collecting and putting into shape the common-places of architectural information, things which every architect knows, but which are not as yet accessible to students.

These various works occupied the first six months of the year, and sufficed for preliminary study. On the 1st of April a more important subject was taken in hand, which has occupied the rest of the year; the sketches and finished drawings for a Casino or Pleasure House, situated in a formal garden and surrounded with statues and fountains. This sort of subject, though

remote from daily use and experience, is for that very reason best suited to this stage of advancement, stimulates the fancy and imagination, and does not involve the numberless considerations of practical detail, which it would not do to slight, and yet which the class are not yet prepared to entertain. A more practical problem would require for its solution a more extended experience than such a class can possibly have had. Work of this kind, on the other hand, while it taxes their powers to the utmost, both in the design and in the execution of the drawings, does not demand for its satisfactory performance any greater resources, either of knowledge or skill, than they have at command.

The result has amply justified this view, which is, indeed, supported by our own previous experience and by the practice of the best schools abroad. The progress of the class during these eight months, in the essentials of professional culture, has been very satisfactory. It is only by such incessant practice of original design under proper guidance and criticism, that the creative and imaginative faculty can be exercised and developed. Moreover, it is through the varied manipulations which exercises of this sort exact, that artistic draughtsmanship is best acquired. Drawing thus becomes to the student not a mere mechanical exercise of hand and eye, but a means of expression,--a language by which to convey the architectural idea he has conceived in his mind.

The plans, sections and elevations which the class exhibit as the result of these two months' work are confidently presented in vindication of these views. They are in great part the work of students who had begun the study of architecture six months before. About half the class accomplished this work. The rest, who through absences or from other causes, were not strong enough to undertake it, have spent the time in exercises more suited to their condition.

Hitherto the classes in Architecture had consisted entirely of Special Students in this Department, most of whom had had no previous connection with the school. This year, however, two Regular Students presented themselves, young men, that is to say, who had been through the first two years' course, passing all the required examinations, and who proposed to take, along with their architectural work, the further scientific studies requisite for a degree. This they have satisfactorily accomplished, and although they have not, of course, done as much Architectural work as the students who could give all their time to it, they have kept up with the class, and have constantly shown the value of the preliminary training the earlier years of the school had given.

The work of the Regular Course thus gone over, in connection with the Departments of Engineering, has comprised the elements of the Differential and Integral

Calculus, and their application to Statics and Dynamics, illustrated by work in the Physical Laboratory, consisting of about a dozen practical problems in Friction, the Resolution of Forces, and the Deflection of Beams under various kinds of strain. These students have also done seventeen problems in Stereotomy, with the necessary drawings, and had instruction in Electricity and Magnetism, besides keeping up their exercises in French, German and English.

The Scientific studies of the Fourth Year will be less numerous, and will give the Regular Students in this Department more time for their professional work. It will embrace a series of exercises in the Physical Laboratory, specially desired to illustrate architectural problems, and a course of lectures upon Building Materials, Mortars and Cements.

This development of our work promises to be a permanent one, several students of the present Second Year having signified their intention to become regular students in Architecture in the autumn.

The history of the last year was marked by an incident of special interest in the meeting in Boston of the Fifth Annual Convention of the American Institute of Architects, which, by invitation of the Institute of Technology, was held in the rooms of this Department.

The opportunity of seeing so large a number of men, eminent in the profession, from different parts of the country, and of listening to their discussions, was keenly enjoyed by the students. The Convention, in adjourning, besides making their acknowledgments for the courtesies extended to them, signified in strong terms their satisfaction and pleasure in observing the scheme of Architectural Education the Institute of Technology had set on foot.

The work of these four years, though in great part tentative and experimental, and full of the deficiencies that come from limited resources and limited experience, has not been without its good results, and has been highly encouraging for the future. At the present moment, it may be claimed that the Department has fairly established itself in the confidence of the profession and of the community, and it may count upon a constantly increasing support and more extended usefulness. It is as yet too early to say how many students will be in attendance another year; but there is no reason to look for any diminution of numbers. On the contrary, the number who have already entered their names, and the frequent applications for information from students and architects in different parts of the country, seem to justify the expectation of a considerable increase.

There is no doubt that we are better able than ever before to meet the reasonable expectations of the profession, and to furnish the instruction and discipline, of every sort, that an architectural education implies.

In this respect the proposed establishment in the school of post-graduate courses of study will be of special advantage to this Department, enabling us at the same time to extend the range of our work and better to arrange and classify it. As the professional work in the other Departments of the school is accomplished during the third and fourth years, we have hitherto, in order to conform to them, had to set down the architectural work also, under the form of a two years' course; but to give notice that hardly in any instance could two years suffice to complete it. The extension of the period of study for an indefinite term after the regular course is finished will relieve us from this embarrassment. It will now be possible by exacting a certain amount of vacation work and somewhat diminishing the work set down to be done in connection with the classes in Civil Engineering, to give the regular students of these two years a sufficient knowledge of the elements of Architecture not to discredit the school--not enough to make them architects, even in the sense in which their fellows become at once Chemists and Civil Engineers.--

to pursue their further studies, in offices and in this Department, to the best advantage. This undergraduate work will thus be complete in itself, including all that relates to the scientific basis of the profession, giving all that an architect needs to know of Mathematics, Chemistry, Physics, Geology and Engineering, with as much of Architectural Drawing and of Architectural Design as can reasonably be comprised within the regular curriculum of a school of science.

The Post-Graduate course will then take up such special scientific topics as may prove desirable, with something of Practice; but it will be chiefly occupied with advanced work of composition and design, in continuance of that begun in the Third and Fourth Years. This work is perhaps more germane to a school of Art than to a school of Science. But it is a work greatly in demand, and one which we may ourselves take in hand with great advantage to our own undergraduates, to more advanced students, wherever trained, and to the community.

By the study of Practice is meant a systematic discussion of professional and business matters, such as contracts, specifications and working drawings, and the relations of architects to their clients and to their workmen. These topics are obviously, in the main, better suited to advanced students than to beginners, and a class fitted to take it up can go over this ground to very great

profit in a limited period of time.

But for the main work of the Post-Graduate course, the study of Architecture as a branch of the Fine Arts, no period of time can be fixed, and no special curriculum assigned. Architecture in this aspect is not an exact science, and the methods appropriate to a school of science are less pertinent to this part of the work than those of a school of art. Still it may be possible, without attempting to set any limit of time, nor to fix upon any course of study as in itself sufficient, to prescribe certain tests of attainment, as is done at the Ecole des Beaux Arts, by which the further honors of the school shall be governed. Just what these honors shall be, and by what rules they shall be awarded may best be left for time and experience to determine.

Such a course of architectural study, beginning with the preparatory work of the Undergraduate course, and extending in the Post-Graduate course over an indefinite period, should be made available, not only for the regular and special students, but for draughtsmen working on half time, or by intermittent and temporary engagements, in the architects' offices of the city. The great advantage to the school of securing such a class of students is obvious, and they should be received on such terms and for such periods as may best suit their necessities.

Their work would naturally exhibit a seriousness of purpose and a command of resources that could not fail to act as a powerful stimulus upon their juniors, and to affect in the most favorable manner the tone of the school and its whole standard of performance. It is in this way, moreover, that the Department can best profit by the advantages of its position, in being established in a community where the practice of architecture is so excellent in respect both of construction and of design, and where the character of the profession is so respectable in point both of ability and of attainments. A practical familiarity with the work of the profession, which no schooling of course can give, must needs be sought in a good office, while the best discipline of an office needs to be supplemented by an academic training. If, by coming to Boston, young men can combine both opportunities, and thus, in time, earn enough to pay their expenses as they go along, without foregoing the work of personal culture, they will not be slow in any part of the country in finding it out. To young men already well advanced in their professional studies, the advantages of such an opportunity will hardly need to be insisted upon.

And in no other way, it seems to me, can we meet the reasonable expectations of the friends of the school, answer the higher demands of the profession, and do justice

to our own position and resources. Architects so much need draughtsmen and assistants of all sorts that our students are constantly drawn off into office-work before we have begun to show what we can do with them. But we are prepared to give a first-rate architectural education, and the profession and the community are eagerly demanding young men who have received it. By enabling practicing draughtsmen to attach themselves permanently to the school, working upon an advanced class of problems during such leisure as they can command, during a term of years, the Department may hope to meet this want, and to vindicate its claims to a place among the agencies of a superior culture.

As time goes on and our needs are defined by experience, the deficiencies of our equipment in respect both of books and of models, begin to be keenly felt. It is very desirable that some regular provision should be made for supplying from year to year what proves to be most needed. The constantly increasing collections of the Engineering Departments are indeed of great service to us, especially in respect of Descriptive Geometry and Stereotomy, and the Trustees of the Public Library, in opening it to our students, and in promptly buying such books as may be asked for, have given us every advantage which we could obtain from a library of our own. The estab-

lishment of the Museum of Fine Arts, also in the immediate neighborhood of the Institute, will presently put at our command extensive collections of works of art of every kind. But besides these resources we need to have certain things close at hand, in daily service. Books for consultation and constant reference, freely accessible to the students, are our most present want, and the more manifest deficiencies of all our collections need to be made good, and recent productions added. The generosity of the friends and patrons of the school is, however, constantly doing much to relieve these wants, and the collections have considerably increased since their formation by various voluntary contributions. The most conspicuous of these additions is the stained glass, which has been partly purchased, but is in chief part the gift of the makers. It is arranged in four movable screens, and comprises work by Messrs. Morris & Co., Lavers, Barraud and Westlake, Heaton, Butler and Bayne, Clayton and Bell, J. T. Lyon and G. E. Cook of London, Cottier in Glasgow, and Cook and MacDonald in Boston, besides some fragments of mediæval windows. Messrs. Maw & Co., of Broseley, Salop, have sent us four large squares of their mosaic and encaustic tiles, suitably mounted for exhibition, besides numerous smaller specimens, to which have been added a considerable number of painted tiles, chiefly by the glass-stainers just mentioned.

We have also received from Dr. Salviati a gift of a capital specimen of his revived manufacture of Venetian glass mosaic, for which and for many other benefactions we are indebted to the good offices of Mr. R. P. Spiers, of London, one of our constant friends. Among other additions to the collections may be mentioned a complete set of the photographs of the original designs for the Law Courts in London, and a cast of the head of Michael Angelo's David at Florence, presented by Mr. Edward Atkinson. Mr. C. F. Shimmin has given us an early set of Hancock's reduced restorations of the friezes from Phigaleia and from the Parthenon. Mr. Hatfield and Mr. Wight also, architects of New York, sent us, on returning from the Convention in November, valuable additions to our stock of working drawings and specifications. Besides occasional purchases, our stock of books has been increased by a set of fourteen volumes of the "Illustrated London News," presented by Mr. F. H. Jackson, and the first seventeen volumes of the "Builder," by Mr. J. C. Hoadley.

We have also received an interesting collection of drawings, illustrating the system of black-board instruction in use in the public schools of Belgium, presented to the Institute by the municipal authorities of the Commune of St. Josse-ten-Noode, Brussels, through

Mr. Hendrickx, the originator of the system. The Trustees of the Boston Athenaeum have also deposited with us, on loan, a number of casts of architectural details and models of buildings; and the Trustee of the Lowell Institute has, in like manner, given us the use of a large collection of lecture diagrams, a valuable addition to our resources in this particular, which, though constantly growing, are as yet far behind our needs.

Among the most interesting objects upon our walls have been the works of the students themselves, which have been regularly hung in the Eastern or Green Room, under the French drawings, remaining there until displaced by their successors. Some of the best of them have been photographed before being returned to their authors, with a view of forming a porte-folio of students' work.

These various subjects have not only been of service to ourselves, but have been freely used in the cause of art education, wherever, in the present deficiency of such appliances, they have promised to be useful. Especially in the evening drawing classes, recently established in Boston and other towns, and which have to a considerable extent depended for teachers upon the students in this and other departments of the school, they have done excellent service.

The whole undertaking has proved more arduous than it seemed at first, and constantly grows more and more difficult as we enter upon its higher paths. But from the point we have now reached we see more clearly the dangers we have escaped as well as the difficulties of the road before us, and the degree of success which, in spite of all shortcomings, has attended the efforts already made, is the best possible encouragement for the future.

The best work, of course, that a school can do is to discover and develop first-rate talent and to turn it towards the work for which it is best fit, and it is the aim and ultimate hope of the Department to attract the attention of young men of superior capacity, so to arrange its methods of instruction as to stimulate their best efforts and thus constantly to recruit the ranks of the profession with highly gifted, as well as with well-trained workmen. It is as yet too soon to say what measure of success may be reached in this regard, but the rapidly extending knowledge of the elements of art among all classes may justify the expectation that whatever germs of artistic power may exist in the community will be brought to light, and this Department may hope to do its part in their training. There is already reason to believe that we are not behind other nations

in the quality of our raw material. The quality of our products will depend on the perfection of our educational processes.

I am, very respectfully,

Your obedient servant,

William R. Ware,

Professor of Architecture.

REPORT, 1873.

The instruction in the Department of Architecture has, during the last year, followed the course laid down in the Catalogue, only differing from the work of the previous year in the organization of an advanced or post-graduate course of study, in accordance with the recently adopted policy of the school. This has been effected, as was proposed in my last report, by separating from the undergraduate work the subjects of practical construction, specifications, and working drawings which the undergraduates have not time to pursue to advantage. Many of the special students have taken this advanced course in construction in the place of the scientific study of construction with which the regular students are occupied, simultaneously with the undergraduate course of design. The post-graduate course of design has not yet been organized.

Three regular students, and about twenty special students have been in attendance through the year. Besides the studies strictly belonging to the course, Professor Warren has given the students in architecture special instruction in Descriptive Geometry, and I have myself given them a course of lectures on Perspective and the perspective of Shadows. Mr. Létang has also given them daily instruction in charcoal drawing

during a part of the year. The study of the history of architecture has been pursued more systematically than in previous years, the development of styles from the fifth century before Christ to the reign of Charles the Fifth being followed with a text-book, with lectures and such illustrations as our collections afford. The Trustees of the Boston Athenaeum have kindly allowed us to use their excellent library of architectural works to supplement the deficiencies of our own.

The subjects upon which the class of design have been occupied, after the elementary work with which the year opened, are as follows:- 1. A monumental column; 2. An artist's house; 3. A railway station; 4. A monumental chapel; 5. A private museum of painting and sculpture; 6. A campanile; 7. The employment of four columns; 8. A pavilion between two bridges; 9. A village church; 10. A grand staircase under a vaulted ceiling or dome; 11. A natural history building; 12. A school of chemistry; 13. A military and naval tomb. This last was drawn and designed in perspective.

Most of these works have been photographed on a small scale, as a memento and record of the year's work.

The collections have not been materially increased during the year, but a good deal of work has been done in arranging and catalogueing the books and photographs,

and although not increased in numbers they are much more serviceable than they have hitherto been.

I am very truly

Your obedient servant,

William R. Ware.

REPORT, 1874.

The instruction given during the last year in the Department of Architecture did not materially differ in character from that of the previous year. Three regular students and about twenty special students have been in attendance, about the same number as in previous years. But the quality of the classes visibly improves from year to year, partly because it has been found that young men without either character or intelligence are no better suited for these studies than for others, so that we are no longer troubled by their presence, partly because the Department has come to be favorably known in the more distant parts of the country, and, other things being equal, students who come a long distance are in general the best workers. It has accordingly happened that the results of the year's work have been more satisfactory than in any previous year, as good work has been done and more of the work has been good.

At the beginning of the year one of the two students who passed the final examinations the previous year presented his thesis and received his degree. The subject chosen was a building for water-works in a public park. The drawings showed the arrangement and aspect of the building itself, with the machinery

for pumping and controlling the water. The text accompanying them contained calculations of the dimensions of the principal parts of the structure and of the flow and supply of the water.

During the year the rule was adopted that the graduating thesis should be presented before the close of the school year. A second thesis and the accompanying drawings was accordingly presented in May, by the student who passed his final examinations at that time. The subject chosen was a Railway Station, situated on a bridge over the track. The drawings showed the structure in plan, elevation and section, with details of the wood, iron and stone work. The thesis itself discussed the thrust and equilibrium of the arches, the strength of the retaining walls, the resistance of the tower to wind, etc., etc.

The Third Year's class, to which most of the special students were attached, were occupied during the year with the following problems:- 1, an arch; 2, a porte-cochère; 3, a portico; 4, a peristyle; 5, a staircase; 6, a billiard room; 7, a Pompeian house; 8, the use of four columns; 9, a monumental bridge; 10, a school of architecture; 11, a dwelling house. At the same time the Fourth Year's class made designs for: 1, a temple tomb; 2, an iron pavilion; 3, a café chantant; 4, a school house; 5, a railway station. This class also made sketches of

most of the problems given out to the other class. They also made careful drawings of King's Chapel, to which the Wardens kindly allowed them access at convenient hours. Two of the designs for the Railway Station were given in the September number of the Architectural Sketch Book, a professional journal published by Messrs. Osgood & Co.

The course of History this year covered the Greek and Roman Period, as usual, in the first half of the year, and in the last half the period of the Renaissance. The usual lectures in construction were continued through the year. The collections have not been materially increased.

I am, very truly,

Your obedient servant,

William R. Ware.

REPORT, 1875.

The founders of the Institute of Technology included Architecture among the branches first to be provided for, and a professorship in this Department was established and the chair filled on the opening of the school in 1865. This appointment was made and accepted, however, on the understanding that the work of instruction should not be begun until proper apparatus had been collected, and opportunity given for studying the methods of professional instruction employed in architectural schools abroad. In the spring of 1866 accordingly, Professor Ware asked leave of absence and remained abroad until the end of the following year, examining the foreign schools, consulting personally with the architects in charge of them or with others who were familiar with their working, and collecting casts, photographs, drawings and other materials of instruction, which the generosity of some friends of this undertaking had given him the means of purchasing.

The Architectural Museum.

The collections thus began have gradually increased in amount and value until they will compare for interest and for serviceableness with those anywhere put at the disposition of architectural students, supplemented

as they are by the collections of the Museum of Fine Arts, established in the immediate neighborhood, and by the treasures of the Boston Public Library, whose trustees, as well as those of the Boston Athenaeum, have done everything in their power to increase the facilities for their use. Some unusually favorable circumstances rendered these collections, even at the outset, much more extensive and valuable than was reasonably to be looked for, especially in respect of mediaeval sculpture and carvings, and architectural drawings.(Report of 1871-72, pp 1 and 2 repeated)

The Societé Centrale des Architectes in Paris also send us the papers they from time to time put forth. This beginning of a library was largely added to in the summer of 1872, by means of a fund specially collected for the purpose, so that the books on the shelves now number three hundred and fifty volumes, most of which are excellently suited to the wants of the students and are constantly consulted by them. These books, as well as the photographs, prints and drawings, which also have been largely added to from year to year, are at all times accessible to the students, and are freely used by them. It has not been found that this freedom has been abused to the injury of the collections, and the advantages to the school are so great that it is

worth while to run a considerable risk, rather than limit their serviceableness.

Besides the casts, photographs, books and drawings, the most noticeable thing in the collections is the stained glass, a part of which has been purchased, but it is in great part the gift of the makers. It is arranged on four movable screens and comprises work by Messrs. Morris & Co., Lavers, Barraud & Westlake, Heaton, Butler & Bayne, Clayton & Bell, Cottier & Co., J. T. Lyon, and G. E. Cock of London, and Messrs. Cook, and McPherson & Co., of Boston, besides some fragments of mediaeval work.

Course of Instruction.

The Museum was arranged during the spring and summer of 1868 and the department opened with four pupils, in October of that year. This number has gradually increased until there are now thirty-two students in attendance, ten of whom are regular students in the Institute, pursuing a four years' course of study, and taking architecture in addition to the mathematical and scientific work pursued in other departments of the school. The other twenty-two are special students, pursuing a two years. course which is confined to the strictly professional work. The special students, however, give all their time to their studies, the same

as the others; the plan of having students spend part of the day in architects' offices and part at the school was tried for a year or two, but it did not prove satisfactory in any respect, and is now given up.

This professional work consists chiefly in successive exercises in architectural drawing and design, introductory to which are given lectures, with practical exercises, in Shades and Shadows and in the elements of architecture, beginning with the orders and giving simple rules for laying them out, and going on to doors, windows, staircases, arcades, vaults, domes and roofs. The history of architecture is then taken up, the Greek and Roman history first, which is gone over with every class as soon as they have completed these elementary studies, followed by the history of the Mediaeval and of the Modern styles, which for convenience are taken up in alternate years. The more advanced students have lectures once a week on the theory of architecture, and upon the arts specially related to building, such as stained glass, mosaic, color, carving, etc. Once a week throughout the year is a lecture upon specifications and working drawings; carpentry and its related subjects being taken up one year and masonry, etc., the next, so that the whole course occupies two years. This subject is necessarily

treated in a somewhat superficial manner, since it is the object of the Department to give the instruction that cannot be obtained in architects' offices, leaving students to learn what can there best be learned during the term of their service as draughtsmen. But the rapid survey these lectures afford is found to be worth the small amount of time it consumes, serving as a sort of review of the subject to those who are already familiar with it, and as a serviceable preparation for office work to others. To both it is useful, as giving a more comprehensive view of the subject than office experience is apt to afford.

Instruction is also given in Perspective, Descriptive Geometry, Stereotomy and Freehand Drawing. The practice in architectural drawing begins with elementary exercises in India ink, with the pen and with the brush, followed by exercises in the use of India ink and color, beginning with architectural details or fragments on a large scale, and going on to plans, elevations and details, first copied from books, and, the next year, drawn from actual measurement of buildings in the neighborhood of the school. Drawings have, in this way been made of King's Chapel, the First Church, the Central Church, Emmanuel Church and some others, the spires of Part Street Church, the Old South, Hollis

Street Church, and Christ Church in Salem Street, of the principal railway stations in Boston, and of a number of dormer windows and doorways, and details of cast and wrought iron work and of ornamental brick work.

The practice in design begins with simple problems intended as practice in the use of the orders, and goes on gradually to the higher class of monumental work, and to buildings of complicated and difficult plan. Among the subjects of these exercises have been the following:- a porch to a private house, a drive-way, a campanile, a peristyle, a staircase under a vault or dome, the employment of four (or six) columns, a boat house, and billiard room, a pavilion between two bridges, a monumental bridge, the restoration of a Pompeian house, a lamp post, a fountain, a chimney-piece, a vestibule, a small museum, a memorial library, a memorial school house, a railroad station, and artist's house, a monumental chapel, a Catholic church, water works in a public park, an iron kiosk, a casino, a dwelling house, a school of chemistry, a school of medicine and a school of architecture. As the class become more advanced, details upon a larger scale are often required. The time allowed for these problems varies from a couple of days to a couple of months according to the difficulty of the work, the experience of the students, and the

number and size of the drawings required. Each class do ten or twelve of these exercises in the course of the year.

The subjects, as will be noticed, are most of them somewhat out of the line of daily experience. (More practical problems would require for their solution more practical experience than such classes as these can possibly have had, involving for their solution numerous considerations of detail, which it would not do to slight, but which students in the beginning of their studies are not prepared to entertain. Work of this kind, on the other hand, while it taxes their powers to the utmost, both in the execution of the drawings and in the design, does not demand, for its satisfactory performance, any greater resources either of knowledge or skill, than they have at command. Besides, its remoteness from daily use and observation, not only stimulates the imagination and fancy, but necessitates the study of the books and of the work of the best masters.)

The classes are made up, besides the regular students of the Institute, of boys just from school, of mechanics wishing to become draughtsmen in offices, of draughtsmen who have already had office experience, and who wish to learn what an office does not give, and of graduates of colleges who desire to enter upon their

profession in the most rapid and intelligent way. It is not possible to lay down a strict course of study that shall equally meet all the wants and occupy all the time of persons varying so much in personal training. But the special work of the school is new to all alike and serves equally well for all as their chief interest and object of study. Moreover, the largeness of the company is an advantage, and all would suffer if they were broken up into smaller groups. The work done is equally instructive to all, whether the result is more or less excellent in conception or in execution. In point of fact, although at the beginning of the year there is great difference in the work, by the end of the year it is often hard to tell the work of the beginners from that of the more experienced hands. Meanwhile the resources of the establishment are open to all, and as much is done, and as much is learned in volunteer work, especially tracing and sketching, not to speak of reading, as is accomplished under the requirements of the programme. The students learn much more than they are taught, and what they thus teach themselves is not likely to be forgotten.

REPORT, 1876.

The Department under my charge was fully described in your Report for the year 1875, and but little change has since taken place in it. The only unusual event during the year 1876 has been the exhibition of the work of its students at the International Exhibition at Philadelphia. No drawings were made expressly to be exhibited, the instruction following its usual course but in addition to those made by students still in the school a certain number were obtained from students of previous years, so that we were able to make a very fair presentation of the work of the Department. The result was unexpectedly satisfactory, and the drawings attracted a great deal of favorable attention especially on the part of visitors from abroad. They were quite unlike anything else in the Exhibition, the American schools not undertaking to cover the ground that we go over, and the foreign schools of similar grade not exhibiting their work. Towards the close of the Exhibition the American Institute of Architects held its annual Convention in Philadelphia, and a valuable opportunity was thus offered of making known to the profession the real issue of our undertakings. At about the same time information was received from Col. J.J. Marin, Commissioner from the King of Spain, that the splendid

collection of casts of Moorish and Spanish architectural detail which formed a chief point of interest in the Spanish Pavilion was to be distributed among the educational museums in different parts of the country, and that in addition to those sent to the Museum of Fine Arts in Boston a portion of them would be sent to augment our own collections. After the close of the Exhibition, accordingly, about fifty pieces of Saracenic and Renaissance detail were delivered to our agent in Philadelphia and are now hung upon our walls. Col. Marin was also good enough to accede to my suggestion, and send us a very interesting set of drawings made in the Municipal Schools of Madrid. At the same time we received from the agents of MM. Dûcher et Cie, of Paris, through M. Albert Levy of New York, six screens, covered with examples of their architectural publications, of great interest and value, and from Messrs. Galloway & Graff, of Philadelphia, a large vase in red terracotta, from an original in the British Museum.

Almost all the students then belonging to the Department, with as many as a dozen former students, joined the expedition organized by the authorities of the Institute and encamped for a fortnight on the grounds of the University of Pennsylvania. The points of professional interest proved too numerous to admit of

systematic study during so short a period, and in respect of tangible results the undertaking so far as concerns this Department disappointed my expectations. But it was none the less a success, and the young men found that although they had not much to report in regard to the special topics assigned to each, it saved them from wasting time to have their attention thus definitely fixed upon special points of real interest.

Besides the gifts above mentioned a number of volumes of professional interest have been received from Mr. Geo. B. Emerson, from Mr. E. C. Cabot, and from Mr. G.J.F. Bryant, and the Royal Institute of British Architects in London and the Société Centrale des Architectes in Paris continue to send us regularly their publications. We are also indebted to Messrs. Hartwell & Swasey for a large and interesting model of a church erected by them in Fall River. No other important additions have been made to the library or collections, but a good deal of work has been done in re-arranging and cataloguing, and in binding and re-binding books, and the number of diagrams used in the lectures has been considerably increased.

The collections, though thus deficient in new material and without the means of supplying old deficiencies which become daily more apparent, prove more and more serviceable as the work of the Department is

so adjusted as to bring them into more constant use. As their character and value become better known in the community and as interest in such subjects increases, their range of service becomes every year more extended, the books, drawings and photographs being freely lent to responsible persons when this can be done without inconvenience to ourselves.

But in this respect as in every other the usefulness of the Department is greatly impeded by the limitation of its resources.

The number of students, both regular and special, has been larger than ever before and of better quality, the two years Special Course affording opportunities for young men who have already had an office training to come and get the training that an architect's office cannot give, of which an increasing number of such students from various parts of the country show a disposition to avail themselves.

I am, very respectfully yours,

William R. Ware.

REPORT, 1886.

The department of architecture has been materially strengthened, during the year, by the appointment of Mr. Thomas O'Grady, Jr., as instructor. Mr. O'Grady was a special student in architecture, at the institute, during the years 1878-80, and has since been engaged in the active practice of his profession in the city of Boston.

T. M. Clark

REPORT, 1887.

The course in architecture has been still further amplified and enriched since my report of last year. A small pamphlet giving an account of the instruction in this department has, within a few weeks, been issued for public information. The large increase of students in this department has rendered it necessary to assign it additional space, and accordingly room 23, when relinquished by the department of civil engineering, was made over into a lecture room and a drawing room, for students in architecture.

In the department of architecture, Mr. Thomas O'Grady having withdrawn from the position of instructor, Mr. Eleazer B. Homer has been appointed in his place. Mr. Homer graduated from the Institute in the class of 1885, and has since that time and up to the date of his appointment been engaged in professional work in the office of Messrs. Hartwell and Richardson, Boston. That department has been still further reinforced, to meet the demands of an increasing number of students, by the appointment, as junior instructor, of Mr. Dwight H. Perkins, who completed the two years' partial course in architecture at the Institute, with marked success, in May last.

In addition to the regular staff of instruction, the following gentlemen have been appointed lecturers for the current year: C.H. Walker, on history of ornament; Ross Turner, on water color and sketching; D. A. Gregg, on fine art.

REPORT, 1888.

Another important change within the Faculty during the past year has resulted from a similar cause. It has for some time seemed desirable that the large and growing department of Architecture should have for its head a gentleman not engaged in professional practice, whose time and thought would, therefore, be given wholly and without interruption to the building up of the department, and who would be able to closely follow the course of his pupils and study their individual needs. However desirable this has seemed in the past, it has not been deemed practicable. In the provision for the present year, however, it was found possible to secure the advantages anticipated from such a course; and, in a very cordial appreciation of the best interests of the school, Prof. Theodore M. Clark, who has for seven years occupied the chair of Architecture, vacated his office to allow such an arrangement to be effected. Mr. Clark carries with him the thorough respect and warm regard of all his late associates.

The chair of Architecture has been filled by the appointment of Mr. Francis W. Chandler of this city. Mr. Chandler entered the office of Messrs. Ware & Van Brunt, as a student, in 1864. After remaining there three years he entered the Atelier Daumet, in Paris.

In 1869-70, Mr. Chandler was connected with the Institute of Technology as Prof. Ware's assistant in the department of Architecture. In 1871, he became assistant supervising architect of the Treasury Department, at Washington, and in that capacity took part in framing the plans of many important Government buildings. In 1874, he became associated with Mr. Edward C. Cabot, in the architectural firm of Cabot & Chandler. On accepting his appointment as Professor of Architecture, Mr. Chandler retired from practice in order to devote his entire time and thought to the needs of the department.

Mr. Dwight H. Perkins having declined reappointment as Junior Instructor in Architecture, Mr. Frank A. Moore, of the class of '88, has been appointed to that position.

In the architectural department of the Institute no important change has occurred so far as the regular course is concerned; but much has been done to strengthen and enrich the two years' partial course, by the introduction of mathematics and French, as required subjects in the first year, and by general rearrangement of studies. The number of students in this department has increased by one half since last year, and the spirit pervading the body of students exhibits the most marked and gratifying improvement.

F. W. Chandler

REPORT, 1889.

In the architectural department the strengthening of the two-years' partial course has worked very satisfactorily, and has already had the effect of bringing to the Institute an abler class of young men, as is shown by the improved work of this year. It has attracted draughtsmen who have been willing to leave good situations, confident that this course will make their future success more certain. These older and stronger men are exerting an excellent influence upon the department; and it is gratifying to report that, while only ten students entered last year, intending to pursue the regular course, this year there are nineteen.

Feeling that the four months' vacation made too long a break from regular work, Prof. Chandler, at the close of the last school year, requested such students as were not engaged in architects' offices to do a certain amount of specified work during the summer. This request was responded to by the students with great cordiality, and excellent results have been shown.

To the regular studies will be added this year a course in acoustics. Iron and steel construction is also to be made an important course. Beginning with the nature of materials, the student is to apply the theory of his applied mechanics to practical construction

in designing roof trusses, floors, columns, etc. The library has been largely added to, and its usefulness greatly increased by more detailed indexing, and by better facilities for reading. The department has been much benefited indirectly by the Rotch scholarship. The trustees of this fund have loaned to us certain of the envois, which are hung on the walls of the drawing rooms. These beautiful drawings of historical architecture, made by finished draughtsmen, serve as a further stimulus for our young men. The architectural department will derive great advantage, beginning with the second term of the current year, from the removal of the Civil Engineering department to the Trinity Place building. The large drawing room now occupied by the second and third year students of the latter department will, after January, be assigned to the use of the architectural students.

In consideration of eighteen years of distinguished service in the department of Architectural Design, Associate Professor Eugene Létang was granted, by the Executive Committee, a leave of absence for the school year 1889-1890, which he will pass in Europe. Prof. Létang's classes will be taken, the current year, by Mr. C. Howard Walker, who has so long and with such

eminent success taught interior decoration to our classes in architecture. Mr. Ross Turner having, also, gone abroad for the year, Mr. Walker has, in addition, assumed charge of the instruction in sketching and in water color.

Mr. Frank A. Moore, Junior Instructor in Architecture, having declined reappointment, Mr. Walter H. Kilham, of the Class of 1889, was appointed to his place.

F. W. Chandler

REPORT, 1890.

In the architectural department the most important fact of the year has been the notice given of the suppression of the Two Years' Partial Course, to take effect in 1891, placing this department, at last, upon precisely the same basis as to regular and special students, with all the others. This will not keep away the class of pupils who at present constitute the main strength of the partial course, since it is intended to allow students to enter the departments as special students who have had two years' regular office experience, or who are graduates of colleges, or are over twenty-four years of age, to pursue such studies as they may be fitted for, these candidates being required to pass a thorough examination in mechanical and freehand drawing, for entrance.

The regular course of studies has been rearranged and strengthened to meet this improvement. Graphical statics, at present only taught in theory, is to be applied to actual construction; and this very important application will be carried through an entire term. In the fourth year there have been added courses in sanitary science, history of construction, history of the Renaissance, and history of painting and sculpture. The library is now in first-rate working order, and, with a small yearly outlay, can be kept up very satisfactorily.

During the year there has been presented to the department a valuable set of working plumbing models by Messrs. William Lumb & Co., of this city; by Mrs. Edward M. Cary, a rare architectural work, Monuments of Art, by Lubke and Caspar; and by Mrs. Emma L. Metcalf, a very interesting collection of drawings of the stained glass windows of the Cathedrale d'Auch.

A very gratifying expression of the good-will of the class graduating from the architectural department in 1890 took the form of a sum of money, \$102.25, subscribed by them as a token of their interest in the "assured welfare and progress of the department, to make some slight addition to the resources of the school for the benefit of those who shall come after." With this money was bought the splendid work of Prisse d'Avennes, L'Art Arabe, making a most notable addition to the library.

The greatly increased number of students in this department will speedily render necessary an increase in the instructing staff. Considerable appropriations are also required for the construction of diagrams illustrative of the various courses of lectures, so that the instructors may be released from the loss of time now involved in putting their designs upon the blackboard afresh each time a lecture is repeated.

Mr. Eleazer B. Homer, for three years Instructor in the architectural department, has been appointed Associate Professor of Architecture. Prof. Homer graduated from the Institute of Technology in the department of architecture, with the class of 1885; and immediately entered the office of Messrs. Hartwell & Richardson, of Boston, where he remained until recalled to the Institute in 1887.

After a year's absence, Prof. Létang has returned with renewed strength and zeal to his duties in the department of architecture, cordially welcomed by all his former students.

F. W. Chandler

REPORT, 1891.

The growing success of this, always first-rate, department constitutes one of the most striking features of the Institute. In spite of illness continued through the greater part of last year, Prof. Chandler, with his able corps of assistants, succeeded in keeping up the interest and the practical progress of his pupils to a remarkable degree; and the present year has opened with the largest number of students which the architectural department has ever known, notwithstanding the discontinuance of the Two-Year Partial Course, which it was anticipated would cause an immediate falling-off in attendance. The raising of the standard of admission for special students has resulted in attracting a large class of older men, of considerable office experience. This has perceptibly added to the power of the department. A circular will shortly be issued which will further explain, for the information of intending special students, the conditions upon which they may enter this course, and will give advice as to the studies they should pursue in preparation for it. A greater number of students than ever before are taking the five-year course, in architecture. The opportunity of securing additional instruction and practice in design, sketching, and water color, and of becoming intimately acquainted with the

department library, is proving a strong incentive to the students to protract their stay at the Institute.

The library of the department is a first-rate working library; and its current additions are made with much care, to meet practical and everyday needs.

Mrs. William B. Rogers has given four large and beautiful Roman photographs which have been framed and hung upon the walls. The Technology Architectural Society has presented to the library Smith's Dictionary of Greek and Roman Antiquities; also, a German and a French Dictionary. The construction of diagrams and charts, for use in the various courses of lectures, has been continued on the most liberal scale. These are of a permanent character, relating particularly to construction-details, architectural history, graphical statics, orders, shades and shadows. The Executive Committee have arranged to have an accomplished draughtsman kept steadily at work, month after month, until the whole series shall be completed, when it will form an addition to the resources of the department whose value can scarcely be estimated. More than almost any other department of the school, this is already suffering from confined space, notwithstanding the two great drawing-rooms three years ago placed at its disposal. Every desk is taken, and the facilities in the way of

lecture rooms and of rooms for the storing and exhibition of models and the materials of construction, are altogether inadequate. Even the library-room is too small for the superb collection of books and photographs now belonging to the department. During Prof. Chandler's illness, many of his classes were successfully conducted by Mr. W. A. Rodman, of this city.

Associate Professor Létang has, in recognition of twenty years of brilliant service, been appointed Professor of Architectural Design.

REPORT, 1892.

Every effort has been made to prevent the instruction in this department from dropping down, even for a moment, in consequence of the death of Prof. Létang. Prof. Chandler and his assistants have redoubled their attentions to the classes; while Mr. Mead, who undertook the charge of the work in architectural design upon Prof. Letang's sickness, has met with success far beyond our most sanguine expectations. Everything is being done, to save the students of the department from feeling that they have lost a single hour out of the year. Thus far things have gone smoothly. With greater facilities and ampler accommodations, we have been able to improve the courses in several respects. Last year, by special appropriation, the construction of diagrams and charts was carried so far that this year there is only needed such time to be given to them as can be spared from the duties of the regular assistants, whose skill and thoroughness leave nothing to be asked for. No department is destined to profit so largely as the department of architecture by the change, beginning the present year, through which students are to make choice of their respective courses at the end of the first term. This change has allowed some very important improvements to be effected in the architectural course, especially in the introduction of more of

freehand drawing, and more of descriptive geometry.

The new building is proving to be wonderfully satisfactory. It is fitted with every material appliance required for the fullest and best professional and technical training. It has been furnished throughout by the generosity of Mr. Arthur Rotch. The number of students is about equal to that of last year, while there has been a distinct raising of the standard. More college graduates are in our architectural classes this year than ever before. The Technology Architectural Society has presented to the library Fossati's "Saint Sophia"; Adam's "Mediaeval French Sculpture"; Gosset's "Les Coupoles d'Orient et d'Occident."

Postscript. Since this report was made, the Corporation of the Institute has been informed of the acceptance by M. D. Despradelle, of the Associate Professorship of Architectural Design. M. Despradelle is from the Atelier Pascal, and was graduated from the Ecole des Beaux-Arts with distinction, at the unusually early age of twenty-five. He won nearly all the minor prizes of his time, and all but obtained the Prix de Rome, taking place as Premier Second. Since graduation, M. Despradelle has already gained a position for himself in the profession. He is Sous-Inspecteur aux travaux des Batiments Civils des Monuments de l'Etat, and has

the title of Architecte diplômé de la Société Centrale des Architectes Français. While M. Despradelle rightly feels that his future is an assured one in his present position, he has been attracted by the opportunities offered at the Institute of Technology, and has, as stated, accepted the Associate Professorship of Architectural Design. At such short notice M. Despradelle found it impossible to leave Paris in time to take up the work of our second term; but he will be with us in September. All that we have learned regarding M. Despradelle, both before and since the appointment, assures us that we could not have found in all France a worthier successor to Prof. Létang.

The Corporation and Faculty are under great obligations to Mr. Arthur Wheelwright and Mr. J. Randolph Coolidge, Jr., now resident in Paris, for most valuable advice and practical assistance in meeting this trying exigency of the Institute.

M. Jean Eugene Létang came to this country and to the Institute of Technology in 1871. One of the most brilliant of the pupils of the Ecole des Beaux Arts, the traditions of whose accomplishments still linger in that greatest school of art, he had been selected as Prof. William R. Ware's assistant in architectural design. It was necessarily a venture fraught with uncertainty to bring such a man hither; but the result has been a great uplifting of architecture in the United States. Hundreds of his pupils are now leading architectural practice in the great cities of our country. Shy, incapable of or altogether averse to lecturing, his chosen field was the drawing room, where bending over each student in succession, he brought into play rare powers of criticism, correction, and instruction. Returning to Boston after a summer abroad, he resumed his duties for the current year, only to be stricken down by disease which terminated fatally on the 28th of November. He has died, lamented by hundreds of pupils who will never cease to feel that to him they owe the inspiration which has given life to their professional careers. To fill his place in the Institute is a problem of the greatest difficulty and nicety, to which Prof. Chandler and the Executive Committee are giving the most earnest attention.

The Department of Architecture having entirely outgrown its previous quarters, the Corporation have this year erected a new building to be wholly devoted to it. This building has been carefully planned to meet the needs of instruction, and is fitted with every material appliance required for the fullest and best professional and technical training. It measures 66 feet by 58, and has a basement and five stories.

One half of the basement is a museum for the testing of cements and mortars, etc., and has also a complete plant for experimenting on the siphonage of plumbing traps. This system is arranged to be in exact accordance with the plumbing practice in private houses, in order that the experiments may be thoroughly practical and useful.

The first floor is devoted to lecture rooms. The second and fourth floors are large drawing rooms, lighted from both sides. One half of the third floor is a drawing room, the other half contains the library. The library is fully equipped and catalogued, and has every convenience for ready consultation of its eight hundred volumes and ten thousand photographs. The fifth and upper story constitutes one large drawing room, arranged for the classes in freehand drawing from

the cast and from life, and for the classes in water color and modelling. The lighting of this room has had the most careful study, and its arrangement of skylights and sidelights is unsurpassed. The heating and ventilating apparatus of the building is so planned that the rooms are kept at a constant regular temperature by means of electrical appliances, and the air is constantly changed without the necessity of an open window. This noble and commodious building has been erected on the land immediately south of the Engineering Building, and in form constitutes an extension of the front of that building, with which it immediately connects and with which it communicates on each floor.

F. W. Chandler

REPORT, 1893.

The department of architecture opened the year with the largest number of students in its history, notwithstanding the recent marked increase in the requirements for special students. Among the new students there are not less than twenty-three college graduates. Seven of the students in architecture are taking a purely graduate course. Prof. Despradelle has begun his work at the Institute under the most flattering auspices. The students have met him with enthusiasm; and his lectures and individual instruction in the drawing room have given an inspiration to the work of the department which it has never before enjoyed in equal measure. Prof. Chandler is thoroughly in earnest in trying not only to maintain unimpaired the traditional standard of this department, but to build up a class of students, who, having completed all the undergraduate work, can give at least an entire additional year to design.

The library of the department and its collections of photographs have been largely increased during the year, both by gifts and by purchase. A large and admirable series of lantern slides, two hundred and fifty in number, for illustrating the lectures in Renaissance Architecture, has been made by Mr. Lawrence. The instruction given in water-color, by Mr. Ross Turner;

in the history of ornament, by Mr. C. Howard Walker; in pen and ink by Mr. Gregg; in modelling, by Mr. T. H. Bartlett,- is of the highest order. Mr. Adams has been very successful during the past year in his conduct of the life-class. The changes of the year in the course schedule, giving more time to professional work, has allowed the course in Architectural History to be extended.

The Architectural Building, which seemed so large a year ago, is now completely filled, almost every desk which can be put into the drawing-rooms being occupied. The main drawing-room at the top of the building, where instruction is given in water-color, freehand drawing, sketching, life-class, etc., has proved wonderfully useful. Its arrangements for the control of the light are unique. During the year the room has been crossed in several directions by rods, over which curtains with rings can be drawn at pleasure, dividing the room into a considerable number of smaller drawing-rooms. Notes on Shades and Shadows have been prepared by Mr. Lawrence, and printed for the use of the classes. By the generosity of many manufacturers the Museum of Building Appliances has been very greatly enriched. From the executors of the will of the late George Snell, Esq., the Institute has received his sketches in four large volumes, and also a collection of Gothic casts, originally given to Mr. Snell by Sir Charles Barry.

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REPORT, 1894.

The Department of Architecture opens the year with no important changes in its scheme of study, but with a sensible extension of several of its technical courses. Some of last year's students in the graduate course have returned for still another year of study. The department is aiming to show that a post-graduate course of two years, continuing the same scheme of studies, governed by the same traditions, is of greater value to the student than to split the course by spending part of the time here and part abroad at the foreign schools. School training in the strictly professional work should teach in the highest degree the principles of composition, balance, proportion, and scale. To accomplish this requires years of hard and uninterrupted study, under instruction of unquestioned ability. Then comes the time for a year or more of foreign travel, when the value of the previous training will be apparent in the greater appreciation of historical architecture. Prof. Despradelle's first year was a very successful one; and his second year has begun with equal enthusiasm on the part of his pupils. They have themselves created a higher standard for work than is called for, and which is impossible to restrain. There is a constant appeal for longer hours, and that the library be opened during the evenings. The valuable library

of the department and its vast collections of photographs increase every year both by gifts and by purchase. Another, larger and more useful, series of lantern slides is being made in the department, to illustrate the lectures on ancient architecture.

The instructors are the same as last year. Mr. S. W. Mead of the firm of Cabot, Everett & Mead, is instructor in architecture with Prof. Despradelle. Mr. Mead's scholarly attainments, with his practical experience, make his services peculiarly valuable. The instruction given in water-color by Mr. Ross Turner; in the history of ornament, by Mr. C. Howard Walker; in pen and ink, by Mr. D. A. Gregg; in modeling, by Mr. T. H. Bartlett,--is of the highest order. Mr. Adams continues to be very successful in his conduct of the life-class. Extending the course in architectural history has greatly added to its efficiency and interest. The various historical monuments discussed and illustrated in the class-room are now divided among the students as subjects for written themes. The results are successful in every way. This scheme also offers an opportunity for a more thorough knowledge of the contents of the library.

While the whole Institute has suffered a great loss in the death of Mr. Arthur Rotch, the blow to the

Architectural Department has been especially severe. He always had its welfare greatly at heart; and his generosity, often appealed to, always responded. He was a constant visitor to the department, and its generous friend both in life and at his death. It was he who contributed or secured the funds for the furnishing of the new architectural building two years ago; and it was to his cordial interest that we owe the presence of the Envois of the Rotch Travelling Scholarship which adorn its walls.

The professors in the Architectural Department, as well as of the whole school, have, within the last few weeks, had special reason to feel proud by reason of the honors won by three of our graduate students. At the competition held in New York City, by the Beaux Arts Society of Architects, this fall, the three men representing the Institute of Technology received, severally, the first, the third, and the sixth prize, from among thirty-seven competitors; the gold medal having been awarded to Mr. F. M. Mann, now a candidate for one of the higher degrees of the Institute; the second "first mention" to Mr. H. H. Thorndike, and the third "second mention" to Mr. W. B. Faville. The competition was open to the members of the Beaux Arts Society, to the students of the departments of archi-

ecture in Columbia College, the University of Pennsylvania, Harvard University, the Massachusetts Institute of Technology, Cornell University, and Syracuse School, and to the members of the New York Sketch Club, and the Philadelphia T-Square Club. The success of our students in a competition so wide is not only gratifying, as showing the thoroughness of the training received at the Institute, but also as proving that this, the oldest school of architecture in the United States is abreast of modern thought and professional progress.

The Summer School of Architecture was begun in 1893 at Chicago, the World's Fair offering an exceptional opportunity for comparative study of both foreign and domestic art and construction. In 1894 the school was held in Salem, Portsmouth and vicinity, for the study of colonial architecture. The class was met everywhere with the greatest courtesy, and the result is a great amount of measured work with sketches and photographs. The study of this architecture is of peculiar value as being the only historical precedent we can refer to in this country. We are also in the centre of the choicest of this work, and in the future we hope to make an exhaustive study of it. The work of both years has been under the supervision of Assistant Professor Homer.

REPORT, 1895.

The Architectural Department continues its steady gain from year to year. Nothing could show better that its courses of study are well in accord with the times than the great success last winter of its students in the two competitions inaugurated by the Beaux Arts Society of Architects in New York, the first of which was mentioned in my last Report. In a fair contest with all the leading schools and draughtsmen's clubs in the country, Institute men bore off the gold medals, as well as a first or second mention for each other of our entries.

The library has been largely increased this past year. We have come into possession of the books of the Rotch bequest: and Mrs. Draper has continued her donations, now embracing several hundred volumes, many of them rare and costly. We have also to thank Prof. van Daell for his gift of "Antiquites de la France," and Messrs. Bates and Guild and Mr. Ross Turner for various photographs.

At the present time, so great has been the growth of the department, we are handicapped for space, both in the library and in the fourth-year drawing-room. It is of the utmost importance that this want be met before another year. The graduating class in the study

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of their theses need twice the space for drawing-boards, reference books, etc., allotted to the other classes. The next year's class will be still larger. Added to this, we have to care for the graduate students, with their still more important theses, requiring every facility of working space, and the readiest access to the library. The library has been growing much faster than seemed possible when the present room was first devoted to it. It has been so liberally aided by donations that now it stands unsurpassed as a working library in all except space for the best use of the books. The fourth-year class, with the graduate students and the library, should each have an entire floor; at present they have a floor together. If the needed space cannot be found elsewhere, I see no other way, within our present walls, than to sacrifice the museum and exhibition room in the basement, and make of it the recitationroom for the department. But this would be a step so much to be regretted that we may well look around in every direction before considering the details of this scheme.

Harry W. Gardner, appointed Instructor in Architecture, graduated at the Institute, with the class of 1894, from the Department of Architecture, and passed the intervening year in professional practice.

1895.

The summer school of architecture was held this year, as last, at Salem; and the special subject chosen for consideration was colonial architecture, of which so many choice and beautiful examples are to be found in that city and the immediate vicinity. The kindness with which the class, comprising seventeen students, was received by the people of Salem cannot be adequately acknowledged. The Essex Institute gave the use of Plummer Hall as a headquarters for the class and for evening drawing. Several of the choicest residences of the city opened their doors day after day to students, who were permitted to make studies and measured drawings of hallways, staircases, mantelpieces, and old furniture. The hospitality, in many forms, offered to this class of Institute students was far beyond what could have been asked or expected.

Of all the large courses, Course IV shows the greatest proportional increase of regular students; viz., from forty-eight to sixty-seven. This is the result of continuous efforts on the part of the Faculty, and especially of Prof. Chandler, to place the Architectural course on as broad and systematic a foundation as any other in the school. This course will always, however,

embrace a considerable number of college graduates and of young men who have had experience as draughtsmen and assistants in architects' offices, who are allowed to enter the department as special students, to get as nearly as possible what they require, without passing through the full course.

Assistant Professor Homer appointed Associate Professor.

Mr. Robert S. Shedd was a student at the Institute in the "partial course" in architecture, 1888-90; was Assistant in Architecture, 1892-94; was appointed Instructor in the latter year; resigned, 1895.

Assistant W. Felton Brown appointed Instructor. Mr. Brown comes to us from the Ecole des Beaux-Arts, Paris, where he studied for four years under the best masters.

REPORT, 1896.

Not much requires to be said respecting the Architectural Department, which continues its steady gain, both in number of pupils and in the character of the work done from year to year. The collections of the department have been enlarged by a considerable number of superb architectural casts, although these very important accessories of architectural designing and drawing rooms cannot be placed to the best advantage in the existing building. Some noble architectural photographs, the gift of Mrs. Henry Draper, have been hung upon the walls. The library has been further increased by purchase, and still more largely by gifts. The library is now one of singular richness, and leaves almost nothing to be desired; but the space allotted to it is so narrow that the large illustrated volumes, photographs, etc., cannot be taken down and used upon the tables with anything like the freedom which is desirable.

An exceedingly important addition has been made to our working plant through the purchase, by Prof. Homer, in Paris and London, the last summer, of twenty-six hundred lantern slides, containing views of buildings and cities in western Europe, Russia and the East. These modern views will admirably supplement the present

collection, and will materially assist the illustration of lectures. The views of Spanish, Russian, Indian and Chinese architecture are particularly valuable, including a large amount of material at present available in no other form. The first installment has already been received from London, and the remainder is expected at an early date. The new electric lantern of the Architectural Department makes the use of the slides much more convenient and effective. The interest taken by the students in the lectures has manifestly increased with the enlarged use of this mode of illustration.

Two prizes, each the income of a fund of \$5000, which were established by the will of Mr. Arthur Rotch, for so long a time chairman of the Visiting Committee on the Architectural Department, became available for the year closing in June last. The prize for the student graduating with the greatest distinction from the regular course in Architecture was awarded to Miss Esther Stone, of Providence, R. I. The prize for the special student completing his course with the highest standing, was awarded to Mr. R. W. Porter, of Springfield, Vt., who is this year continuing advanced studies at the Institute. The Boston Society of Architects have also generously continued their two prizes, each

of the value of \$50 in books. These were awarded to Messrs. H. W. Chamberlain, of Hudson, Ohio, and R. C. Henry, of Watertown, Mass. This year, again, in the competitions of the Beaux Arts Society of Architects of New York, the students of the Institute bore off the gold medal and the highest honors in each competition.

Professor W. H. Lawrence was graduated from the Institute in 1891, and was at once made Instructor in Architecture. His active interest, the accuracy of his work, and his ability as a teacher have been highly appreciated. Made Assistant Professor of Architecture this year.

The Institute has received by bequest, from the library of the late Arthur Rotch, 84 volumes of architectural books, many of them of very great value.

The largest contribution from a single person is from Mrs. Henry Draper, who has presented to the Institute during the past year 235 volumes, chiefly on architecture, all valuable and many of them rare.

F. W. C.

During the past year the department of Architecture has made an important extension of its work, taking the initiative by sending a group of its students abroad for the study of European architecture. Since 1893, when the first summer school was held in Chicago, the serious study of the Colonial buildings of New England has given the classes opportunities for an intimate acquaintance with the peculiarities of our local architecture. The work thus conducted has been valuable; but it could not be expected to afford the student the broad knowledge of style which forms so important a part of thorough architectural training. The scheme of a tour in Europe was at once supported by the students with enthusiasm. Although a fee was necessarily charged, twenty students from the third and fourth years applied for admission. Applications from several students of other colleges had to be refused, in order to keep the school down to a practicable size. The class of twenty students, in charge of Professor Homer, who had as assistant Mr. F. M. Mann, S.M., '94, spent fifty days in England and France, touring on bicycles from London to Southampton, and through Normandy and Touraine to Paris. It was found that this way of traveling was particularly advantageous, as it did away with railway expenses, was entirely healthful, and afforded unusual opportunities for the study of local architect-

ure. The large size of the class required careful preliminary arrangements. Maps were imported, routes decided upon, and hotel accommodations secured, before the expedition left America. General permission to photograph and draw was also obtained from the French government. The only difficulties encountered were those that arose from accidents to bicycles, and the temporary fatigue produced by the method of traveling, but nothing of a serious nature occurred at any time. The tour proved entirely successful, the eleven days in England and the thirty-nine days in France giving excellent opportunities for comparing examples of monumental and domestic architecture of the Romanesque, Gothic, and Renaissance styles of these countries. Pencil sketches and studies were made in each town visited, and a large number of photographs taken with the twelve cameras carried by instructors and students. The average necessary expense for the entire trip of seventy-six days proved to be \$340.00. Omitting London and Paris, the average necessary expense was \$2.00 per day for England, and \$1.90 for France. It is to be hoped that this successful precedent in the study of European architecture will be followed with good results in succeeding years.

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REPORT, 1897.

During the past year there have been few changes made in the work of the Architectural Department, but in several respects it has been greatly strengthened. Full-sized models of the Doric and Ionic orders from the Theatre of Marcellus, made during the summer from the most accurate drawings obtainable, have been placed in the drawing room of the second year students. The shafts are omitted, for lack of height, but anticipating the time when the museum is certain to become an indispensable part of our plan, the models have been so constructed that they can be easily completed. They will then offer an opportunity for study which can only be surpassed in Rome itself. These models serve as our text-books, and are sketched, measured, and drawn out, giving a far better knowledge of scale and construction than can possibly be learned in any other way. It is needless to say that this instruction is carried on with much greater interest to the students. We have only two large models as yet, for we cannot afford to infringe on the area of the drawing room; but the scheme should be carried to its completion as soon as possible, if the best results are to be obtained.

In architectural history great improvement has been noticed in the interest and work of the students, due to the increased number of lectures and the concentration of the course in the second and third years. This change in the course scheme has given opportunity for the introduction of the study of the history of painting and sculpture, which has heretofore been carried on in a less systematic manner, whenever we have been able to procure a lecturer on these subjects. A course is now regularly established, in charge of Professor Sumner. It is certain to prove of much value and interest.

This year we have nine students engaged in graduate work. The value of this extra year becomes continually better appreciated, as is shown by the steady increase in numbers from year to year.

The students of the Institute, for the fifth time in succession, won both the competitions of the Beaux Arts Society of Architects of New York, and, as before, bore off the gold medal and the highest honors.

The two Rotch Scholarships, each amounting to about two hundred dollars, were awarded this year to Mr. T. E. Videto, of South Framingham, and Mr. H. M. Seaver, of West Roxbury. Mr. Videto has returned this year as a candidate for an advanced degree.

The Boston Society of Architects also generously continued its two prizes of the value of fifty dollars each in books. A beautiful edition of Piranesi, the gift of Mrs. Henry Draper, has been added to the library, while Prof. W. R. Ware, of Columbia University, has presented two valuable lithographs, restorations, by Viollet-le-Duc, of a Doric Temple and the Baths of Caracalla.

Mr. Cass Gilbert, of Minneapolis, has most generously presented to the department a set of blue prints of the Brazer Building, in Boston, of which he was the architect, with his written description. Many novel conditions occurred in the planning of this building, and his methods of solving them are exceedingly interesting.

Mr. James M. Hubbard has also presented to the library three volumes of the Palestine Exploration Fund.

The department becomes more hampered each year for want of space and the proper adaptation of it to the present demands of architectural education. The museum is badly needed. The library has become entirely inadequate to allow of the proper care, use, or display of its exceedingly valuable collections. The drawing rooms are crowded this year to their utmost

capacity. The condition of things can be understood from the fact that we have twenty-two more students in the department than last year.

The Summer School in Architecture for this year was held in Quebec. Mr. Gardner, with a small party of students, spent three weeks in the town and its suburbs. It was the aim of the school to give the students practice in out-of-door sketching in pencil and water-color, in preparation for a future European trip. The old town with its historical interests, its curious people and customs, its attractive and picturesque bits of simple architecture, proved to be almost as good as a European city itself for such work.

F. W. C.

REPORT, 1898.

The only important change in the courses of study offered by the Department of Architecture has been the introduction of the new option in Architectural Engineering. For some time it has been felt that a demand existed for men specially trained in the computation of all the details of modern steel construction, and that the regular course should be so modified that undergraduates might be allowed a choice between the academic and engineering sides of architecture. This choice is now offered at the middle of the third year, the introduction of courses in structures and structural design, in place of academic design, constituting an important addition to the engineering side of the established courses of the department. It is to be hoped that graduates as well as undergraduates will take advantage of opportunities offered by this option.

By far the most important event during the past year has been the change to the new quarters in the Pierce Building. For the third time since 1883 the department has had to change its location in order to meet the constant need of expansion. From the small rooms at the top of Rogers it has so grown that it now occupies two and one-half floors of the Pierce Building and the large room at the top of the Dynamo Building.

The new quarters provide space for all the rooms of the former Architectural Building, and in addition give opportunity for increased accommodation for the architectural library, exhibition room, and fourth-year and graduate drawing rooms. The library and fourth-year drawing room have now double the area of the old room, and the former crowding and interference have entirely disappeared. We are also to be congratulated on the fact that the library is now placed in a fire-proof building where its valuable books will have proper protection. The adoption of the alcove system in the library greatly assists in the effective use of books by bringing together works of the same period and subject. The library is not only better arranged than heretofore, but also has room for the addition of some 800 quarto volumes, 250 large folio volumes, 10,000 photographs, and 12,000 lantern slides. Better table space is also provided, and many periodicals, catalogues, and plates formerly not accessible can now be placed on the shelves. In addition, an entire alcove has been devoted to the exhibition and use of books and photographs relating to the course on the History of European Civilization and Art.

The new exhibition room gives ample opportunity for the display and comparison of designs and sketches,

and the continuous exhibition of students' work. It is therefore an important aid in architectural training. The new drawing-rooms are all that could be desired, and their walls are rapidly being covered with the best examples of academic drawing and details of classic buildings. Daylight is well diffused by the special glass and light-colored walls, so that all parts of the room can be used to advantage. At present there are the following desks in the different drawing rooms. The number which could eventually be placed in the rooms is given in the second column:

Second-year drawing-room,	37 desks;	limit about	56 desks.
Third-year	"	"	46
Fourth-year	"	"	41
Graduate	"	"	11

The new architectural studio is also a great improvement on the old room, for it now has both direct and north top light in addition to the light from the side windows. The great north skylight in this room gives a superb light for life-class work.

At present the department feels the need of large casts in order to familiarize the students with the scale and actual size of good architectural detail. The full-size models of the orders from the Theatre of Marcellus and the full-size cornice from the Temple of Concord at Rome have proved excellent aids in class work and general instruction, but more examples are

needed, and it is hoped that a series of such casts from historic buildings may be obtained in the near future.

The prizes annually given to students in the department were this year awarded as follows:

Rotch prize, \$100, for student graduating with greatest distinction, Mr. G. P. Stevens.

Rotch prize, \$100, for special student completing course with highest standing, Mr. A. H. Cox.

Boston Society of Architects' prize, \$50, Mr. E. H. Schroeder.

Boston Society of Architects' prize, \$50, Mr. H. P. Richmond.

It may also be interesting to state that during the past summer Professor Chandler has been head of the Architect's Department of the City of Boston and a member of the Fine Arts Commission; Professor Despradelle is one of the eleven competitors for the second trial in the great Phoebe Hearst world competition for the University of California; Professor Homer has had charge of the construction of the new buildings of the Institute.

F. W. C.

REPORT, 1899.

Since the last report no changes have been made in the arrangement of studies of the regular course.

The option in Architectural Engineering introduced last year is now well under way, and will present an excellent class for graduation next spring.

The recently created option in Landscape Architecture offers opportunity for study in new directions, and is a distinct step in advance. The course of study is the result of the fullest cooperation between the Institute and practising landscape architects of the highest rank in their profession. The value of this assistance will be better understood when it is known that no precedent exists on which to base such a course, and that the prescribed studies represent the result of personal experience during years of active practice. The schedule of studies in this option has been under consideration for some time and now approaches complete form. Next term the department will be prepared to receive students in the second-year work of this option.

Although no change has taken place in the titles of the studies of the regular course, considerable internal change has been developed in the professional courses. Among these improvements may be mentioned

the free use of lantern-slide illustrations for all lectures, the addition of valuable details to the courses in history of architecture and construction, the frequent use of models instead of casts for freehand drawing, and the better draughtsmanship shown by the classes in design. It has, however, been felt for some time that closer correlation is needed in the professional work of the different years, and that the more complete study of the later periods of the history of architecture should be introduced as soon as possible.

The greatest addition in equipment is due to the purchase last summer of sixty-five casts of Roman architecture, which offer excellent opportunity for the study of good antique and renaissance detail. Part of these casts are now temporarily placed in the studio and library, awaiting the arrival of the larger fragments that are to be specially made for the department. Among the large casts are the full-size section of the cornice of the Temple of Castor and Pollux in the Roman forum, the order from Trajan's Arch at Beneventum, and a portion of Sansovino's monument to Cardinal Girolamo Basso della Rovere in the Church of Santa Maria del Popolo at Rome.

The library is improved each year, and although few expensive books have been added lately, new photo-

graphs to the number of 2,900 have been added and are now being put in circulation, 3000 old photographs have been remounted on cards of uniform size, 400 lantern slides have been added to our previous large collection, and a new and enlarged card catalogue provided for the use of students and instructors.

In the Exhibition Room, in addition to the continuous display of drawings, large numbers of photographs and diagrams of historical importance are arranged each week to illustrate the regular lectures and to assist students to a working knowledge of architectural precedent.

At the request of the department the visiting committee from the Boston Society of Architects has been changed from nine to three members, the committee consisting this year of Mr. Robert S. Peabody, Mr. R. Clipston Sturgis, and Mr. Philip Hale. Because of Mr. C. Howard Walker's absence in Europe, Mr. Walter H. Kilham is giving the lectures of the course in history of ornament. Mr. Harry W. Gardner, Instructor, on leave of absence, and Mr. George P. Stevens, the holder of the Swett fellowship, report progress of studies in the north of Italy, and that several measured drawings have been made as "envois" in Bologna and Florence.

The department mentions with deep regret the death at Siena, Italy, last June, of Mr. H. W. Chamberlain, one of our most conscientious and loyal graduates. Mr. Chamberlain was working under the direction of the department, and had sent home one set of drawings made in Rome. His remaining sketches and measured drawings are now being drawn in formal manner by Mrs. Chamberlain, and will be given to the Institute.

A large number of our graduates desire to continue their studies abroad, and a year's architectural study and travel in Europe forms an excellent continuation of the regular course, and the benefit, direct and indirect, is great when the studies are properly directed under scholarship supervision. The Perkins graduate scholarship is devoted to this purpose, and a part of the Austin fund is available, but other foundations would render great aid to the Architectural department.

The Rotch prizes given annually to students in the department were this year awarded to Mr. L. B. Abbott and Mr. J. F. Clapp.

SUMMER SCHOOL OF ARCHITECTURE. This Summer School of Architecture this year had a very profitable European tour. Starting from Genoa, two weeks were spent in Milan, Brescia, Verona, and cities of north Italy, including a five days' visit in Venice. After a quick

return from Venice to Genoa the party began its bicycle ride along the western Riviera to Paris through Mentone, Monaco, Nice, a section of the Maritime Alps, Frejus, and Toulon to Marseilles. Then turning north, two weeks were spent in the Rhone Valley visiting Aix, Arles, Nimes, Avignon, and many architecturally interesting towns, finally leaving the valley at Viviers for the climb over the Cevennes mountains to the higher levels of the Puy de Dome region,-a very interesting trip through sections seldom visited by tourists. Passing through Riom, Vezelay, Sens, Moulin, Nevers, Bourges, Troyes, and Fontainbleau, the school reached Paris in good condition on August 10.

Much hard riding was encountered in the mountains of the Riviera and the Cevennes and in pushing against the strong head winds in the Rhone Valley, but these hard days were offset by many delightful rides.

Measured drawings were made at Venice and Arles, and sketches were made in most of the towns visited. Over 700 negatives were taken with hand cameras of important details, interesting buildings, and local scenes. The successful pictures will be added to our library collections of photographs and lantern slides, filling up many vacant spaces. The school passed through very rich architectural regions, and profited

greatly by observation and local study. It is only to be regretted that more students could not take advantage of the opportunity.

1899.

An optional course in Landscape Architecture has been planned to diverge from the architectural course in the second year, and Mr. Guy Lowell, who graduated from the Institute in 1894, and has recently received a diploma at the French government school of Fine Arts, has been appointed to lecture upon this subject, which he has made an object of special study while in Europe.

In addition to the program elaborated by our own departments, engineers, landscape gardeners, and architects have been consulted, and our thanks are due for the very carefully considered projects of work which have been made for us. Each author has shown a tendency to multiply studies in his favorite branch, so that the only difficulty has been in reducing the number to a suitable course, of which a schedule will be issued later. A main feature of the new option will be a very thorough course in Horticulture at the Arnold Arboretum, which is under the direction of Mr. Charles S. Sargent. Horticultural and botanical studies in the laboratory and the field will extend through three years, and ample opportunities will be offered not only to learn the habits of trees, shrubs, and plants, but also to study landscape gardening effects in the park of the Arboretum, which is of easy access from our

Institute. Excursions will also be made for the same purpose to suitable localities. The engineering practice required for grading, masonry, and other work will be taught, so that correct plans and estimates can be made. Architectural studies and skill in design and composition are most essential parts of the course.

The consultations referred to above give added proof that a course in Landscape Architecture, which has now become one of the professional demands of our country, can be best given in conjunction with a strong school of architecture and engineering, and we are fortunate in being able to establish a connection with the Arboretum, which Mr. Sargent's publications have made known throughout the world as a great horticultural station.

F. W. Chandler

REPORT, 1900.

In the option in Landscape Architecture, now in the second year of its existence, there are ten students, five in the second and five in the third year. As yet there appears to be no reason for a change in the course of instruction. We have daily proofs of the unrivalled advantages that we can offer for this study in our close proximity to the Arnold Arboretum, where much of our regular work is done, and to Brookline and other suburbs where many fine estates have been thrown open to our students through the courtesy of their owners.

The option in Architectural Engineering graduated its first class last year, and it is a pleasure to report that good positions were found for all its members. The importance of this field is fully acknowledged, and the number of pupils now pursuing the course proves its attractiveness. Our graduates are more and more realizing the need of a year's uninterrupted study in some one field, and return to take advantage of the opportunities offered by the department for advanced work.

The Rotch prizes, given annually to students in the department, were this year awarded to Mr. G. B. Ford and Mr. J. L. Little, Jr. Both students are taking graduate work. Mr. Ford and Mr. P. L. Price, a graduate from the option in Architectural Engineering,

are candidates for the Master's degree. The Boston Society of Architects has awarded prizes in books of the value of fifty dollars each to Mr. C. H. Stratton and Mr. W. R. Kattelle, both of the class of 1900.

The drawings sent to the Paris Exposition were selected to present a characteristic exhibit of the work done in an American school of architecture. The honor with which they have been distinguished by the French government has been referred to elsewhere. The drawings of Professor Despradelle's "Beacon of Progress," a full description of which was published in the "Technology Review" for October, 1900, have been accorded equal distinction.

The work of the students in the summer school of Architecture has again been the study of the old colonial buildings. The interior of King's Chapel was first measured, and here was given the necessary drill in the systematic plotting of lines and measurements, the use of lead strips in getting the forms of mouldings, etc. The work done here proved that many errors had been allowed in the published drawings of the building. From Boston Professor Homer took his class to Providence where through the courtesy of the Rhode Island School of Design they obtained an excellent room for day and evening work. After ten days spent in making a great

number of measured sketches, the class returned to the Institute, and devoted the remaining days to putting the material in hand into accurately made drawings.

Mr. Gorham P. Stevens, of the class of 1898, retains the Swett fellowship, and is continuing his studies at the Atelier Pascal in Paris. His admission to the Ecole des Beaux Arts as twenty-third out of sixty candidates shows the high quality of his work.

Mr. H. W. Gardner, Instructor in Architecture, was absent in Europe for a year on a grant from the Austin Fund. The greater part of his time was spent in Italy in making careful measured drawings of certain monuments that had special bearing on his future work at the Institute. In particular he studied the landscape gardening of a number of famous villas. At Lante near Viterbo, he was allowed full scope to measure and draw as he pleased. He has made a complete drawing of the famous gardens of this villa.

The Institute felt much gratified to receive a request on behalf of the French government for the presentation of a number of the large architectural designs, exhibited at the Paris Exposition, to the Ecole des Beaux Arts.

F. W. C.

REPORT, 1901.

The steadily increasing number of our graduates returning to the Institute for a year's study is perhaps the most gratifying thing connected with the Department of Architecture. This year there are eleven Institute graduates and one from Columbia University pursuing advanced courses, and five of them are candidates for the degree of Master of Science. The year is not only a breathing-space in which to become better acquainted with the culture which our library gives, but it is the opportunity for a fuller application of practical problems and for continued study in professional work. It is the true means of fostering work of a high grade.

The option in architectural engineering has well met an important demand, and its high standard is fully acknowledged by the exceptionally good positions found for its graduates. It is already beginning to attract students from other universities; and we have at present one advanced student in the option, a candidate for the Master's Degree.

The option in landscape architecture will complete its first four years next June. These years have fully proved that we have made no mistake in adding this option to our course. The facilities offered by the Institute, and the unusual opportunities for outdoor

study in close proximity, leave nothing to be desired. Notwithstanding the entire lack of precedent of a well-defined course of study for the landscape architect, the results of the year show need of only slight changes in that laid down. These will be carefully considered and attended to.

The prosperity of the country made itself so strongly felt last summer in the demands from architects for draughtsmen's services that our Summer School was given up. The demand came for every one we could send, experienced or otherwise; and we could not advise against so good an opportunity of early acquaintance with the routine of an architect's office.

Professor Homer, of the Department of Architecture, has accepted an appointment as Director of the Rhode Island School of Design at Providence, fortunately, however, continuing his lectures on the history of architecture to our students. Professor Homer graduated in the Department of Architecture in 1885, and has been connected with it in successive grades since 1887. In recent years he has also engaged in professional practice. Professor Homer carries with him to his new work the cordial esteem of his colleagues.

Assistant Professor Lawrence has been promoted

to Associate Professorship in the Department of Architecture. Professor Lawrence has been successively instructor and assistant professor of architecture since his graduation in 1892. He has had the chief share in the development of our present engineering option in architecture--a line of work of increasing interest and importance.

F. W. C.

REPORT, 1902.

Reference was made last year to the gratifying increase in the number of students returning for graduate work. This year the graduate class is one larger than last. Six of this class, one of whom is a graduate of the Option in Landscape Architecture and another of that in Architectural Engineering, are candidates for the degree of Master of Science.

The choice of studies leading to the advanced degree being made largely by the students themselves, although with the aid and advice of the instructors, it has been of interest to compare for a term of years the selections which have been made, with a view to formulating therefrom a regular graduate course which shall at once be attractive to graduate students and acceptable to the Faculty, and which shall lead to the degree of Master of Science. The department is exceedingly well fitted to care for graduate work, and the evolution of a definite graduate course is not intended to interfere with the present latitude as regards choice of work. It will remain as now a simple matter to make slight variations in individual schedules, according to the option graduated from. The graduate students invariably make much of a course of scientific construction, which is as it should be.

The number of students taking the option in Architectural Engineering, curiously enough, does not increase, although the demand for its graduates is steady, and exceptionally good positions and salaries have been found for them as soon as they were ready to go forth.

If the time devoted to practical problems based on previously taught theory could be extended through the entire first term of the fourth year, the regular student would gain much, and the demand for Option II would come only from those to whom the aesthetics of architecture do not appeal.

The department is this year working to its full capacity, and it has been found necessary to make use of the exhibition room for recitation purposes.

The greatest need of the department is a museum of building-models and appliances. The demand is for the best practical training that can be given for immediate usefulness when office life begins, and as an aid to this a well equipped museum, to which manufacturers would be glad to contribute, would be invaluable.

F. W. C.

REPORT, 1903.

The department opened this year most favorably, both in the quality and in the increased number of students. The Graduate Course is filled, and it has been found necessary to add another instructor in design to the regular staff. It has been our good fortune to secure for this position Mr. Allen H. Cox, a former student of the Institute, and later of the Paris Beaux Arts. With Mr. Putnam, another of our men, he won in the recent competition for the new library building of the Boston Athenaeum. Mr. Cox will continue to practice his profession, but will devote the afternoons to the Institute. The opportunity to obtain the services of one so able and enthusiastic, who brings with him a good knowledge of both theory and practice, is a rare one, and the department is to be congratulated on its accession. An assistant is also greatly needed to aid in the several courses in construction, perspective, stereotomy, etc. The preparation and correction of plates increases so much the labor of the instructor, that it leaves him too little time to give to the improvement or extension of his course. Another recitation room furnished with blackboard, and tables to which the students could take their drawing boards, would add greatly to the effectiveness of instruction, and would also relieve the class-room of a disturbing element, when

occupied as it has to be very often by both those taking and not taking a specified course. It must besides be accepted that the department becomes more and more administrative, and in consequence assistance should be allowed to relieve its increasing routine work.

The increased number of students adds comparatively few to the general average of graduates. This is due largely to the fact that so many come to us who already hold a college degree, that the value of another is not considered of enough importance to warrant the necessary work along sometimes uncongenial lines to win it. In fact, they come to us as to a graduate school, and specialize their work. With the special student from the office, the case is different, as his time as a rule is too limited for him to hope for the degree, and he devotes himself to design or construction according to his taste. The results from both regular and special students might be better if the mathematical preparation for professional work were made less burdensome.

Through the continued generosity of Mr. Guy Lowell, the department was enabled, at the end of the last term, to offer attractive money prizes for sketches and more serious work, to be made during the summer vacation, with the result that an interesting exhibit has been held, and the prizes awarded. The end hoped for was not

fully accomplished. As usual the busiest men responded the best.

This year the summer school was held in Europe with Professor Gardner in charge. The party of five landed at Naples and travelled slowly, studying and sketching, through Italy to Paris, and returned home by the way of Liverpool. The results are better than when the class was much larger, with more divided interests.

How the Year Book shall be published in the future is a question that calls for careful consideration.

At present this is done through the Architectural Club, an organization within the department, and much time and energy is devoted to making the work a success.

It is the sincere hope of the department that the Year Book may be continued, without advertisements, but under the protection of the Institute and supported by its generosity.

H. W. Gardner made Assistant Professor of Architecture.

F. W. C.

REPORT, 1905.

Last year was a very successful one for the department. A strong graduate class set the pace to which the undergraduate class finely responded. It was possible to send two exhibits of architectural work to St. Louis, one of which was to represent the Institute as a Land Grant College. In addition to this, the regular exhibition at the end of the term was the best we ever had.

The good influence of the graduate class makes us desire more and more to have the third and fourth-year classes brought in direct contact with it and its instructors, and to this end we hope it will be possible to have such necessary changes made in the drawing-rooms as we asked for last year.

The Rotch Prize of \$200 for the regular student making the best record during the four years was given to Miss Eliza Codd, and the one of \$200 to the special student doing the best work during two years was equally divided between Mr. L. Schwartz and Mr. A. P. Wadsworth. The Boston Society of Architects also gave two prizes of the value of \$50 each in books, one to Mr. O. M. Wiard and one to Mr. H. S. Pitts. These prizes were given for skill in design; the problem being approved by the Society, and ability in solving it decided by a jury of its members.

Mr. G. C. Glover, the first recipient of the Perkins Graduate Scholarship, has recently returned from Europe., His year has been very successful, and a proof of the excellence of his work is shown by its admission to the Paris Salon. Mr. G. B. Ford, who is aided in his studies by the Swett Fellowship, is still in Europe devoting his time mainly to the Ecole des Beaux Arts at Paris, of which he is a member. Both these young men have met with most gratifying results the responsibility placed upon them, and we sincerely hope that other fellowships may fall to the department for the good of our graduate class.

The fourth-year class of last year showed a just appreciation of the opportunities they had profited by, by establishing a prize for third-year work. The spirit which prompted this act is best shown in their own words. "In consideration of the great benefit to the students of the fourth year resulting from the prizes offered by the Boston Society of Architects, the members of the Class of 1904, desiring to have similar opportunities offered to students of the third year, do hereby pledge themselves to contribute one dollar annually towards the foundation of a fund to be known as the "Class of 1904 Competition Prize." From the capital of this fund are to be given two prizes

of the value of ten dollars each to the regular and special students whose designs shall be placed first in a competition to be held between the Christmas and Mid-year recesses."

This year has opened with every table occupied, and with a large number of college graduates. An interesting feature is that the college-bred man is more desirous of adding the Institute degree to the one he already possesses, or, if he prefers to rest as a "special," he is not so likely to limit himself to the aesthetic side of his profession as formerly, but, in the interest of scientific construction, adds the necessary mathematics to his course. It has been found that the courses at the Paris Beaux Arts, if the student is to take his degree there, are somewhat more exacting than at the Institute. This has had its good influence here, as shown by the above results. Another cause of this change is undoubtedly the steadily increasing demand for engineering knowledge in all important work; but the fact remains that the association of construction and design is coming to receive its proper recognition.

J. W. Chandler

REPORT, 1906.

This year has opened with numbers that have tested the full capacity of our floors. The material changes made last summer in the arrangement and lighting of our drawing-rooms have proved very successful. A floor area which formerly was poorly lighted has now become most available, and the screens that have been added now permit us to show to the best advantage our very valuable collection of drawings. Yet, with all these good conditions, we are still cramped.

The good results of bringing the advanced classes into closer touch with each other in the drawing-rooms are already being seen, and our larger exhibition room permits of calling the students together at short intervals to discuss their current problems in design, and to receive criticism on their work. All this tends towards the formation of an esprit de corps, as well as a closer coöperation between student and instructor than we have been able hitherto to bring about. It seems advisable to develop in the highest degree those lines of work which we have already undertaken rather than to start anything new.

The Rotch Prize of two hundred dollars for the regular student making the best record during the four years was given to Miss Ida A. Ryan; and the prize of two hundred to the special student doing the best work during two years was divided equally between Mr. W. H. Crowell and Mr. M. H. Whitehouse.

The Boston Society of Architects also gave two prizes of the value of fifty dollars each in books, one to Miss Ida A. Ryan, and one to Mr. W. P. Delano, Jr. These two prizes were given for skill in design, the decision being made by the Society. The occasion was celebrated by a dinner of the Department, given by the Boston Society of Architects to the fourth-year class. Dr. Pritchett was the guest of honor, and announced the awards.

"The Class of 1904 Competition Prize" was awarded last year for the first time. This prize gives ten dollars each to the regular and the special students whose designs are placed first in a competition held between the Christmas and mid-year recesses. The first was given to Mr. A. A. Blodgett, and the second to Mr. P. F. Mann.

Of particular interest to the Department will be the award at the end of the school year of a traveling scholarship amounting to twelve hundred dollars, the very generous gift of a friend. "It is to be awarded solely on the basis of distinguished merit," but candidates must have passed two consecutive years in the Department, and at least one of the years must have been in the Graduate Course.

A fact worthy of note is that Mr. W. D. Crowell, a student with us two years ago, recently won and is

now holding the Rotch Traveling Scholarship of two thousand dollars for two years' study abroad.

It is a satisfaction to note the continuance of a good graduate class, and also the large number of college graduates who have entered this year, many of them candidates for our degree.

F. W. Chandler

REPORT, 1907.

This year the new Course Scheme made possible by the increased entrance requirements in Modern Languages is for the first time in complete operation. The two hundred and seventy hours which became available for additional general and professional work have opened the way for many modifications and improvements in the courses given by the Department, that promise well in the direction of greater efficiency in methods of teaching, and a general broadening of the Course. A generous proportion of the added time has been devoted to an increase in the structural subjects taught in Options I and II. These changes have, on the other hand, very largely extended the labors of Professor Lawrence, who had all that he ought to carry before. As these hours represent class work, and as the instruction is practically all with individual students, each of whom may be working on a different problem in the same class, it is evident that the demand upon his time has been so materially increased that he should have aid to help him in routine work, and so give him opportunity to do full justice in the way of extension or improvement to the courses of instruction under his charge. Undoubtedly, an assistant could be secured from the graduating class to serve next year, and I hope this will be allowed.

More applications come for graduates from Option II than it is possible to meet, and the reputations of those offering these positions are sufficient proofs of the high

consideration in which these graduates are held. This standard we are bound to maintain.

The good results that have attended the union of third and fourth-year students in a common drawing-room have made it highly desirable that the second-year students should have part in the same arrangement. Unfortunately, our limited floor area on a single story makes this impossible of accomplishment, but it increases the desire for new quarters planned to profit by the experience in teaching gained during these many years. The younger men would mature more quickly but for their isolation. They need the stimulus gained by close association with men stronger than themselves, and they would more fully appreciate how much their own work stands for if they could watch more closely its theory put in practice by those who have had a year's start of them. The third and fourth-year men now meet on a common ground. They help each other in many ways. They work on each other's drawings, and they criticise each other's designs. This association seems to develop more quickly their reasoning powers, and their ability to discriminate between good and bad in architecture, and to express themselves clearly in words.

Each year the question returns as to the best way of producing the Year Book of the Architectural Society. There are many objections to the present methods of conducting it. The value of the work as an advertisement of the Department has been so well proved that it is earnestly hoped the Executive Committee may see fit to put the publication on a

permanent footing, and to give it the indorsement of the Institute.

Last year the Department was enabled to offer a traveling scholarship amounting to twelve hundred dollars, the very generous gift of a friend. Nine competitors, representing present and former architectural students of the Institute, met in the Department, where their drawings were made en loge, without any assistance after the start. The competition was very successful, and the prize was won by M. H. Whitehouse. Miss Ida A. Ryan and L. C. Clarke, Jr., received honorable mention. Mr. Whitehouse is at present studying in Italy. It is to be regretted that the opportunity the Department has to offer such a prize is the exception and not the rule.

The Rotch Prize of two hundred dollars for the regular student making the best record during the four years was divided equally between A. A. Blodgett and J. T. Wrinkle; and the prize of two hundred dollars for the special student doing the best work during two years was divided equally between F. C. Lebenbaum and R. G. Stebbins.

The two prizes of fifty dollars each, given by the Boston Society of Architects, were won by J. T. Wrinkle, regular, and W. Rasmussen, special student.

The two prizes of ten dollars each, the "Class of 1904 Competition Prize," were won by W. Soule, regular, and W. Rasmussen, special student.

It is a renewed satisfaction to note the continuance of good graduate work this year. There are eight candidates for the advanced degree.

F. W. Chandler

REPORT, 1908.

The last year was one of peculiar interest to this Department. The fourth-year class was unusually large and of more than average ability.

The Technology Architectural Record was launched as a quarterly magazine, and has already proved itself well worth the labor expended upon it. It has been the means of a strong reawakened interest in the Institute among our alumni, as shown by the many letters received in approval of this effort.

The American Institute of Architects at its Fortieth Annual Convention at Washington in January of this year gave active evidence of its interest in the architectural schools through its Committee on Architectural Education. As expressed in the Committee's report: "Through co-ordination, a unification of standards, and co-operation, we believe that in a few years the education offered in this country might be looked upon as final except for the absolutely necessary element of study and cultivation through travel and research amongst the inimitable monuments of the pagan and Christian past." The result of the acceptance of the report was a meeting held by the Committee in New York in the May following, to which were invited the heads of the architectural schools of Columbia, Cornell, Harvard, Pennsylvania, and the Institute of Technology. They all responded. The most tangible result of that meeting was to inaugurate a system of competitions between the schools, and the experiment was made to hold the first one during the summer vacation. The difficulty of control of vacation work has proved, however,

that it is not practicable to carry out this plan, and at another meeting held last month it was decided instead to have the competitions a part of the school curriculum. Preparations are now being made to accomplish this. The Department is much interested in the success of the experiment.

The last year was also the first in which the Perkins Travelling Fellowship was awarded to a woman. The successful competitor was Miss Ida A. Ryan, '05. The jury was composed of Mr. R. S. Peabody, President of the Boston Society of Architects, Mr. J. Randolph Coolidge, Jr., its Chairman on Education, assisted by the staff of the Department. Three other competitors were given honorable mention. Miss Ryan sailed for Europe in October.

We have much to be grateful for in the active support of the Boston Society of Architects. In April the studio of the Department was the scene of the Society's monthly dinner and meeting, which was held there for the purpose of awarding the prizes, the gifts of the Society, won in the annual competition among the fourth-year students. Mr. Peabody presided and presented the prizes; E. F. Lewis and Winsor Soule shared the one for the regular students. The prize for special students was given to A. N. Rebori. In another way the sympathy of the Boston Society was shown when Sir Aston Webb was a visitor in Boston. The Society gave a reception to him and Lady Webb in the library and drawing-rooms of the Department, and there were no more appreciative guests on that occasion than our students.

The informal address made to them by Sir Aston will always be a most interesting memory.

The two Rotch prizes of two hundred dollars each were given, according to the will of Mr. Arthur Rotch. One prize was awarded to E. F. Lewis, a graduate in the regular Course, the other to R. B. Barnes, a special student of two years standing.

M. H. Whitehouse, the holder of the 1906 Travelling Scholarship, returned from Europe at the end of his year's study. There was held in the Department an exhibition of his work, the quality of which fully proved his ability to profit by the opportunity given him.

The usual Summer School of the Department was held during July and August with sixteen students in attendance. The Institute, we believe, is the only school offering a regular summer course in Architecture, and the gradual increase in attendance since the beginning, indicates its value to college graduates, and to specially prepared students already in the Department, in gaining a year in the regular course in design. A number of teachers of drawing in secondary and trade schools have also taken advantage of the summer courses to supplement their regular work.

As affecting our present work, I beg to present to your consideration two important matters. First, [the desirability of requiring in the near future five years' attendance in this Department to attain the Bachelor's degree. Beginning fifteen years ago, the necessity of a longer school training for our

students became evident and the effort of the Department was directed to that end. President Walker's entire sympathy was with such an extension, as may be seen in his reports; but conditions at that time did not seem ripe for such a change. Since then we have set forth the importance of such a movement whenever opportunity offered. Until now our experience alone governed our desires in this matter, but now there have come pressing demands from the architectural profession for a higher standard of graduation from the schools, which, if met, makes it imperative to lengthen the Course.

The training of our first year might well be accomplished in a preparatory school so far as concerns its direct influence on our professional work. Adding another year simply places the degree where it belongs, and puts us more nearly on a par with the requirements of the other professions, no one of which demands more skilful, thorough, broad training than that of Architecture. It is always from our graduate class that architects make their first demands for assistants. Much may be gained of course by raising the standard of admission, but it is the standard of graduation that tests the schools, and we wish to have set for the whole Department that standard which is now limited to graduates.

The other matter referred to is our Traveling Scholarship. In 1906 a friend of the Department, ^{who} wished to remain anonymous gave the sum of twelve hundred dollars for a travelling scholarship for that year. The accumulated interest of the Perkins Fund

amounted to an equal sum in 1907, and the scholarship was continued. Our resources are now at an end. The Department begs either that the Executive Committee may see fit to make an annual allowance of twelve hundred dollars for this purpose or that the same amount be allowed from the Austin Fund. We believe that much good would accrue not only to the school but also to the beneficiary of this scholarship if it were stipulated that at the end of his year of foreign study he should return to the Department as an instructor for some stated time, perhaps a half year. To the school is really owed some practical recognition of the splendid opportunity given for foreign study. Such a scholarship cannot be measured in money. It counts for position, standing, reputation to its beneficiary. His services for the profession immediately have an increased value because the scholarship represents recognition of unusual ability. It should not be felt an obligation by the beneficiary but a favor, to be allowed the opportunity to make the Institute a practical return, and there could be no better way of doing this than to show to those who hope to have a similar opportunity some day how best to profit by it.

To our students this instruction would come at the opening of the school year, just at the time when the aid of fresh young talent would be most inspiring. To the young instructor the value of such an opportunity to teach cannot be overestimated. He learns to know himself and his own

capabilities. He puts his own knowledge into training. He finds unsuspected weak points in his armor, and, when found wanting, he will endeavor to elevate his own standard for any position he may occupy later.

But better than all would be the good effect on the Institute of the successful scholar returning to the Department for this short time to teach the causes of his success. Both teacher and pupil would have a higher appreciation of what the Institute stands for. They would learn that to graduate means much more than to get through and to get out; rather that it is to begin to show work which is worthy of Institute training, and which must be proven at the Institute itself. A practical illustration such as the above would carry weight when simple theoretical consideration would amount to nothing.

The income of the Perkins Fund amounts every four years to one thousand dollars, and is then available for a traveling fellowship, but the Department has no other scholarship endowment. It shares with the other Departments from the funds that have been left so generously for the common good, and in addition to this the Institute does all that its means permit. Cornell, Columbia, Harvard, Pennsylvania, St. Louis, have each one or two scholarships, and the Institute, the oldest of them all, should not be less favored.

F. W. Chandler

REPORT, 1909.

This year the Department of Architecture opened with an increase of fourteen students over the register of last year, and with a class of unusual size and strength taking fifth-year work. Seven members of this class are last year's graduates who have returned for the Master's degree. This fifth-year work shows a most satisfactory growth, which is due to the demand for more highly trained men than those graduated in the regular Course, and perhaps to a certain extent to a reaction from the opinion until recently prevalent that the American architectural schools are hardly more than feeders of the Paris Ecole des Beaux-Arts. More and more do our students both from abroad and on their return home speak with increased respect for the training received at the Institute, a training not fully appreciated till the Paris atelier and the Beaux-Arts' exhibitions give the opportunity for comparison. A recent example of what our standard means is shown in the case of one of our '07 graduates, who passed the examination at the Paris Beaux-Arts and entered first in architecture over all Frenchmen and foreigners. It appears as if our Travelling Fellows would, in the future, give more and more attention to travel, and the careful study of classic monuments of architecture with only incidental work in the French atelier or the American Academy in Rome.

The loyalty of former students of the Department has been markedly shown this year. Mr. Robert P. Bellows, '04, made a most interesting exhibition in our rooms of his work accomplished at the Beaux-Arts, of which he is a "diplomé." He also

prepared a very careful paper on the foreign school methods and atelier ways of study, which he delived to our students. Mr.

F.L.W.Richardson, '03, after an exhibition of some of his foreign work, presented us with three water-colors, which now hang on the library walls. Mr. A. W. Longfellow, '78, has given us a large copper plate engraving of the "Leaning Tower of Pisa." He gave it "in memory of happy, useful days at the school where I gained so much. I should like to be remembered there, and send it in grateful memory." This also decorates our library. We are glad of this opportunity to record another of the many kind things done for us by Mrs. William B. Rogers. A gift of books, photographs, and engravings from her has an additional value in their association with one who has done so much for the Institute. Miss Helen M. Longyear, a present student who was in Europe last summer, has filled many a gap in our library by a most generous gift of photographs collected while travelling.

The first three-year scholarship given by the American Academy in Rome was to be granted without competition, and among the candidates from those eligible for this honor, Mr. Ernest F. Lewis, '07, received the appointment. It was a great compliment to the Institute, and we are glad to say that Mr. Lewis is proving himself well worthy of the confidence placed in him. An interesting illustrated article explaining what the Academy in Rome stands for, written by Mr. Lewis, was sent to the Technology Architectural Record, and appeared in the August number. This year a regular competition takes place for the Academy scholarship, and a number of our students will take part in it.

Mr. Andrew N. Rebori, '07, was the winner of the 1908 Traveling Fellowship. Again Mr. Guy Lowell came to our aid and generously added five hundred dollars to a like sum granted from the Austin Fund to make this Fellowship possible for a year. Mr. Rebori sailed in September. Miss Ida A. Ryan, the previous beneficiary of this Fellowship, has recently returned after a year's study in Europe. As a result of her accomplishment she has received a very flattering invitation to take an important position in the office of one of our best architectural firms.

Mr. George E. Burnap, a graduate in the Option in Landscape Gardening and a beneficiary of a Travelling Fellowship from the Austin Fund, has also recently returned. His successful work had brought him to the knowledge of Cornell University, and he was invited to the position of instructor in the Rural Art Department, which he accepted.

The Rotch Prize of two hundred dollars for regular students was awarded to Mr. Edgar I. Williams, who has returned for a graduate year, and is a candidate for the advanced degree. There was no candidate for the special student prize.

There is little to be said in regard to our regular course of study. No radical changes have been made since last year. The steadily increasing demand, however, from the profession, for the highest standard of work from the schools is a very effective stimulus to improve methods and avoid ruts, and we believe that each year finds us fully prepared to meet every requirement. The rapid progress in the methods of scientific construction demands continuous exertion in the Option in Archi-

tectural Engineering; and the preparation of material for use in the class room, the correction of students' work, etc., entail too great amount of clerical labor which falls on Professor Lawrence at the expense of time that would be far better employed in the further development of the Course.

Fully appreciating the impossibility of obtaining more floor area for the use of the Department, we still desire to call attention to our growing needs for more class rooms and a larger exhibition room.

We renew our plea that the Department be so endowed that a one-thousand dollar Travelling Fellowship may be awarded each year. The Executive Committee has already signified its willingness to allow five hundred dollars from the Austin Fund for this purpose, and it is earnestly hoped that a like amount may be secured from some other source. Not to have this fellowship is a great handicap in the accomplishment of the results we are striving for. We cannot make rules as to eligibility and invite candidates for competition if we are not sure beforehand that there is a fellowship to offer. Our plea, besides, is for nothing more than what every architectural school of standing in the country has enjoyed for many years.

F. W. Chandler

REPORT, 1910.

The present school year of the Department of Architecture opened with a second-year class of forty-three, the largest number of students with one exception that this class has ever recorded. There are nine students in the graduate course, of which five are candidates for the advanced degree. The universities and colleges continue to send us a large quota. There were newly registered with us this term graduates from Brown, Dartmouth, Harvard, and St. Louis universities and from the State Universities of Illinois, Nebraska and Oregon; one from the Mississippi Agricultural and Mechanical College, one from Radcliffe, and one from the Rhode Island School of Design.

The curriculum was readjusted last winter so as to permit moving a large part of the preparatory technical work from the third to the second year. More opportunity will thus be afforded in the last two years for studies of a strictly professional nature, and a broadening of the course in the History of European Civilization and Art. The first and second year students are now working according to this schedule.

The Option in Architectural Engineering is being taken by an unusually large number of students. Its graduates are always in great demand, and to the architect who leans more to the construction side and is fond of mathematics this course offers excellent opportunities.

The Rotch Traveling Scholarship, giving opportunity for two years' study in Europe, was this year awarded to Mr. Horace G. Simpson, '03.

The Rotch Prize for the regular student in the Department of Architecture at the Institute was awarded this year to Mr. Lester H. King; the Prize for the special student was divided between Messrs. Louis Svarz and Kenneth E. Carpenter. Messrs. King and Carpenter are now following the graduate course.

The two Boston Society of Architects' Prizes of fifty dollars each were awarded to Mr. Alvin F. Menke, a regular student, and Mr. Louis Svarz, a special student.

The 1909 Traveling Fellowship of one thousand dollars was won by Mr. Ralph J. Batchelder in competition with nine others. Mr. Batchelder is now in Paris after six weeks' travel in England. He is following a course laid down by the Department.

Mr. Andrew N. Rebori, the beneficiary of the 1908 Traveling Fellowship, returned a month ago. His work accomplished while in Europe now hanging in our exhibition room is most interesting, and is a good example of the value of this opportunity to the student of architecture for rounding off his school work. Mr. Rebori's drawings show great skill in draughtsmanship and appreciation of color. His greatest effort, a large drawing in color of a part of Raphael's Loggia in the Vatican, he leaves to the Department.

I again take this opportunity to call attention to the generosity of Mr. Guy Lowell, without whose help this fellowship could never have been started, and upon whom its success depends.

The prize of the American Academy in Rome, which is the highest in value and in honor offered to American architectural students, was won by Mr. Edgar I. Williams, '08, last January.

In the preliminary competition, in which nine of the American schools of architecture were eligible to join, the number of competitors was reduced to four, of which three were from the Institute. The final competition gave the prize to Mr. Williams. Mr. Williams also completed the graduate course and gained the Master's degree. He is now in Rome at the American Academy.

A gift of fifty valuable books formerly belonging to Mr. Alfred Greenough was made to us by the heirs of Mr. Charles Henry Parker. We were asked to have a book plate inserted in each book to bear the inscription, "From the Alfred Greenough Collection." This has been done. The greater part of Mr. Greenough's collection was given many years ago by Mr. Parker to the Museum of Fine Arts.

Mr. David A. Gregg, so well known in the profession for his expertness in architectural rendering, and who has served loyally the Department during twenty-two consecutive years teaching this subject, presented the Department this term with a large pencil drawing beautifully done, from one of Bacon's sketches of the Assos Expedition.

An interesting event to the Department was the visit of Professor Reilly, Professor of Architecture at the University of Liverpool. He had come to America to study our schools of architecture. He was much impressed by our methods, and took away a number of examples of our student work in design.

Mr. William F. Dolke, Jr., who is a half-time instructor, helping mainly in Option 2, has shown himself very capable,

good service in that course where it has been most needed. Mr. Tashjian will give next term a short course of lectures on Reinforced Concrete Construction.

The first number of the third volume of the Technology Architectural Record will make its appearance in December. Its scope has been enlarged to embrace illustrations of work accomplished in actual practice by our former students, and more space will be given to the subject of Architectural Engineering. It will publish the investigations of the Institute laboratories in subjects of interest to the architect, which until now have appeared only in the Quarterly, recently discontinued, or in scientific journals.

So much depends upon our ability to offer a traveling fellowship as a reward for scholarship that I must make my regular appeal for it. As you may not know, ours is the only architectural school of any standing in this country that can not offer a yearly prize of this kind, and we are the oldest school besides. To this end we should have a traveling fellowship of the value of fifteen hundred dollars; one thousand of which should be paid to its beneficiary for foreign study and five hundred as a salary for six months' instruction at the Institute immediately upon his return to this country. His duties as an instructor should be to devote himself impartially to our second, third, and fourth year classes in design. Such an association of our students with one of our recent graduates, only a little older than themselves, who had achieved conspicuous success and would show how he had attained it,

would be invaluable; and this instruction would come at the opening of the school year just at the time when the aid of fresh young talent would be most inspiring.

A further improvement of our course must be to bring our students into more intimate association with the foremost practicing architects of the day, whom they are to succeed in the next architectural generation. We should have the History of Modern Architecture told to our fourth-year men by the most distinguished practicing architects of to-day. We should be given the opportunity to invite them to tell the story of their own work, two or three lectures from each; say fifteen lectures in all. In no better or more interesting way could this intimate and most valuable connection be brought about of theory and practice; of the student and the architect.

F. W. Chandler

REPORT, 1911.

For the course in Architecture the year opened well, not only in the number but in the quality of the students. The registration, including second, third, fourth, and fifth years, numbers one hundred and fourteen,-the largest class in the history of the Department. Of this number twenty-six are graduates of colleges, twenty-five have had from one to three years of college training, and the remainder come from high and preparatory schools. The special students, of whom we have thirty-seven, make a very acceptable and important adjunct to our number. They bring with them the experience gained during two or more years in architects' offices; and have, perhaps, a greater appreciation of the practical value of a school training, and the influence of their presence is an additional stimulus on their less mature classmates.

The number of students who will enter the option in Architectural Engineering this year promises to be unusually large. Among them several, who have arranged their preparatory work at other institutions to fit them for this option, are entering with advanced standing.

The necessity for greater space to care properly for our classes is an old story, but is to-day greater than ever before. Some of our classes which, owing to complications of the tabular view cannot be divided into sections meeting at different hours, are so large that none of our class-rooms will accommodate them and they have therefore to be spread through two or three rooms, to the great disadvantage of their work.

The 1910 Traveling Fellowship of one thousand dollars was won by Mr. W. B. Kirby, '07, in competition with seven others. Mr. Kirby sailed for Europe the first of October, to follow a course of study laid down by the Department. I again call attention to the generosity of Mr. Guy Lowell which instigates this fellowship, and has thus far kept it going.

Mr. Ralph J. Batchelder, '08, holder of the 1909 Traveling Fellowship, has recently returned after spending a little over his year in Europe. He brought home many drawings accomplished during these twelve months, and a public exhibition of them has been held in our rooms. These drawings gave good evidence of the value of foreign study to one capable of profiting by it.

The Rotch Prize for the regular student in the Department of Architecture at the Institute was awarded this year to Mr. John H. Scarff; the Prize for the special student was divided between Messrs. Charles C. Clark and William E. Haugaard. Messrs. Scarff and Clark have returned for graduate work.

The Rotch Traveling Scholarship, which first requires from its candidates two years' practice in the office of a Massachusetts architect, and gives opportunity for two years' study abroad, again fell this year to an alumnus of Technology, Mr. J. McGinniss, '08. The beneficiary of this same scholarship two years ago, Mr. I. P. Lord, '03, has recently returned, and the walls of our exhibition room are at present completely

covered with drawings of unusual interest made by Mr. Lord while abroad.

The two Boston Society of Architects' Prizes of fifty dollars each were awarded to Mr. Reginald D. Johnson, a regular student, and Mr. John E. Kelley, a special student.

Professor Despradelle is this year a lecturer in Architectural Design at the School of Architecture of Harvard University. This does not interfere with his regular work here. On the contrary, it is to be hoped that the results may tend to a cooperation with our neighbor with the greatest profit to both.

Mr. Herbert E. Fowler, '10, is half-time instructor this year, helping mainly in Option 2. He is doing good service where it is greatly needed.

We are very fortunate in being allowed the partial services of Mr. L. Earle Rowe, Assistant in the Department of Egyptian Art at the Museum of Fine Arts, to help Professor Sumner in his course in European Civilization and Art. This opportunity has enabled Professor Sumner to require personal conferences from his students, and occasional visits by classes to the Museum for decent instruction, -the consummation of a long cherished desire.

The opportunities offered by the Museum in its collection of classic models of figure and architectural sculpture is again for the first time since the removal of the Museum to be made use of by our advanced students in Life Class and

Decorative Design. The Museum cannot be so freely used as when it was next door to us, but we believe that some alternation between work at our school and at the Museum will more than compensate in the broadening influences of the Museum for the time lost in going back and forth.

The first number of the fourth volume of the Technology Architectural Record will make its appearance in December, 1910. The usefulness of this publication has steadily gained in recognition by the architectural profession, and we believe that there has also been a steady gain in its general improvement from year to year. It is the only advertisement of the Department of Architecture. It contributes to the general advertising of the Institute, and is, besides, sent as the regular Department circular, to prospective students in Architecture. The Record serves a good purpose, and our experience shows that the pecuniary assistance it receives from the Institute is at least counterbalanced in the tuitions returned through its influence.

I reiterate my regular appeal for a Traveling Fellowship in Architecture, and relief for the Department from its yearly struggle to get the necessary funds for this purpose. To a very great extent the success of our post-graduate course is dependent upon our ability to offer such a prize. It is discouraging to receive, as we have repeatedly done, requests from other schools to lay before our graduates statements of

inducements which they offer, and with which we cannot compete, to come to them for the advanced degree and the opportunity of winning a fellowship for foreign travel; and it is humiliating to us that we are unable to create sufficient appreciation of our crying need to have it satisfied. There is not an architectural school in good standing in this country, excepting that of the Institute, that has not assured means of offering its students the opportunity to round out their school life with foreign travel, and yet the Institute's school is the oldest of them all.

F. W. Chandler

REPORT, 1912.

The Department of Architecture began the present school year unusually handicapped by the resignation of Professor Chandler, which was sent to the Executive Committee just before the opening of the term. Professor Chandler had endeared himself to every member of the Department, and his resignation was met with sincere regret on every side. It is a source of great satisfaction that the good health which Professor Chandler enjoys, his continued deep interest in the welfare of the Department, and his appointment as Professor Emeritus, will still keep him in close communication with Institute affairs, and will enable us for many years to look to him for counsel. We therefore commence the school year full of hope and confidence that the prestige, the methods, traditions and wonderful "esprit de corps," developed during the twenty-three years of Professor Chandler's most able leadership, may be continued.

This year is a notable one regarding both the numbers and the strength of the students in the Department. The total registration in the second, third, fourth, and graduate classes is one hundred and fourteen, the same as last year, and continues the record then made of the largest enrollment in the history of the Department.

The class in Advanced Design is now larger than at any previous time. There are fourteen members in all, four candidates for the Master's degree, four candidates for the Bachelor's degree who anticipated Senior Design last year, and six special

students. The class is of exceptional strength and promise.

The candidates for the Bachelor's degree number twenty-two. Ten of these are in the Architectural Engineering Option, and form the largest and perhaps the strongest class in its history.

In addition to four graduate students from our own Department, we have twenty-one students holding college degrees, besides twenty-four men who have had from one to three and a half years of college training. The mingling with our undergraduates of this class of men, as well as those coming for special work with two or more years of office experience, tends materially to broaden and mature the viewpoint of our students, and is a very real and beneficial factor in their development.

In the instructing staff of the Department Mr. Herbert E. Fowler, who resigned last spring to take a position with Purdy & Henderson, New York, has been replaced by Mr. Marcus M. Cory, as half-time instructor in Architectural Engineering. Mr. Cory comes to us from the Department of Civil Engineering, and has entered upon his work with most commendable interest and enthusiasm.

Mr. George H. Ingraham, a well-known Boston architect, and a graduate of the Department with the Class of 1892, has taken charge of the course in Specifications and Working Drawings formerly given by Professor Chandler.

We are fortunate in being able to retain the partial services of Mr. L. Earle Rowe, Assistant in the Department of Egyptian Art at the Museum of Fine Arts, who was appointed last

year to assist Professor Sumner in his courses in European Civilization and Art.

The new Course scheme adopted by the Faculty in 1909, and made possible by the omission of one year of Modern Language, for the first time becomes fully operative in all four years. We believe the course offered by each Option to be broader, more effective, and better balanced than ever before. Numerous minor changes have been made since the first adoption of the Course, all tending toward greater efficiency.

A short course in the senior year of Option II consisting of laboratory investigation of the materials and methods used in making Armored Concrete, in charge of Professor Hayward, followed by a brief course in the Design of Reinforced Concrete, by Mr. E. F. Rockwood, chief engineer of the New England Concrete Construction Company, introduced for the first time last year, fills a long-felt want in Option II, and enhances decidedly the strength of the Option. These courses were added to meet the demand that our structural men should be trained in at least the fundamental considerations pertaining to Design in Reinforced Concrete. Not a small number of the graduates of the Structural Option take positions in the west, where this material is being used in heavy construction to a far greater extent than in the east.

During the past year the Department has been the recipient of several gifts. His honor Mayor Fitzgerald presented us with a small-scale plaster model of the Memorial Band-stand which is being erected on Boston Common in honor of the late George F.

Parkman. It is of interest that the award for the design was made to Messrs. Derby, Robinson & Shepard, all former students of the Department.

Two reproductions of sketches by Prout were received from the late Mrs. William Barton Rogers.

The Architectural Society Scholarship Fund, founded in 1906, was made available for the first time this year by a gift of one hundred dollars from a former student, bringing the total amount of the Fund to something over one thousand dollars. The interest from this amount may now be used each year to help some deserving student.

Several "envois" have been received from Mr. I. P. Lord, '03, holder of the Rotch Travelling Scholarship three years ago. These are a welcome addition to our very valuable gallery of drawings.

A number of stereopticon slides of Italian gardens, a gift from Mr. Guy Lowell, a number of slides from Mr. S. E. Gideon, '06, and a subscription to the German Periodical "Berliner Architekturwelt" from Mr. Kurt Vonnegut, '08, have been added to our library.

The \$1000 Travelling Fellowship, made possible this year by the interest from the Willard B. Perkins Fund, was awarded to Mr. Walter S. Davis, '10, in competition with five others. The jury of award consisted of Professor Duquesne, of Harvard University, and Mr. Stephen Codman in association with Messrs. Cox and Mead of the Department staff.

The Rotch Prize of two hundred dollars for the student in the regular course making the best record in four years, was divided between Messrs. John T. Arms, Jr., and William D. Foster; and the Prize of two hundred dollars for the special student making the best record in two years was divided between Messrs. Edward H. Kruckemeyer and Albert McNaughton.

The two annual prizes of fifty dollars each given by the Boston Society of Architects were awarded to Ralph H. Doane, '12, and Mr. Freeman A. Pretzinger, special students.

The two "Class of 1904 Competition Prizes" of ten dollars each were awarded to Mr. Sidney L. Day, '12, and Miss Constance Fuller, special students.

It was announced at the recent reception to Professor Chandler by the Boston Society of Architects that a prize fund had been established in honor of Professor Chandler, to be known as the Francis Ward Chandler Prize, and to be given to students of the fifth year class in the Department.

The Architectural Society, the members of which are students of the Department of Architecture, exerts a very manly and helpful influence within the Department. The opportunities which it affords for bringing the students of the several classes into close comradeship, and for supplementing the regular instruction by lectures by professional men of prominence, are of inestimable value.

A new undergraduate society known as the Architectural Engineering Society, to be closely affiliated with the

Architectural Society, has been founded since the opening of the term. It is believed that the two societies working in association will be productive of much benefit, and do much toward broadening the ideas of the students. It is of interest to note that members of the new society will be eligible to become members of both the Architectural Society and the Civil Engineering Society, and may exert some small influence in bringing into better appreciation of one another the two professions of Architecture and Civil Engineering.

Our quarterly publication, The Technology Architectural Record, has in its fourth volume materially strengthened its position as a recognized magazine. It continues to be the most acceptable means of keeping our alumni in touch with the progress of the Department, thereby bringing to us indirectly many new students. The financial results of this last volume show a very gratifying decrease in the cost of the publication to the Institute. Its prospects for the future, both financially and otherwise, are much better than at the close of its third volume. We all agree as to its usefulness and effectiveness, and sincerely hope that it may be continued as a feature of our Department.

A matter which is at present arousing the keen interest of all members of the Department, and which if successfully carried out promises to be of much help to architectural education in general, is the proposed intercollegiate competition between the leading architectural schools of the east.

The details of the plan are still under discussion, but in its essentials the proposition is to have at some stated date each year a single programme given simultaneously to the more advanced classes in Architectural Design at Harvard, Columbia, Cornell, Pennsylvania, and the Institute, to be attacked and solved exactly as though it were the regular work of each school; the results to be brought together in a joint exhibition to be judged by a competent jury; and the exhibit as a whole then sent from one school to another, affording an opportunity for the students of each school to gain ideas and inspiration from the work of others. The competition is in no sense to be a competition between schools, and if properly managed, it can be made a tremendous factor for good in the general advancement of architectural education.

The large number of students in the Department is taxing our room capacity to its utmost. With the present large class in Advanced Design we find ourselves without proper accommodation for the "en loge" problems, which are such an important feature in the instruction of the subject.

We need a larger recitation room than we now have, fitted with drawing-tables and blackboard and a stereopticon. The lantern being a necessary factor in the illustration of the courses in Second and Third-year Architectural History, Third, Fourth and Fifth-year European Civilization and Art, and a useful adjunct to a number of other courses, it is with

great difficulty that we can with our present equipment meet to the best advantage the requirements of tabular views and room schemes.

The unusually large classes just now bring heavy additional burdens upon the instructing staff. This is particularly felt in the Engineering Option, where we sorely need the addition of one man to the permanent membership of the instructing staff with the grade of Instructor.

The Department feels perhaps this year more than ever before the need of a permanent endowment that would permit it to continue without interruption the annual \$1000 Traveling Fellowship that has proved so successful during the years it has been offered. The income from the Willard B. Perkins Fund is available for this purpose every fourth year, including the year 1911-1912. This income enabled the Department last spring to hold the fellowship competition, with the result already stated in this report. During each of the three previous years a very generous gift from Mr. Guy Lowell, supplemented by an equal amount from the Corporation of the Institute, has furnished the means for offering the fellowship. It would be a matter greatly to be deplored should this fellowship lapse through lack of funds. Furthermore, in order that the fellowship may be made most effective, it should be advertised well in advance of the date for the competition. Therefore the Department must make the strongest possible appeal to the Corporation, none the less urgent because so often repeated, for an endowment of the fellowship which shall place it upon a permanent basis.

W. H. Lawrence

REPORT, 1913

It gives us great pleasure to be able to report that the work of the Department of Architecture for the present year opens with every promise of success, not only in number but in the type and quality of students as well.

Although deprived by death of the leader in the branch of Design, the services of Professor Duquesne of the Harvard School of Architecture have been secured to at least partially continue that course. In this it is felt that the Department is particularly fortunate as Professor Duquesne is a former atelier associate and student with Professor Despradelle, and will therefore in all probability continue the methods that made the latter's teaching of such note. Coming as the death of Professor Despradelle did, almost at the opening of the school year, it would have been more than difficult, if not quite impossible, to in any other manner secure a substitute in time to take up the work. This condition alone, if any confirmation were needed, fully indicates the wisdom of the action taken.

In this connection, while the writer of this was not personally intimately acquainted with Professor Despradelle, from his reputation, both outside as well as in the Department, it is felt that in his death not only the Department of Architecture of the Institute but the cause of education generally has suffered an almost irreparable loss. Eminently fitted by training, temperament, and tireless enthusiasm for his work, and adding to these qualities the years of experience as a teacher, the task of

selecting his successor will be one of greatest difficulty. The arrangement with Professor Duquesne is of a temporary nature only, and being only partial it is bound to be more or less unsatisfactory in that the students are deprived of the complete instruction and attention to which they are entitled, and which they would receive from a permanent instructor. It is therefore urgently recommended that steps be taken at the earliest possible date looking toward the selection of a successor to Professor Despradelle so that the announcement of his appointment may be made early in the coming summer, and that also he may be in position to take up his work at the commencement of the next school year.

The enrolment for this year exceeds all previous records, showing a total of one hundred and thirty-one, - seventeen more than ever before. Of those entering the Department in 1912-13 nine are graduates of other colleges and five of the Institute; fifteen others have had partial college training.

There are nine students in Advanced Design, six of whom are candidates for the Master's degree. There are twenty-nine candidates for the Bachelor's degree, eleven of whom are taking the Option in Architectural Engineering.

As the writer's connection with the Department is comparatively recent it is believed that in no better way can the needs of the Architectural Engineering Option be presented than to incorporate as a part of this report a statement obtained from Professor Lawrence who is in direct charge of that branch.

"Option II. Mr. Marcus M. Cory, half-time instructor of last year, has been succeeded by Mr. Clarence E. Morrow, who devotes all of his time to the work of the Department. We have long needed this additional assistance, and its benefit is already apparent, especially in connection with the structural work given to the students of Option I.

"We have one more student in the senior class this year than last, in all thirteen,- the largest number in the history of the Option. The junior class shows a small decrease, being eight this year against ten last year; the second year, however, shows a very marked increase over any previous one, about twenty men having already signified their intention of taking the work in Architectural Engineering.

"It is interesting to note that in the senior class eleven of the thirteen men are working for the degree of the Institute; and with the exception of four, each member of the class already holds a degree of B.A. or B.S. from another institution. Eight different states and the territory of Hawaii are represented,- one man coming from Massachusetts, one from New York, and all of the remainder from west of the Mississippi.

"The differentiation of the Options, which originally occurred at the middle of the third year, now takes place at the beginning of the third year. We feel that the course of instruction could be improved materially by commencing some of the special work of Option II at the middle of the second year. While the desirability

of giving both Options the same fundamental training in Architecture cannot be emphasized too strongly, and while it is absolutely essential that the course in Architectural Engineering should give sufficient training in Design and in the fundamental conceptions of art to insure sympathy and understanding between the student who makes a specialty of Engineering and he who studies general Architecture; yet there are some subjects now given to both Options in the second year which are so distinctly for the aesthetic man that they might well be modified for the engineering student or omitted altogether from his curriculum. The courses in Water-color and History of Ornament will serve as illustrations.

While these courses are both important from the point of view of general training, they are otherwise of little use to the engineering student. He does not take kindly to them, and with the limited time at his disposal they are studied by him only at a sacrifice of preparation along his own lines of interest.

This condition is perfectly natural as the Option in Architectural Engineering is an offshoot from the general course in Architecture. It seems, however, that the Option has arrived at sufficient dignity to have a curriculum arranged on the basis of its own requirements. For instance, we need very much a short course in Surveying to give the students some experience in the use of the transit, etc., which might well be put in the second term of the second year.

"Separating the Options early in the course would, I think, work no hardship as conditions are at present. Option II is

becoming well known, and very few students now enter our Department without having decided which Option they will select.

"With the development of this Option comes an increasing demand for adequate training in the fundamental principles of Design in Reinforced Concrete. A course similar to that now being given by Professor Hayward and Mr. Rockwood has become a necessity, and should be still further developed in the near future. Many of the students in the senior year, especially those coming from the western states, desire to select for their theses, subjects involving design or experimental work in reinforced concrete. It is almost imperative that the facilities for carrying on this work should be improved. The services of Mr. Rockwood, who gives the instruction in Concrete Design, must end under the present arrangement after the first five weeks of the second term. His services should be continued to some extent throughout the second term to enable him to assist and supervise some of the thesis designs. This would involve a comparatively small additional amount of time on the part of Mr. Rockwood, and would at least serve as a temporary solution of our difficulty. So far as experimental work connected with the theses is concerned, the Department of Applied Mechanics has been most courteous in offering to cooperate with us to the fullest possible extent.

"We have had recently a number of applications for advanced work in Option II which would lead to the Master's degree. It is perhaps desirable that such a course should be arranged at an early date. The list of studies should include work in Advanced

Theory of Design and in Advanced Concrete Laboratory Design. The work would necessarily be so specialized and so distinctly removed from that of general Architecture that the degree conferred might take the form of Master of Science of Architectural Engineering."

Through the generosity of its friends the Department has been favored during the year with several valuable additions to its equipment:

Mrs. Ellen H. Ross presented a file of articles and illustrations of architectural and allied subjects that had been collected and arranged by her son, the late Frederick Haven Ross. The selection and arrangement have been made with great care, and forms a valuable acquisition.

Mr. R. S. Peabody donated the amount of his fee for a lecture given by him on sketching, with the suggestion that it be applied to offering three prizes for the three best sketches by students in Course IV. The suggestion was adopted, and in a competition held Messrs. G. I. Edgerton, F. H. Kennedy, L. H. Hall were successful. The subject of the sketch was "The Tower of the New Old South Church", and the prizes offered were copies of Mr. Peabody's "An Architect's Sketch-Book."

The Boston Society of Architects announced the establishment of an award in money, to be called "The William E. Chamberlain Prize", in memory of the architect by that name, himself a graduate of the Institute in 1877. This prize will be available for award in competition among the fifth-year students.

The Boston Society of Architects also donated one hundred and three lantern slides of miscellaneous subjects, which form a very useful addition to our collection.

Mr. Guy Lowell very generously asked to have the amount of his fees for three lectures on Landscape Architecture credited to the Department, with the suggestion that it be expended for some addition to the equipment in the way of casts or other objects of art for the gallery.

The one thousand dollar Traveling Fellowship made possible through the generosity of the Corporation, was awarded to Mr. John H. Scarff, '10, in competition with ten others. The jury of award were Professors Chandler, Despradelle and Gardner, Messrs. Cox, Mead, Codman and Bellows.

The Rotch Prize of two hundred dollars for the regular student having the best record in four years was awarded to Mr. Sidney L. Day; and a similar prize for the special student with the best record in two years was awarded to Mr. Thomas H. Mace, Jr.

The two annual prizes of fifty dollars each given by the Boston Society of Architects were awarded to Mr. Theodore R. Prouty, regular student, and the other divided between Messrs. Thomas H. Mace, Jr. and George B. Brigham, Jr., special students.

The two "Class of 1904" Competition Prizes of ten dollars each were awarded to Mr. Henry O. Glidden, regular student, and Mr. George W. Dyer, special student.

It is understood that the fund established in honor of Professor Chandler last year, to be known as "The Francis Ward

Chandler Prize" will be available this year for award among the students of the fifth-year, but no definite information has yet been obtainable.

The Architectural and the Architectural Engineering Societies continue to exercise a marked and beneficial influence on the student body, and do much to stimulate the work of all connected with them.

It is felt that the Technology Architectural Record, the quarterly publication of the Department, and those who have charge of it are entitled to congratulations because of its improved financial condition. Its value is evidenced by the fact that both Harvard and Pennsylvania Schools have recently inaugurated similar publications,- inspired without doubt by the success of our paper.

The proposed Interscholastic Competition between the leading architectural schools of this country was successfully inaugurated during the past year, those participating being Harvard, Pennsylvania, Columbia, Cornell and the Massachusetts Institute of Technology. It is proposed to continue this feature this year, and steps are already in progress to complete the arrangements.

While it is recognized that no relief can probably be granted at present, still it is felt that the necessity for increased space is so urgent that no report would be complete without some reference being made to that subject. This plea has in previous years been taken up, but there is an even stronger necessity for it this year than ever before. The large numerical increase of

students, and the requirements that they should be properly housed and provided with the facilities for doing their work under sanitary and healthful conditions, would seem to demand that this be given early consideration. These features are now recognized very generally in commercial life by the introduction of many provisions for the comfort and health of their employees which formerly would not have been considered any part of the duty of an employer; and this is largely because employers are realizing more than before that favorable conditions for production produce more than correspondingly better results in quality and quantity. If this is the attitude of business how much more ought it to be that of an educational institution.

The present crowded condition of our quarters prevents a satisfactory and economical handling of the work. Classes which from the character of the work or because of conflicting schedules cannot be divided into sections, are so large that none of the classrooms will accommodate them, and they are compelled to spread through two or three adjoining rooms, greatly to the disadvantage of the work. This same condition is true of the "en loge" work, there not being a sufficient number of "loges", nor can the students be isolated in them as they should be to secure the best results. In this connection the recommendation seems apropos that in the planning of the buildings for the "New Tech" an entirely separate and ample structure be provided which can be arranged and planned with careful reference to the work of the

Department, and its successful and convenient conduct as well as provide for its future growth.

For many years the drawing rooms of the Department have been open evenings from 6:30 to 10 for students of the fourth and fifth years. We think that a further extension of the opportunities for evening work in the Department should be made, and recommend that our library, under proper supervision, should be open during these same hours to all of our students. We believe, however, in limiting the kind of work for the evening hours in the library to research work in Design and to reading, etc., in connection with the courses in Architectural History and European Civilization and Art. It is necessary to make this restriction in order to continue our policy of not affording facilities in the evening for drawing room work in Design in the second and third years. Supervision of the library evenings can be provided for by engaging one of the present janitors, or, preferably, one of our former students, who would be glad of a chance to study combined with a comparatively small remuneration. We make this recommendation believing that it is wise to provide our students with the fullest opportunities for the study of their profession, and because we feel that the Department of Architecture at the Institute ought not to offer less than do the other well-known schools of architecture.

Mr. Walter B. Kirby, '07, the holder of the 1910 Traveling Fellowship, has recently returned. He now has on exhibition in the Department many exceedingly interesting drawings that formed part of his work during his stay abroad. Mr. John H. Scarff, who was the successful competitor in 1912, will leave shortly

to take up his study under that Fellowship.

This again raises the question of putting this Fellowship on a more permanent basis. The Department feels that it can only reiterate and endorse by repetition the strong appeals that have been made in past years, urging that either by endowment or by some form of administrative enactment some plan be found that will assure a continuance of the offer as a yearly one. During the past years, except those in which the income from the Willard B. Perkins Fund was available, the award has had to depend on the securing of aid from private sources, supplemented by such assistance as was voted by the Corporation. This private generosity cannot be expected to continue indefinitely, and it would be most deplorable if because of its failure the Fellowship should lapse on account of lack of funds.

To a great extent the success of the advanced course in Design is dependent on the ability to offer such a prize. Nothing is more discouraging as well as humiliating to all connected with the work than to receive, as has repeatedly happened, requests from other schools to lay before our graduates statements of inducements which they can offer to advanced students, and with which we cannot compete. There is not another architectural school in the country, of the standing of the Institute, that does not have the assured means of offering its students the opportunity for foreign travel as a reward. Early action on this should be taken as, to make it effective, the fact should be advertised well in advance of the date of the competition;

in fact, should be stated in the annual catalogue as one of the inducements to come here rather than go elsewhere.

The Department therefore again appeals in the strongest possible manner to the Corporation and urges most earnestly that such action be taken as will settle the question of the permanency of this Fellowship at the earliest possible date. It also renews its recommendation made last March that a provision be incorporated in the conditions governing the award of this Fellowship, making it an obligation on the part of the recipient to return to the Department upon his completion of his term of travel as an assistant in the instruction of Design, at a salary to be fixed for at least a part of the year succeeding his return.

JAMES KNOX TAYLOR

REPORT, 1914

It is very gratifying to the Department to be able to report a continuance of the bright prospects for a successful year such as was indicated in last year's statement. Although slightly handicapped by the temporary character of the instruction in Design, the work for the year was as a whole satisfactory. This year, through the additions that have been made to our instructing staff, this handicap is now a thing of the past, and already the work done by the students in Design gives evidence that the selections of new members were wisely made.

Mr. Edgar I. Williams, a graduate of the Institute and a Fellow of the American Academy in Rome, and Mr. Albert LeMonnier, a graduate of the Ecole des Beaux Arts, have been appointed Assistant Professors. In addition, Messrs. William T. Aldrich and Charles Everett, both former students of the Institute and also graduates of the Ecole des Beaux Arts in Paris, have been engaged for part-time service in the instruction of Design. With this staff of instructors, together with Professor Gardner and Mr. Mead, no reason can be seen why the work of the Department should not at least retain, if not increase, its old-time prestige.

The registration for the year exceeded by two that of last; two students have dropped out, however, so that our present enrollment remains the same as last year. Of those entering this year sixteen are college graduates, one from the Institute itself, and fourteen others have had a partial collegiate training.

In addition to these gifts the equipment of the Department has been increased by several thousand photographs purchased by Professors Gardner and Sumner while in Europe last summer, and by the collection of Cantagalli ceramic ware, selected by Professor Gardner at the works in Florence.

Mr. Guy Lowell again very generously donated the amount of his fees for three lectures on "Landscape Architecture", to be expended for additional casts or objects of art for our gallery. Accordingly a volume of Piranesi's engravings of vases and candelabra was purchased by Professor Gardner while abroad.

The thousand-dollar Traveling Fellowship, so kindly provided by the Corporation, was awarded in 1913 to Mr. Thomas H. Mace, Jr., in competition with eight others. The jury of award was composed of Professors Chandler and Duquesne, Messrs. Codman, Cox and Mead.

The Rotch Prizes of two hundred dollars each for the regular and the special student having the best general records in four years and two years respectively, were for the first time awarded to students in the Architectural Engineering Option. Mr. Andrew Vogel was given the prize for the regular student, and Mr. Charles H. Hopkins the prize for the special student.

The two annual prizes of fifty dollars each given by the Boston Society of Architects were awarded to Mr. Patrick D. Horgan, regular student, and Mr. Barton E. Brooke, special student.

The two "Class of 1904" Prizes of ten dollars each were awarded to Mr. Dale R. McEnary, regular student, and Mr. Frank S. Whearty, special student.

In the instructing staff there have been numerous changes. Professor Duquesne is no longer with us, Professors Williams and LeMonnier taking the work he formerly had. Messrs. Aldrich and Everett have taken the work of Mr. Allen H. Cox whose business engagements compelled him to withdraw from our staff. Mr. Cox had successfully performed the work for several years. Another loss came with the resignation of Mr. David A. Gregg, who for twenty-six years has given the course in Pen and Pencil Rendering. Mr. Gregg's health has failed to such an extent that it was impossible for him to continue; in fact he has not only given up here but has retired from all business. Mr. Gregg will be greatly missed both by the students and by the faculty of this Department. His charming nature and constant interest in his work has endeared him to all who came in contact with him.

I desire to acknowledge the receipt of the following gifts made during the year:

Mrs. Helen Longyear Paul, '09, two hundred and fifty photographs, also pamphlets and prints,- the Boston Society of Architects, one hundred and fifty-seven lantern slides,- Professor Charles R. Cross, a collection of post cards and photographs,- Mrs. Desiré Despradelle, a collection of drawings by her husband, the late Professor Despradelle. The Carnegie Institute of Washington, two volumes of their publications,- the American Bridge Company, fourteen copies of "Tables and Specifications for Steel-frame Structures",- Richard E. Schmidt, '87, a copy of "The Modern Hospital", a work compiled by himself and Dr. Hornsby.

As arrangements had not been completed to make either the Francis Ward Chandler Prize or the W. E. Chamberlain Prize available, no award was made. The latter prize we have been advised will be available this year, and a competition to decide its award will therefore be held. The Chandler Prize is not yet available.

The Architectural and the Architectural Engineering Societies are continuing their good work of past years, and do much to keep up the interest and enthusiasm of the whole body of students.

To the Technology Architectural Record, the quarterly publication of the Department, congratulations are due because this year it has become self-supporting in that the receipts have equalled the expense of publication. We consider it of great value to the Institute.

The Interscholastic Competition was inaugurated two years ago but it has not given the results hoped for. Owing to the very great interruption in the regular work caused by the preparation of the drawings the Department has decided to withdraw from this year's competition.

While the work of the Department is seriously interfered with by the crowded quarters occupied, it is recognized that only the removal to the new building on the new site can furnish relief.

There is one recommendation, made last year, which we desire to repeat, that of the extension of opportunities for evening work in the Department by opening the library from seven to ten to all students of the school, the work, however, to be limited

for the evening hours to research work in Design and to reading and study in connection with Architectural History and the History of European Civilization and Art courses. It is necessary to make this restriction in order not to annul the policy of not affording facilities for evening work in the drawing rooms in Design during the second and third years. We are more than ever impressed with the wisdom of this recommendation, and feel that in thus giving our students the fullest opportunities for the study of their chosen profession we are only keeping abreast of what is being done in other well-known Schools of Architecture.

Mr. John H. Scarff and Mr. Thomas H. Mace, Jr., the successful competitors in the 1912 and 1913 competitions for the Traveling Fellowship, are both abroad. Through the action of the Executive Committee this year's Fellowship is assured, and the Department hopes that it will not be thought unduly persistent when it repeats the urgent appeals of the past years in asking that action be taken that will definitely fix this feature as an annual event. As was stated last year, the success of the advanced course in Design is largely dependent on the ability to offer such a prize, and the fact that it was a fixed annual feature would, I am sure, be very conducive in influencing students to select the Institute for advanced work in preference to other schools. The Department therefore again urges in the strongest manner action by the Corporation on those lines. It also renews the recommendation made last year that a provision be incorporated in the conditions governing the award of this Fellowship making it obligatory on the part of the recipient to serve the Department as an assistant

in Design for at least a part of the year succeeding his return at a salary to be fixed.

Professor Lawrence reports as follows with reference to the Option in Architectural Engineering:

"There are forty-three students registered for the Option as compared with forty-one last year. Two of these are candidates for the Master's degree, so that the number of undergraduates remains the same as last year. They are divided among the classes as follows: senior, six; junior, sixteen; sophomore, nineteen.

It is gratifying to find that the older graduates of the Option are beginning to advise young men employed in this offices to take the course. Several of the students now in the Option have been so advised, and have come to me with letters of introduction from older graduates.

I have already pointed out in previous years that there should be a permanent Instructor in the Department who could take up the work of Option II in case of my own disability. The point of view of the Option in Architectural Engineering is quite different from that of any of the other Engineering courses at the Institute, and it would be difficult for a new man successfully to carry on the work even temporarily without materially changing the character of the course. As this character is the only real excuse for its existence it seems evident that as an insurance against the annihilation of the course there should be a second permanent instructor in the Option. The opportunities in practical work are so many for the graduates of this course that it is

extremely difficult to find a man with the proper training and experience who at the same time is fitted and willing to teach. When such a man is found I cannot urge too strongly that the Department make every effort to enroll him permanently as a member of our staff.

In accordance with my suggestions of last year, a number of changes have been made by the Faculty in the curriculum of the Option tending to its greater efficiency. The students have been relieved from some of the more special work in Ornament Design, and a much-needed short course in Surveying has been substituted. A course has been added in the first term of the third year in Structural Drawing as an introduction to the professional work in Structural Design, and which promises to have a very beneficial effect upon the latter course. Time was found for this change in the hours set free through the changes in the course in Heating and Ventilation. In passing I must express my great satisfaction with the manner in which the latter course, now being given by the Department of Mechanical Engineering, is being handled.

I wish to urge again the consideration of the degree of "Master of Science in Architectural Engineering" for the graduates of the advanced year in Option II in place of the somewhat misleading degree of "Master of Science in Architecture" that is now given. I believe that for the S. B. degree the "Bachelor of Science in Architecture" is proper for both Options, but in the advanced year of Option II the work is of such a special engineer-character that the broader title is inappropriate and misleading."

JAMES KNOX TAYLOR

REPORT, 1915

While the past year has been an eventful one in the history of the Department, we are most fortunate in being practically unaffected in our work by conditions abroad which have so seriously handicapped the instruction in many of the schools of architecture in this country.

A number of important changes have taken place in the instructing corps. Through resignation the Department has lost five members of its staff. Professor James Knox Taylor, who has been Director of the Department since 1912, resigned last June to take up active professional practice. Three other members, Mr. Ross Turner, Mr. Truman H. Bartlett, and Mr. Samuel W. Mead, whose resignations have been accepted since the close of the last school year, have served the Institute long and faithfully, and will always be remembered with gratitude and affection alike by the graduates who owe much to this skillful guidance, and by their colleagues who have gained much from personal association with them. Mr. Turner had been connected with the Department since 1884 as Instructor in Water Color; Mr. Bartlett had been in charge of the course in Modelling since 1891, and Mr. Mead came to the Institute as Instructor in Design in 1893.

Professor Albert LeMonnier, the fifth member of the staff to leave during the year, was abroad at the outbreak of the war. He has joined the French army in the service of his country.

Mr. Ralph Adams Cram has been appointed to succeed Professor Taylor as senior Professor of Architecture. Professor Cram's reputation as one of the foremost architects in the country is

too well known to require more than mention here. Professor Cram comes to us well informed on matters connected with architectural education, having been for seven years Chairman of the Committee on Education of the American Institute of Architects, and having made during that time a careful study of the architectural schools in this country and abroad. He is Fellow of the American Institute of Architects, President of the Boston Society of Architects, Chairman of the Planning Board of this city, Associate of the National Academy of Design, and Member of the American Federation of Arts. He is Fellow of the Royal Geographical Society, and of the North British Academy of Art, member of the Architectural Association of London, and one of the very few American honorary corresponding members of the Royal Institute of British Architects. Professor Cram brings to us an influence which will broaden the whole educational scheme of the Department, the beneficial effect of which is already making itself felt in the keen enthusiasm of the students and the increased use of our library by them.

Mr. Alexander S. Jenney has been appointed to take charge of the courses in Professional Relations and in Working Drawings and Specifications. Mr. Jenney is a former student of the Department, and a member of the American Institute of Architects. His experience as a teacher, his wide acquaintance with the members of his profession and with men of prominence in the allied professions, fits him particularly well to conduct these courses which come more intimately in touch with the practitioner and his point of view than most of the other subjects offered by the Department.

Mr. Israel P. Lord, a holder of the Rotch Traveling Scholarship, a member of the firm of Codman & Despradelle, and a student in the Department under the late Professor Despradelle, has been added to our staff as an Instructor in Design.

The reappointment, after an interval of two years, of Mr. Lacey D. Caskey, Ph.D., now curator of classical art in the Museum of Fine Arts, to an assistantship in the courses on the History of European Civilization and Art will be of great value, not only in the conduct of those courses but by bringing the students once more into close relations with the work of the Museum.

The number of students this year is the largest in the history of the Department; it exceeds the previous largest attendance over twenty-two percent. We have at present a total enrollment of one hundred and sixty students in the second, third, fourth, and graduate years. Of this number thirty are special students not working for the degree of the Institute. The total number divided among the different years is as follows: Graduate-year, fourteen students, including three candidates for the Master's degree in Architecture, and one in Architectural Engineering; Senior year, forty-two students, including twenty-two candidates for the Bachelor's degree in general Architecture, and eleven in Architectural Engineering; Sophomore year, fifty-three students. It is interesting to note that twenty-five students in the Department already hold college degrees, and thirty-eight others have spent one or more years in college before coming to us.

The unusual influx of students is overcrowding our drawing and recitation rooms, and exceeds the number that can be accommodated comfortably in our present quarters. Not only are we badly cramped for floor space but the ventilation of the rooms is inadequate to care for the increase in the number of students occupying them. It has been found necessary to cut our exhibition room in halves to provide an additional drawing-room, thus diminishing the efficiency of a most important factor in the instruction and sadly handicapping the jury in their judgments of the problems in Design. It has also been necessary to separate the graduate students in Design from those in the undergraduate years, thereby losing to a large extent the very beneficial influence exerted by the more mature students on those in the earlier years.

The course scheme has been carefully studied and revised during the summer, the main object sought being to bring more closely into relation with one another the courses in Design, Architectural History, and the History of European Civilization and Art. These subjects, together with the course in Philosophy of Architecture, form a group which should be more intimately associated in the minds of the students. Under the old schedule this was not so; the two historical subjects extended only through two years, and were given independently of one another and of the courses in Design. Under the new schedule they begin with the work in Design and run more or less parallel to it and to one another through the entire course. Occasional lectures given by Professor Cram, and his course in the Philosophy of Architecture,

will further emphasize the relation between these subjects, and show that architecture is the logical product of a civilization, and its masterpieces the records of the highest art and culture of a people.

The course in Water Color has been brought into closer relation to the work in Freehand Drawing under the theory that Water Color is but one medium of expressing values in drawing, and the study of its use should be based upon the same broad principles that underlie the use of charcoal, the pencil, or the pen. Professor Brown, who has already met with such pronounced success in teaching Freehand Drawing, will be in charge of the course in Water Color.

Modelling in Clay has been omitted from the curriculum of the Department. It was originally introduced in the belief that in dealing with the solid mass of a model, the student would be led to think in three dimensions and would apply the habit thus formed not only to his work in clay but to his work in Design as well. With the comparatively short period that could be devoted to modelling, however, so much time was used in acquiring facility in handling the clay that it is very doubtful if the end sought was really accomplished. It is believed that the ability to visualize in three dimensions can much more easily be taught in the time at our disposal by perspective studies. With this object, courses in Applied Perspective have been introduced in which the student will be expected to study the actual appearance from different points of view of the design which he draws in plan and elevation.

The course in Professional Relations already mentioned as being under the charge of Mr. Jenney, is a development from the former course in Business Relations. It will present to the members of the graduating class, by a series of conferences extending through the entire year, a view of the different relations which an architect must have to his own profession, to his client, to the law, and to the members of allied professions and arts. In connection with Mr. Jenney's work men of prominence in various lines will be invited to lecture before the class from time to time. The following lectures have already been given: "Office Accounts", by Mr. W. Stanley Parker; "Relation of the Architect to the Landscape Architect", by Mr. A. A. Shurtleff; "Relation of the Architect to the Consulting Engineer", by Mr. J. R. Worcester; and the following gentlemen have accepted invitations to address the students: Mr. R. C. Sturgis, President of the American Institute of Architects, on the "Relation of the Architect to the American Institute of Architects"; Mr. J. R. Coolidge, Jr., President of the Boston Chamber of Commerce, on the "Relation of the Architect to the General Public"; Mr. W. H. Sayward, Secretary of the Master Builders' Association, on the "Relation of the Architect to the Contractor"; Mr. L. C. Newhall, President of the Boston Architectural Club, on the "Relation of the Architect to the Junior Organizations of His Profession."

The revision of the schedule has been accomplished with practically no change in the balance between the main groups of subjects, and without modification of the time occupied by the nonprofessional courses.

A decided improvement has been made this year in the method of recording the students' work in Design by the introduction of the point system of marking. This system is in use in many of the other architectural schools, and has been adapted to conditions in our own Department. Numerical values, or points, are given to each problem in accordance with the mention it receives at the judgment of the problem, a certain number of points being required in order for the student to advance from one grade to another. Only those drawings which receive mention or are "placed" are given numerical values. Thus a student will be unable to advance from one grade to the next higher, even though all the required problems have been submitted, unless the quality of the work presented meets the minimum satisfactory standard. On the other hand, a brilliant student may advance from one grade to the next as soon as the required number of points is obtained; but no student will be allowed to advance beyond the grade in which he is registered unless the general average of his work outside of Design is satisfactory. The requisite number of points for advancement from each grade has been fixed so that an average student can complete one grade in one year.

It is the intention of the Department to invite a number of practising architects to act as a permanent jury to assist in the judgments of the problems in Design.

An interesting experiment is being tried during the first term of the present year of taking in the Junior and Senior years problems in Design jointly with the Architectural School of Harvard University and the Boston Architectural Club. The pro-

grams will be the same in all three schools, the instruction in each school will be independent of the others, and the final judgments of the problems will be made for each school separately in accordance with its own methods and standards. Joint exhibitions will be held in which the work as a whole may be studied. The plan should act as a stimulus to the students. Every effort has been made to eliminate the undesirable element of competition between the schools, which finally proved such an unsatisfactory and undignified feature of the Interscholastic Competition, and largely on account of which it has been discontinued.

It is gratifying to note the continually increasing interest of the American Institute of Architects in the architectural schools throughout the country. At the convention of the Institute to be held in Washington in December there will be an exhibition of school work in which ten of the leading institutions offering courses in architecture will be represented, including our own Department. The drawings will be hung upon the walls of the convention room, and should invite interesting and helpful discussions from the delegates.

The Department was represented at the second meeting of the Association of Collegiate Schools of Architecture which was held at Columbia University on December 27, 1913. Delegates were present from the Universities of California, Columbia, Cornell, Harvard, Illinois, Michigan and Pennsylvania; from the American Institute of Architects, and from the Society of Beaux-Arts Architects of New York. The meeting was most successful, and showed plainly the great value of such conferences between the schools.

The Department proposes this year to discontinue the publication of the Technology Architectural Record as a quarterly, and to publish in its place, under the same name, a single issue which shall serve both as a year-book and as a circular of the Department.

The Department has received the following gifts during the year: Fifty lantern slides of furniture and decoration of the Louis XV period, from Mr. W. T. Aldrich; fifty-five lantern slides of modern American buildings, from the Boston Society of Architects; twelve lantern slides of European interior decoration, from Mr. W. W. Bosworth; a number of photographs from Professor Charles R. Cross; and several books from interested friends. Professor Edmund S. Campbell, a graduate of the Institute in 1906, now in charge of the course in Design at the Armour Institute of Technology in Chicago, has presented the Department with a very beautiful framed water color. Mr. Guy Lowell, with his usual generosity, has given the Department the fees for three lectures delivered before our students, with which to purchase material for our library.

The 1914 Traveling Fellowship in Architecture entitling its holder to one year of travel and architectural study in Europe, was awarded to Mr. Louis C. Rosenberg. Owing to the unsettled condition of affairs abroad during the early summer, Mr. Rosenberg was advised to delay his trip, which has now been postponed indefinitely.

In January of last year the Department was informed through Professor LeMonnier that the Société des Architectes Diplômés par le Gouvernement Français had placed at our disposal two medals, one of gold and one of silver, to be awarded in competition in Design. This was, we believe, the first instance of an American school of architecture receiving recognition in this particular form. It may be considered as a graceful acknowledgement of the fact that since its inception some forty years ago Technology has adopted the method and the spirit of its instruction in architecture from those of the Ecole des Beaux-Arts, and has had two distinguished graduates of that school, Professor Létang and Professor Despradelle, at the head of its courses in Design. The gold medal was awarded to Frank S. Whearty, the silver medal to Ernest Hayward.

The Rotch Prizes were awarded to Frederick H. Kennedy, '14, and to Frank S. Whearty, special student. The prizes of the Boston Society of Architects were won by Philip L. Small and Frank S. Whearty. The prizes were presented at a most interesting meeting of the Society at which the graduating classes of the Harvard and the Technology architectural schools were guests. The Chamberlain Prize, established in 1912 by the Boston Society of Architects in memory of the late William E. Chamberlain, a member of the Society, and a graduate of the Institute in 1877, was available for the first time last year, and was won by Wilfred W. Barrows. The "Class of 1904" prize was awarded to S.M. Spaulding.

WILLIAM H. LAWRENCE

REPORT, 1916

For the Department of Architecture the past year has been one of gradual development. There have been comparatively few changes. Through the resignation of Mr. Eleazer B. Homer we have lost a member of the staff who has been connected with the Department since 1887. Mr. Homer was admitted to the Faculty in 1890; he resigned his professorship in 1901 to take up active practice, but still kept in touch with the Institute by continuing his lectures in Architectural History until the present year. In his place we have secured the services of Professor H. Langford Warren of the School of Architecture at Harvard University, who now has charge of the courses in Architectural History. Professor Warren's reputation as a lecturer on this subject is too well known to require comment. Mr. Russell W. Porter, a former student in the Department, has been added to the staff in Design as instructor for the first term. Miss Ida D. Loring has been appointed Assistant in Architectural History. Dr. Lacey D. Caskey has been appointed Lecturer in European Civilization and Art.

It is with deep regret that mention must be made of the death of two former members of the instructing staff. Professor William R. Ware died at Milton, Mass., June 9, 1915, in his eighty-fifth year. Professor Ware organized the Department of Architecture at the Massachusetts Institute of Technology, the first school of its kind in America, and

acted as its Head from 1865 to 1881. He was widely known as an educator. His keen judgment, his skill, his inspiration and sympathy will always be remembered by his former associated and pupils.

Mr. Ross Turner died at Nassau, Bahama Islands, February 12, 1915. Mr. Turner had been connected with the Department as Instructor in Water Color since 1884. By his kindly help and genial personality he endeared himself to all who had been associated with him.

The registration in the Department remains the same as last year, being one hundred and sixty. There are five candidates for the Master's degree in general Architecture, three in Architectural Engineering; twenty-six candidates for the Bachelor's degree in general Architecture, and twelve in Architectural Engineering. Only nineteen out of the total number are special students not working for the degree of the Institute. Thirty-eight of the students already hold college degrees, and forty-six others have had from one to three years in college before coming to the Institute.

The course scheme adopted by the Faculty in December, 1914, is year by year replacing the old schedule, but will not become fully operative until 1916-1917.

The status of the special student in Architecture has been given careful consideration. Through Faculty action the entrance requirements for such students have been strengthened by the addition of examinations in English and Ancient

History. Most of these students enter at once the second-year courses in Architectural History and European Civilization and Art, and it has been found not unusual for them to be quite unprepared for this work. Pressure is also being brought by the Department to induce the special student to take a sufficient number of related subjects to make his course a broad and rational one.

During the past year the problems in Design taken jointly with the Architectural School of Harvard University and the Boston Architectural Club proved of great interest both to the students and to the members of the instructing staff of the three schools. The joint exhibitions which afford opportunities for judgment, comparison and friendly criticism of the work have been a source of inspiration to all concerned. It is most gratifying that the dangerous element of competition among the schools was successfully eliminated. The experiment proved so satisfactory that the practice is being continued with little change except that the number of problems will be somewhat reduced.

The point system, which was introduced for the first time last fall, has been slightly modified in the light of experience gained during the year. The number of points required for advancement from one grade of Design to the next higher has been increased so that only the really brilliant men will be able to advance before the end of the school year.

No student who has a failure or deficiency incurred in a previous year will be recommended for advancement until such failure or deficiency has been made up and until his records in all subjects approved for the term in which advancement is desired are satisfactory to the instructors in charge.

It is believed that thus safeguarded the point system will have a tendency to improve the general standing of the student in his non-professional work.

The Technology Architectural Record, formerly published as a quarterly, was issued last year as an annual. It is serving admirably the double purpose of a year-book and circular of the Department.

During last summer a very generous gift of fifteen thousand dollars was made to the Department by Mrs. Harriet A. Henshaw, of London, in memory of her brother, the late Frank W. Boles. The gift will constitute the Frank Walter Boles Memorial Fund. Its income, which will be available at once, will be devoted to the purchase of fine art material suitable for supplementing the instruction in Design. The resources of the Department for such purposes have been very limited, and the gift will prove most valuable.

The Department has also received during the year a collection of about one hundred and fifty lantern slides from the Boston Society of Architects, and thirty slides from Mr. Guy Lowell.

In the report of last year mention was made of the increasing interest of the American Institute of Architects in the schools throughout the country. At the annual convention of the Institute held in December of last year a student-medal was created, to be presented each year at each of the schools having membership in the Association of Collegiate Schools of Architecture to the member of the graduating class having the best record for his entire course. The medal for the Massachusetts Institute of Technology was awarded to Mr. Henry P. Sabin.

The 1915 Traveling Fellowship in Architecture was awarded to Mr. William Tallman. The Rotch Prize for the classified student was presented to Mr. Henry P. Sabin; the Rotch Prize for the special student was withheld there being no eligible candidate. The Boston Society of Architects' Prizes were awarded to Mr. Elwin P. Norberg, classified student, and Mr. Ludvig T. Bengtson, special student. The Chamberlin Prize was won by Mr. Donald des Granges; the F. W. Chandler Prizes by Messrs. William Tallman, Harry C. Stearns, James M. Brown, Sumner M. Spaulding, Thomas D. Brophy; the "Class of 1904" Prizes by Messrs. William W. Dodge, Jr., and Arthur L. Guptill.

WILLIAM H. LAWRENCE

DEPARTMENT OF ARCHITECTURE
INSTRUCTING STAFF

R.Ware, S.B., 1865-81. Professor of Architecture, in charge of the Department. (Died June 9, 1915)

1869-71 F.W.Chandler, Assistant in Architecture
 1869-70 T.O.Langerfeldt, Instructor in Water Color
 1869-70 Virgil Williams, Instructor in Crayon
 1870 Alexander Johnson, Instructor in Modelling
 1871-78 Eugène Létang, Assistant in Architecture
 1878-80 " " Instructor " "
 1880-84 " " Associate Professor of Architecture
 1877-79 George F. Underwood, Assistant in Architecture

M.Clark, A.B., 1881-88. Professor of Architecture in charge of the Department (Died

1881-82 W.P.P.Longfellow, Adjunct Professor of Architectural Design
 1883-84 E.P.Treadwell, Lecturer on the Practices of Decorative Painting
 1883-84 Arthur Rotch, Lecturer on the Theory of Decorative Painting
 1883-85 Edward F. Ely, Instructor in Architecture
 1884-91 Eugène Létang, Associate Professor of Architecture
 1884 - Ross Turner, Instructor in Water Color
 1884- C. Howard Walker, Instructor in History of Ornament
 1885- C. L. Adams, Instructor in Drawing
 1885-86 Emil Carlsen, Instructor in Water and Sketching
 1885-86 G. King, Jr., Assistant in Architecture
 1886-87 Thomas O'Grady, Jr., Instructor in Architecture
 1887-88 Dwight H. Perkins, Instructor in Architecture
 1887- E. B. Homer, Instructor in Architecture
 1887- D. A. Gregg, Pen and Ink Drawing
 1887-88 C. E. Hills, Life Class

W.Chandler, 1888-1911, Professor of Architecture, in charge of the Department.

1891-92 Eugène Létang, Professor of Architectural Design (Died Nov., 1892)
 1884- Ross Turner, Water Color
 1884-89 C. Howard Walker, Instructor in Design and Ornament
 1889-93 " " " " " " " " Water Color
 1893-99 " " " " " " " " Lecturer in History of Ornament
 1901- " " " " " " " "
 1889-91 W. H. Kilham, Instructor in Architecture
 1891- T. H. Bartlett, Instructor in Modelling
 1891-96 W. H. Lawrence, Instructor in Architecture
 1896-01 " " " Assistant Professor of Architecture
 1901-09 " " " Associate Professor of Architecture
 1909- " " " Professor of Architectural Engineering
 1885- C. L. Adams, Drawing
 1887- D. A. Gregg, Pen and Ink Drawing
 1887-90 E. B. Homer, Instructor in Architecture
 1890-95 " " " Assistant Professor of Architecture
 1895-01 " " " Associate Professor of Architecture
 1901- " " " Lecturer in Architectural History
 1888-89 F. A. Moore, Instructor in Architecture
 1889-91 W. H. Kilham, Instructor in Architecture

INSTRUCTING STAFF
(cont'd)

1892-94 Robert S. Shedd, Assistant in Architecture
 1893-94 Desiré Despradelle, Associate Professor of Architecture
 1894-97 " " Professor of Architecture
 1897- " " Rotch Professor of Architecture
 1893- Samuel W. Mead, Lecturer in Architectural Design
 1894-95 W. Felton Brown, Assistant in Freehand Drawing
 1895-11 " " " Instructor " " "
 1895-03 Harry W. Gardner, Instructor in Architecture
 1903-09 " " " Assistant Professor of Architecture
 1909- " " " Associate Professor of Architecture
 1898-02 Alice G. Loring, Librarian and Assistant in Arch. History
 1899-00 T. H. Skinner, Lecturer in Architectural Design
 1899-01 W. H. Kilham, Lecturer in History of Ornament
 1899-11 Guy Lowell, Lecturer in Landscape Architecture
 1900-08 John G. Jack, Lecturer in Horticulture
 1900-02 R. C. Sturgis, Lecturer in English Architecture in connection with Landscape Gardening
 1901-03 Winthrop Alexander, Lecturer on Modern Systems of Fireproofing
 1903- A. H. Cox, Lecturer in Architectural Design
 1908-10 A. H. Tashjian, Lecturer on Reinforced Concrete Construction
 1909-10 W. F. Dolke, Jr., Instructor in Architectural Engineering
 1910-11 H. E. Fowler, " " " "
 1910- E. F. Rockwood, Lecturer on Concrete Design
 1911-12 M. M. Cory, Instructor in Architectural Engineering
 1911-12 G. H. Ingraham, Lecturer on Specifications & Work. Drawings

D. Despradelle, Professor of Architecture, Director of the Department
 May - Sept. 1912. (Died Sept. 2, 1912)

James Knox Taylor, 1912-1914, Professor of Architecture, Director of
 the Department (Died Aug. 27, 1929)

1884-14 Ross Turner, Water Color (Died Feb. 12, 1915)
 1885-14 C. L. Adams, Drawing (Died Sept., 1914)
 1884- C. H. Walker, Lecturer in History of Ornament
 1887-13 D. A. Gregg, Pen and Ink Drawing
 1901- E. B. Homer, Lecturer in Architectural History
 1891-14 T. H. Bartlett, Modelling
 1893-14 S. W. Mead, Lecturer in Architectural Design
 1903-12 A. H. Cox, " " " "
 1909- W. H. Lawrence, Professor of Architectural Engineering
 1909- H. W. Gardner, Associate Professor of Architecture
 1911- W. Felton Brown, Assistant Professor of Freehand Drawing
 1912- Clarence E. Morrow, Instructor in Arch. Engineering
 1912-13 Eugene J. A. Duquesne, Professor of Architectural Design
 1912-1913 Edgar I. Williams, Instructor in " "
 1913- " " " Assistant Professor of Architecture
 1913-14 Albert LeMonnier, " " " "
 1913-14 William T. Aldrich, Instructor in Architectural Design
 1913- Charles Everett, " " " "
 1910- E. F. Rockwood, Lecturer on Concrete Design







