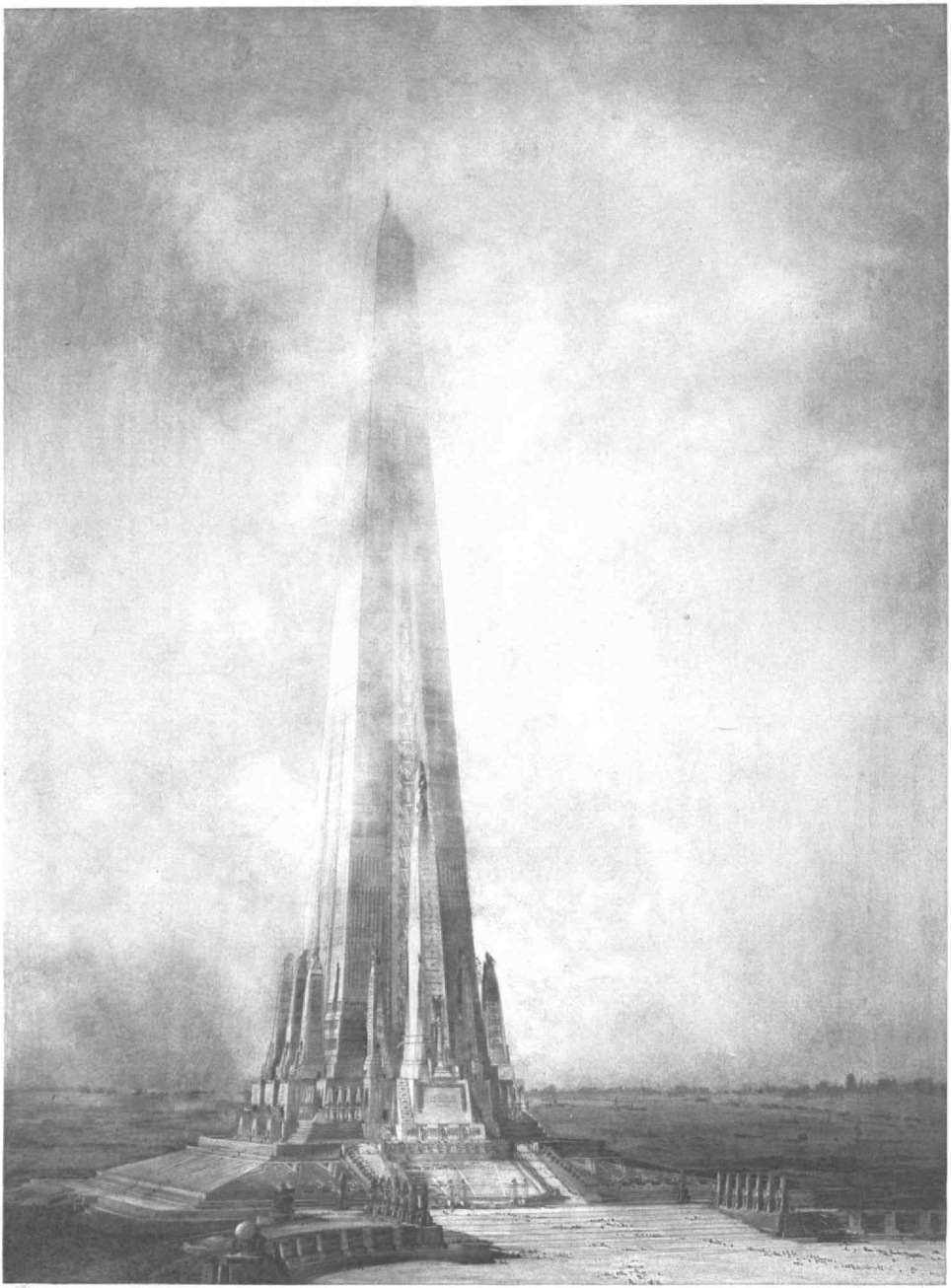

Photogravure

John Andrew & Son

The Technology Review

Vol. II. OCTOBER, 1900 No. 4

THE BEACON OF PROGRESS

In the last number of the Review (page 257) it was stated that the Paris Salon of 1900 had awarded the first medal, in the Department of Architecture, to Mr. Desiré Despradelle, Rotch Professor of Architectural Design in the Massachusetts Institute of Technology, for a monument fifteen hundred feet high, to be called "The Beacon of Progress." Since then the French government has purchased two of the smaller drawings for this monument, to be hung permanently in the National Gallery of the Luxembourg. This is a rare honor, only a few architects — among them Dubon, Labrouste, Viollet-le-Duc, and Paulet — having been thus distinguished. The Review is fortunate in being able to reproduce this remarkable design, in regard to which Professor Despradelle writes as follows: —

When visiting the United States for the first time in 1893, I proceeded directly to Chicago, where I was struck by the splendor of the Exposition as well as by the marvellous energy of a people capable not only of developing material things to a superlative degree, but of an artistic manifestation of such a high order. The Universal Exposition at Chicago was not alone the first great attempt of the kind in the United States: it at the same time

showed to the Old World the aspirations of a people capable of the most daring enterprise, yet paying the utmost deference to outward beauty as the setting and ornament of civilization.

The impression of the happy effect of the White City so boldly erected on the shores of Lake Michigan haunted me. It seemed that such a manifestation should not pass without leaving some trace, and the idea of commemorating this noble initiative was born. I immediately began the study of a monument as a memorial of the Chicago Exposition. This, after some months, resolved itself into the expression of a still more comprehensive thought, one of a national character, both to fix the memory of the vanished White City and to glorify a great people. All the forces which have shaped the American nation marshalled themselves in the form of a glorious monument, the symbol of progress and grandeur. The history of Rome was inscribed upon Trajan's column: that of America should be written at the base of a column fifteen hundred feet in height, of a "Beacon of Progress," a monument typifying the apotheosis of American civilization, to be erected on the site of the World's Fair at Chicago.

The studies for this gigantic undertaking, covering a period of six years, were developed in Boston and Paris. The relative scale and environment of space were first considered in determining the proportions of the monument. This done, it was no easy task to combine the decorative elements of architecture with a colossal pyramid of such proportions; to avoid the brutality of so formidable a mass of stone in order to arrive at a result so happy that the unanimous verdict of the jury of the Salon of 1900, which awarded it the first medal in the section of architecture, should be that "it is at once noble and graceful, and the thought of glorification is clearly expressed."

All civilizations of the past have their monuments, their national manifestations, whether of religious faith or of conquests, in imperishable stone,— pyramids, temples, towers, triumphal arches, columns, and cathedrals. To America at the dawn of the twentieth contury is dedicated the " Beacon of Progress," a sort of glorious Pantheon offered as a gracious gift by a passing generation to the generations to come.

The monument is supposed to be placed on Jackson Park, the site of the World's Fair, facing Lake Michigan. It is to be connected with the principal roads and avenues of the park, the chief access being from the lakeside by a maritime boulevard. A sort of esplanade precedes the access to the principal terraces and platforms, from which can be read the different facts in American history, represented by sculptures in groups of statuary, bas-relief, etching, lettering, names of eminent men who have made the nation strong and great, a triumphal *cortège* of industries, science, arts, commerce, etc.,— in short, sculptured trophies of all descriptions. The States and Territories are represented by female figures hand in hand, symbolizing the indissoluble chain of union. Constellations of stars indicate their number.

In the place of honor, in the axis of the monument, are written the names of the thirteen original colonies; and upon the " Stela," guarded by the eagle, is the goddess of the twentieth century, the modern Minerva, flanked by ranks of lions roaring the glory of America.

At the base is a great amphitheatre, forming a sort of sanctuary where orators, philanthropists, and *savans* may deliver inspiring words before the altar of their country. In the interior, elevators conduct to different stories and balconies, as well as to the powerful beacon placed fifteen hundred feet above the ground.

In the lake itself, facing the monument on the other side of the esplanade, is to be a basin of vast dimensions for regattas, with seats for one hundred thousand persons.

A brochure will be issued, giving a more complete explanation of the monument, together with the principles of its construction and the expense.

THE LIBRARY

A few years ago it was not unusual to have some one of the older graduates come into the office of the Librarian, and remark: "You have been changing things here. This used to be the Society of Arts room." Then he might go on and speak of the wonderful enthusiasm of President Rogers, and he might relate how, when the society lacked other subject for discussion, the President would sometimes take a little stone from his pocket, and, using this as a text, deliver offhand a discourse that would hold the interest of the members of the Institute for an hour or more.

That room of so much historic interest has undergone another change. Where once stood the little glass cage, called the Librarian's office, is now the Committee Room. The partition that separated off a part of the room for the use of the Secretary is removed, and the whole is now the seat of administration. The blackboards, brought to view again by the removal of the library bookcases, have been painted over, and the transformation is complete.

Now the visitor, who, returning for the first time to view the scenes of his early struggles with "Gen. Biol." and "Comp. Anat.," in the old room at the end of the Rogers corridor, misses the familiar odor of alcoholic specimens, is

Institute of Technology.

surprised not to find himself in a maze of glass cages, and looks in vain for an imposing array of steam sterilizers, incubators, and reagent bottles.

In place of the once familiar features of the Biological Laboratory he finds a stately hall, its walls colored in subdued tints, its roof supported by Corinthian columns, its furniture of mahogany, and on all sides open shelves containing books in orderly array. This room, originally intended for the Museum of Arts, is now the General Library. Upon entering it, one finds upon the left hand shelves filled with encyclopædias, dictionaries, and other works of reference. These rest upon a tier of drawers for atlases, and the top of the atlas case forms a projecting shelf upon which the heavy books may be consulted without removing them to the tables. Beyond this is a circular desk enclosing a low opening in the wall which leads into what used to be the mineralogical laboratory, of which a part is now the Librarian's office. On the other side of the desk is the general card catalogue, containing in one alphabet the titles of all the books in the Institute arranged according to authors. If one wants to know the title of any book not to be found in the catalogue, on the adjoining shelves are printed lists of everything published within recent years in the four great book-producing countries of the world,— England, the United States, Germany, and France. Upon the shelves to the right of the door are to be found the current periodicals of a literary or popular character; and over them on a large bulletin board are pinned maps illustrating the march of current events, lists of prescribed readings, notices of public lectures, and the like. The books on Military Science are at the west end of the room, and near them a collection of the publications of the Institute, its officers and graduates; while the east

end is devoted to American, English, German, and French literature. In another place are the books on the science of language. In the galleries are kept books which are less frequently used. In one are the school and college catalogues and educational reports; and the bound volumes of periodicals are kept in the other.

But the General Library, with its seven thousand volumes, is only one of the eleven libraries of the Institute, which contain altogether over fifty thousand volumes and more than fifteen thousand pamphlets and maps.

Our system of departmental libraries is the result of a gradual growth from small beginnings. At first the heads of the various departments bought such books as they needed from time to time for purposes of instruction. In this way about eighteen thousand volumes had accumulated, when, in 1889, it became evident that more systematic attention was needed for this branch of the work; and Clement Walker Andrews, A.M., Instructor in Chemistry, was appointed Librarian of the Institute. To him was delegated the duty of purchasing all books for the Institute upon requisition of the heads of the teaching departments; and he was intrusted with the cataloguing, arrangement, and general supervision of all the libraries.

During the first decade of the existence of the Library as a distinct executive department the number of books has increased threefold. The mean annual increase for the ten years ending September 30, 1899, was 3,260 volumes.

It is needless to say that the office occupied by the Librarian and his Assistant is one of the busiest places in the Institute. Librarians may come and librarians may go, but the ebb and flow of books through this small room never ceases. Before one lot of books can be despatched to the libraries, another wave of literature is tumbled upon them.

Each book, when it arrives, is examined to see if it is one that has been ordered. If found correct, the bill is recorded and approved; and the book is entered in the record of accessions, and receives the stamp of the Institute. Then the catalogue cards are written, often several being required for a single book. These are copied, the original cards are filed in the general catalogue, and the copies are sent, with the books, to the departmental libraries. During the last few years the new books for the Physical, Chemical, and Engineering Libraries have been catalogued by the assistants in charge of these libraries. Thus a certain amount of work has been transferred from the General Library, but it still requires the supervision of the Librarian.

But this is not all. About eight hundred serial publications — dailies, weeklies, monthlies, quarterlies, and annuals — are received regularly. Each issue as it is received is recorded, and sent to the library where it is to be kept. When the volumes are completed, the separate parts are gathered together, arranged for binding, directions written and recorded, and finally sent to the binder. When the bound volumes are returned, they are examined and recorded again, the bills are approved, and the books are entered in the record of accessions, and catalogued like new books. While all this is going on, orders are being issued for new purchases; and, moreover, the Librarian is expected to keep himself informed of all that is published in English, German, and French, and to bring to the attention of heads of departments all new books that may be of interest to them.

The work of the Librarian has its pleasures and its trials. It is pleasant to instruct the gentle Freshman in the use of the Library. Generally, he asks where he can find the book that he wants. Sometimes he asks if there is "any kind of

a catalogue" by which he can find it. In any case he is referred to the general card catalogue, for a knowledge of the use of this instrument is regarded as an important part of his education. Frequently he returns with the query as to where he can find some such number as this: "12+627p. 106 il. 15 pl. O."; and his surprise and gratitude are truly delightful when he finds that, while these figures describe very accurately the number of pages, illustrations, plates, and the size of the book, the number by which he can find it upon the shelf is something quite different and very much simpler. But in the midst of the rush of work at the beginning of the term, when everything is being hastened to the utmost, it is painful to be interrupted by a young laboratory assistant with his S.B. hardly dry, who desires, with a lordly air, that this or that be hurried up. And it is still more painful to have a member of the Faculty come in, and ask, with evident expectancy of a negative answer, "Is there *any* way that you can tell whether such and such a book is in the Library?" Then, as we point to our catalogue of forty-five thousand cards, we wonder whether much of our work is of any use, after all.

The books in all the libraries of the Institute are arranged upon one system. This is the Dewey Decimal Classification, not invented by our genial professor of economics nor by the hero of Manila Bay, but by the well-known librarian of the New York State Library. It is a system that is very puzzling to the beginner, but it is quite simple when once the principle is understood. The whole realm of human knowledge is divided into ten branches. Each one of these is separated into ten divisions, which are subdivided by ten again; and so on to any degree of minuteness that one wishes. General works are given the