

PALATIAL HOME AND WORKSHOPS FOR NEW YORK ENGINEERS.

Plans for Engineers' Club and Engineering Building to be Erected by Andrew Carnegie—Luxurious Libraries, Living Quarters, and Assembly Halls.

WHEN it became known that Andrew Carnegie had authorized "the erection of a suitable building in New York City to contain the libraries, assembly halls, offices, meeting and other rooms of the following bodies: American Society of Mechanical Engineers, American Institute of Electrical Engineers, American Institute of Mining Engineers, and a building contiguous for the Engineers' Club," it was generally understood that the philanthropist had announced one of his greatest gifts.

With the materialization of his original scheme, to the point where actual plans have been put on paper, the architects chosen, and work begun, what has been before a matter-of-fact acceptance of the

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A glance at the perspective will show that this height reaches approximately to the beginning of the fourth floor of the Engineers' Club, each of the three lower stories being 19 feet in height. Thus the building is sure of light in abundance for the upper nine stories for all time to come.

The building will cover the entire plot to the rear line, with the exception of a court on the west side of the structure. It is to be twelve stories in height, with a basement and a sub-basement besides. Perhaps the most unusual feature of the entire building, filled, as it is, with innovations, is the fact that for the first time since

importance of his donation to the engineering arts now becomes astonishment on the part of the layman that such a vast undertaking is to be paid for by one man.

It is doubtful if anywhere in the world there will be two buildings more perfectly fitted for their respective needs and more artistic in conception and execution than these two structures.

The programme of competition for the selection of an architect for the Engineering Building and the Engineers' Club followed roughly the fundamental requisites laid down by Mr. Carnegie, whose main thought was to have erected a structure in two parts, similar in exterior treatment and properly connected in the spirit of architecture, at the same time absolutely separate and distinct in the interior arrangement, and above all simple and dignified in the matter of decoration. His requirements were few, and he interjected no others during the entire time of the preliminary work, leaving the several organizations absolutely free to carry out his ideas in their own way.

To this end a committee of three members of each society was appointed to select and employ an architect to prepare plans and specifications and to obtain proposals for and to have charge of the erection of these buildings. Thus there were four committees representing the four bodies concerned, and a head committee of four, with Charles F. Scott as Chairman.

It was decided that the competition should be mixed, and Prof. William R. Ware was selected as professional adviser to assist in making the awards.

The following six architectural firms accepted the invitation of the committee to submit designs in the competition: Ackerman & Partridge, Carrere & Hastings, Clinton & Russell, Lord & Hewlett, Palmer & Hornbostel, and Whitfield & King. To each of these firms the committee paid \$1,000 as compensation for the expense of preparing plans for both buildings. Whitfield & King, to whom the contract for the Engineers' Club was awarded, are not entitled to the extra \$1,000, this amount being deducted from the final commission.

Besides these six, all architects anywhere in the country, who had been in actual practice for two years or more before July, 1904, and who proved that their experience was sufficient to warrant their competing, were invited to submit designs. Of these four received equal prizes of \$400 each for the best design of both buildings. There were twenty-eight of these "outsiders" who competed, and one of them was chosen to build the Engineering Building. He is Herbert D. Hale, a Boston architect, whose work was considered superior to that of any of the six firms which had received the first invitation. One New York firm, Trowbridge & Livingston, received one of the four prizes.

Cost of the Structure.

The money available for the two buildings, exclusive of decorative carving, sculpture, and painting, and of furniture, except the seating of the large auditoriums, and exclusive also of the cost of removing the buildings now on the ground and of any further excavation which may prove necessary as the work advances, is about \$1,000,000. The entire cost will exceed \$2,500,000, of which \$1,500,000 is a gift from Mr. Carnegie.

It is interesting to note that the lavishness of expenditure extends even to the side and rear walls of both buildings. The committee insisted that they should be conformable in treatment to the front walls, so that where they rise above the other buildings surrounding them, they shall look like a completed structure and not a section of an unfinished block.

The problem before the competing architects was by no means a simple one. The peculiarities of the site were no small item of discouragement in themselves. Roughly speaking, the plot on which the two buildings are to stand is midway on the block bounded by Fortieth and Thirty-ninth Streets, Fifth and Sixth Avenues. The Engineering Building is to front on Thirty-ninth Street and the club building on Fortieth Street. The latter thus will have an unsurpassed outlook over Bryant Park and the new library.

The difficulties are best understood when it is known that after a selection of architects had been made their plans were by no means accepted as they stood. As a result, although the selection was made early in July, it is not until now that the corrected, final drawings are ready for inspection.

The Engineers' Club.

Whitfield & King, the successful firm, have prepared a design for the Engineers' Club which immediately strikes even the layman as sumptuous in the extreme. It is doubtful if anywhere in this country so luxurious a club dwelling exists.

The Engineers' Club will stand on a plot having a frontage of 50 feet and a depth of 98 feet 9 inches, on the south side of West Fortieth Street. The private dwellings, Nos. 32 and 34, are now being removed. The top of the adjoining building on the east is less than 60 feet above the curb, while that on the west is 58 feet in height.

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elevators were first used a building is to be erected in New York City in which a staircase is to be made a practical feature of the interior and is to be used to the exclusion of all other means of ascent between the first three stories.

Staircase of Monoliths.

The staircase will be entirely of marble, with each step a monolith seven and a half feet long. The rises will be low, in order to facilitate the ascent. It will occupy the entire central portion of the building on the west side, and will open off the main hall on the ground floor in two highly ornamental, curving sections, which will meet in a big landing half way up to the next floor. Over the top of the third landing, on a level with the fourth floor of the building, a magnificent dome of colored glass will light the stairway for its entire length. Above this dome the space will be left clear to the sky, the space above forming the only court the building will have.

There will also be service stairs, for use of the club members in case of emergency, to run from sub-basement to roof. Above the third floor these stairs will be the only means of communication between floors other than the elevators. There will be two passenger elevators, each with a capacity for twelve to fifteen persons, which will run from the basement to the roof garden. There will be no entrance to the elevators on the second and third floors, however. A freight elevator will be provided to run through the entire building.

In the sub-basement and basements there will be the boiler and engine rooms, dynamos, pumps, refrigerating plant, elevator machinery, fuel and storage rooms in the former, and in the latter the wine cellar, barber shop, boot-cleaning stands, men's locker, maids' locker, stewards, and store-rooms, main lavatory, and men's toilet.

The main floor is to be constructed so as to impress the visitor at the outset that he has entered a building the like of which has never been built before. By no means the crowning feature, it is at the same time a wonderful sample of the beauty and splendor of the floors above. The entrance will be through huge doors 15 feet wide, the total width of many private houses. Windows 6½ feet wide and twice as high will flood the interior with light.

The reception room, running the width of the building, with a ceiling twenty feet above the floor, will be treated in a simple but effective style, marble predominating. The office will be here, mahogany and marble furnishing the equipment, with a safe built into the masonry of the wall. A feature of this floor will be an enormous coat room, with accommodations for more than 700 wraps at one time.

The main hall, lighted sixty feet above by the colored glass dome, will be square in shape, with the elevators on one side and the grand staircase on the other. It will be surrounded with sculpture from famous hands and will be almost entirely in marble. The stairs at this point will also lead to the basement. Behind them will be telephone, telegraph, and stenographers' booths, as well as a lavatory.

Running behind the elevator shafts, the bar will extend along the east wall, with an entrance out of the reception room in front. It will be connected with the wine cellar by dumb waiters and by the service stairway.

Not until the visitor has passed through the main hall and entered the café, however, will the luxuriousness of this club for scientists be appreciated. In this room, covering upward of 1,500 square feet, running the extreme width of the building and clear of exposed columns, will be two grills, one on either side, where chops and steaks will be cooked over coals in the fashion of a century ago. There will be no kitchen connected with the café, every particle of food being prepared on the grill in full sight of the diner. Windows facing the rear of the Engineering Building will afford ample light. The style of finish in this room is yet undetermined, but it is believed that the walls and ceilings will be covered with mahogany, the ceiling being finished with exposed beams, 30 feet in length.

The second or clubroom floor, reached only by the grand staircase, will be divided practically into two parts. In the front half the lightroom, containing 1,300 square feet and lighted by six big bay windows, will serve as a general lounging place for the members. As in the case of the café, the clear span of 50 feet will be carried without exposed pillars.

The library, in the rear, will be almost as large as the clubroom, and will be lined on all four sides with bookcases running the

full 20 feet from floor to ceiling. The capacity of these cases is about 18,000 volumes.

A lavatory, the elevator shafts, service stairway, and a landing connected by dumb-waiters with the bar below will occupy the remaining space.

The billiard room floor, as the third story will be called, will contain the billiard room in the front half of the building, and in the rear portion the beard room, committee room, and card room. Again a landing behind the elevator shaft will connect this floor with the bar on the main floor, and drinks will be served in the billiard room.

The next six floors will be entirely given over to bedrooms, sixty-six in all. They will be of varying sizes, with a bath attached to each. Besides this there will be a shower bath on each floor as well as toilet rooms.

On the tenth or breakfast room floor there will be the breakfast room, covering 1,000 square feet in area, two private dining rooms, a public lavatory, service rooms, and bar. This floor will have no connection with those below it, and will be served entirely from the floors above.

The banquet hall on the eleventh floor will be the largest room of its kind in the city. The entire floor, except for the necessary service rooms, will be clear of pillars and partitions, and will run the full 90 feet, from front to rear. It will cover about 4,000 square feet. The height of this floor will exceed 20 feet, and will be magnificently finished.

The roof garden will occupy the front half of the roof, a portion of it being roofed with glass. The elevators will run direct to the roof garden. In the rear will be the kitchen, supplying the banquet hall, and the breakfast rooms; refrigerator room, storeroom, housekeeper's rooms, six sleeping rooms for servants, separate service stairs in two parts, one coming up from and the other going down to the service rooms of the banquet hall, making the passage of waiters either way unnecessary, and a big dining room for the servants.

The Engineering Building.

The Engineering or Union Building is to be primarily a workshop, whereas the club is primarily a playhouse. Here the engineers will be at home in the midst of all the latest and most approved mechanical contrivances of the hour. There will be no provision made for the comforts of the members beyond those necessary for the different pursuits to be followed in the various rooms. It will be strictly and grimly utilitarian—every inch of it.

Its exterior will be similar in treatment and material to the club building, marble and Dutch brick forming the walls on all sides. The site comprises the five lots, Nos. 25, 27, 29, 31, and 33 on the north side of West Thirty-ninth Street, giving a total frontage of 125 feet with a depth of 98 feet 9 inches. It is directly behind the plot on which the club building will be erected. Mr. Carnegie owns 23 West Thirty-ninth Street, a private residence, and its height is thus restricted for all time. The building will cover approximately 10,500 square feet.

At the top of the building will be four stories, all alike, to be held for the use of technical, scientific, and engineering societies, which may be invited to make use of them. Below these will be three floors for the accommodation of the offices and other rooms for the three engineering societies, each of which will reserve a floor for its own uses. Each of these floors will be divided as follows: Reception, editorial, counting rooms; Secretary's office, office staff, board and committee, stationery and transactions, and storage rooms. Additional accommodation for the storage of publications and other documents will be a feature of the basement.

Advantage will be taken of the roof spaces in the top floor in furnishing rooms for the making of large scale diagrams and photographic enlargements.

On the floor below the upper seven, the fifth floor, will be the library, containing at the outset the combined collections of the three societies, comprising about 50,000 volumes. There will be shelf room for 400,000 additional volumes. In this connection it is interesting to note that all the books on engineering now owned by the city, and originally intended for the Astor Library, in Bryant Park, will find final lodgment in this library of the Engineering Building.

The room will be 22 feet high, with two galleries running around it. The bookcases will be arranged in three stories, each 7 feet high.

The next two lower floors will be given over to a series of lecture rooms and auditoriums, the largest of which, on the third floor, will have a gallery. This one alone will seat 1,500 persons. The six others will seat from 100 to 600, and are arranged so that they may be thrown into one.

On the second floor there will be an assembly and smoking room for informal meetings. It will also be used for dinners on special occasions, which will be served by caterers from outside. On this floor also will be space for wallcases containing museum collections.

The main floor will be devoted mainly to administrative purposes. Near the main entrance there will be three coat rooms, aggregating 2,200 square feet, capable of taking care of the wraps of 1,500 persons at once. There will also be a women's dressing room on this floor. A Bureau of Information, containing the telegraph and telephone offices, the Post Office, and a sales department for the distributing of the publications of the societies, will be a feature of this floor.

A driveway will run directly through the building on the street level, and all deliveries and shipments will be made at the court in the rear. This will also serve the Engineers' Club.

The floor of this driveway will form the roof of coal pockets in the basement holding 300 tons. All the various machines will be in the basement and sub-basement, the ventilating plant being especially comprehensive.

In the auditoriums at the lecture tables there will be furnished gas, water, compressed air, and electrical current to make more interesting the scientific lectures.

Three elevators will be sufficient to care for the entire building, the amount of access for visitation being much less than is the case in the ordinary office building.

On the first-floor level a bridge will connect this building with the café of the Engineers' Club.

It is expected that the two structures will be completed early in 1906.

"A HERB FOR EVERY PAIN."

IN Bethune Street, where Greenwich Village seems to tie itself into a knot of tangled thoroughfares, there is an old-time herb shop. Fifty years or so ago there were many of them in New York, but there are very few now. The sign over the door reads "A herb for every pain." On the shelves and counters are three hundred kinds of herbs for the cure of human ills, and bottles with fluid extracts made from nearly half of that number, or combinations of them. Customers with old-fashioned ideas about health and sickness go there for bugle-weed for consumption, sumach for sore throat, wintergreen for rheumatism, and extract of oats to cure drunkenness. At this season of the year there is a constant call for catnip, sassafras, chamomile, horehound, yellow dock, cherry bark, and mandrake. Boneset tea is brewed as a cure for colds and served hot in little china cups. Lobelia is sold as an emetic for persons living in the neighborhood have taken poison, either by accident or otherwise. Some of the herbs are deadly poisons, and are sold under the same restrictions as other poisons. Strangers to the herb doctor are served with caution.