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DOORWAY IN BANKING ROOM—BANKING HOUSE OF J. P. MORGAN & CO., NEW YORK CITY. TROWBRIDGE & LIVINGSTON, ARCHITECTS.

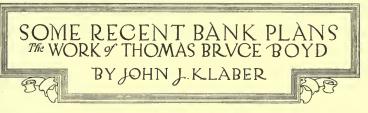
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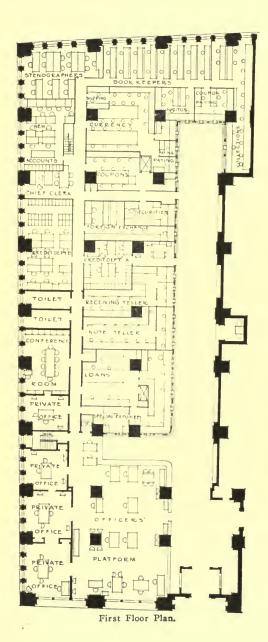


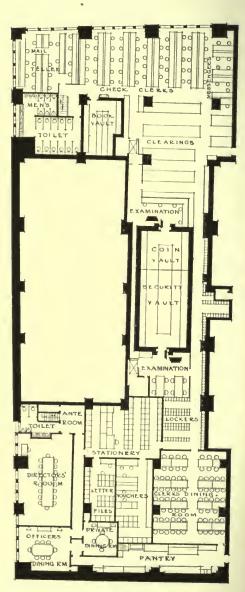
HE planning of a large banking institution is a task for which neither the average banker nor the average architect is particularly well fit-The banker lacks knowledge of building, has difficulty in reading plans, and is usually too busy to enter into the mass of detail necessary to an efficient plan. The architect, on the other hand, is not sufficiently familiar with bank administration, and cannot give the problem the time necessary for an adequate study of all the factors involved. In the smaller installations, and with a small architectural practice, it is true, the problems are sufficiently simple so that the architect has time to solve them himself, but as the difficulties multiply, and the architect's time is more and more occupied by the complexity of the organization under his command, the need of a new method of attacking problems of this nature becomes increasingly apparent. It is this state of affairs, existing

particularly in New York City, that has given rise to the new profession of the bank specialist.

The specialist does not, and in fact cannot, replace the architect, for in so doing he would become an architect himself. His function is, either as a consulting expert or as an outside adviser, to collaborate with the banker and the architect in forming an efficient layout, determined by the special requirements of the institution, and co-ordinated with the constructive necessities of the building.

Mr. Thomas Bruce Boyd has chosen to devote himself to this particular phase of the great efficiency movement of the present generation, and has collaborated in the planning of many of the largest banks of recent date, as well as in some commercial institutions of other kinds. It has been his aim to secure the greatest efficiency with the space available and for the purposes required, to save for the banker both in initial cost of equipment





Basement Floor Plan.

THE CHASE NATIONAL BANK, NEW YORK CITY. KIMBALL & ROOSA, ARCHITECTS.

and in time and expense of future operation; in short, to raise the standard of bank planning to a point of scientific perfection not previously attained. The degree of his success can best be shown by a description of a few of the installations

for which he is responsible.

One of the newest and most important of the bank plans in which Mr. Boyd has collaborated is the Chase National Bank, in the new Adams Building, of which Messrs. Kimball and Roosa were the architects. This vast interior, two hundred feet long and seventy feet wide, has been laid out with a view to the maximum efficiency. Entering from Broadway, one finds, directly on the left, a large platform with the desks of the bank's officers, the more important of whom have additional private offices adjoining, along Exchange Alley on the side of the building. The grouping of the officers' desks in an accessible location near the entrance is a feature on which Mr. Boyd lays much stress, as he considers it of great importance in maintaining and establishing a friendly relation between the bank and its customers.

Beyond the officers' space we find the loan department, sheltered by the customary screen, and in a corner near the officers the telephone switchboard, alongside which a corridor runs from the officers' desks to a conference room for their use, lighted also from Exchange Alley. From the loan department a lift, centrally located, descends to the basement, which is also reached by stairs convenient to the private offices. Beyond the loan department are the credit and foreign exchange departments, the tellers, auditors, and other employees who handle currency, and in the extreme rear, on Trinity Place, the stenographers and book-keepers. A second lift, near the tellers, leads also to the basement, as does an additional stairway near the chief clerk's office.

The public space, narrow as it appears on the plan, is in reality not less than fourteen feet wide, and its apparent narrowness is due to its great length, nearly one hundred and sixty feet. Along one

side runs the screen with its many windows, while on the other check desks are arranged in the intervals between the structural columns. While the proportions of the space are not particularly fortunate, it is scarcely possible to imagine a way in which any real improvement could have been effected, in view of the shape of the ground and the necessity of an entrance from Broadway, the narrowness of Exchange Alley making it almost valueless as a thoroughfare, and certainly quite impossible for the main entrance of a great banking institution.

The basement of the Chase National Bank is used mainly for storage purposes. In the center is the vault, divided by a light screen into two independent parts. The larger part, used for securities, is reached by the lift from the loan department, through an examination space, while the other portion, used for currency, is similarly reached by the second lift. The vault is closed by two heavy doors at each end, and a narrow observation gallery protects it at the side.

Near the vault are lockers, and storage for stationery and filing. The locker room gives access to the clerks' diningroom, next to which is a pantry, into which the food, cooked by an outside caterer, is brought by a separate entrance. The same pantry is used to supply the officers' dining-room, as well as a smaller private dining-room used occasionally by the president of the bank. The directors' room, adjoining the officers' dining-room, is entirely separated from it, and is reached directly by the stairs from the officers' space on the main floor.

Back of the vault, on the same floor level, are the mail and check clerks, and the messengers. Here also is the book vault, to which the second lift and the stairs give convenient access, and a capacious toilet room. The level of Trinity Place is about ten feet below that of Broadway, so that the basement windows at this end are above grade, and the lighting is far superior to that of an ordinary basement.

Without attempting, in this brief outline, to describe in detail the planning of



BANKING ROOM-CHASE NATIONAL BANK, NEW YORK CITY. Kimball & Roosa, Architects.



BANKING ROOM—CHASE NATIONAL BANK, NEW YORK CITY. Kimball & Roosa, Architects.





BANKING ROOM—CHASE NATIONAL BANK, NEW YORK CITY—KIM-BALL & ROOSA, ARCHITECTS. the various departments and their relation to each other, a few salient points may be noted. One of these is the arrangement of the working spaces so as to gain the greatest possible use of the natural lighting facilities, while the vault, the public space, and other parts requiring only artificial light were grouped in the center of the plan. Another interesting feature is the arrangement of the lifts, by which all the departments on both floors are placed in easy communication, and which greatly increase the working efficiency of the bank.

In this building, as in Mr. Boyd's other plans, the idea of unit construction has been used wherever practicable. The fixtures have been made of standard sizes, with interchangeable bases, allowing departments to expand or to be shifted in location with the minimum of inconvenience and expense. This is a feature frequently lost sight of in business installations, where inferior fittings are often used because of a slightly reduced original outlay, which may later be expended several times over because of necessary changes that could not be foreseen when the original arrangement was planned.

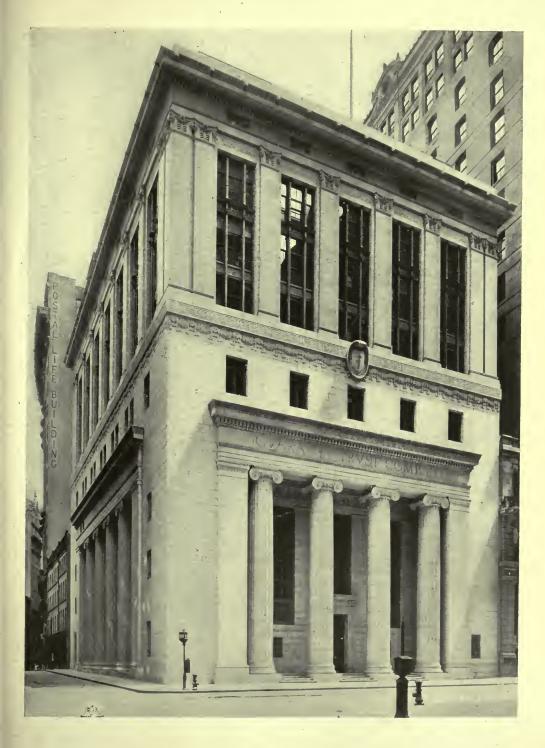
The architectural treatment of the banking room is comparatively simple, as the bank occupies part of an office building, rather than one designed specially for its use. A richly coffered plaster ceiling is the principal feature of interest. Apart from this there is little architectural elaboration, except for the marble casing of the walls and columns, and the carved counter screen.

A far more finished interior is that of the Guaranty Trust Company, of which Messrs. York and Sawyer were the architects, with the assistance of Mr. Boyd for the planning and equipment. This institution occupies a building of its own, at the southeast corner of Liberty Street and Broadway, the main entrance being, of course, on the latter thoroughfare. The banking room is indicated on the exterior by a large order of columns, on both fronts, those on the Broadway front forming a shallow portico, while on the Liberty Street side the columns are engaged. Above this order a pilaster treatment is used for the portion of the building containing offices, but this is subordinated to the banking room, which is clearly indicated as the main feature of the building.

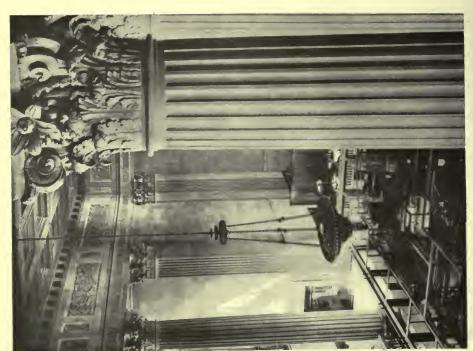
The exterior is of a light gray granite, and the restrained treatment of the decoration results naturally from the refractory nature of this material. The Ionic order used is simply handled, and the manner in which it is inserted in the wall, showing clearly that it is to be considered as a decorative feature without structural significance, is decidedly suggestive. The pilaster order above is also of interest, for while it is Ionic by its proportions and general treatment, the capitals, in some respects, suggest rather the Corinthian.

In the interior of the main banking room the treatment is lighter, due to the employment of marble in the place of granite. The floor is of light gray Knoxville, with mosaic inlays whose design suggests a Pompeian influence, which is to be detected also in the Corinthian columns, whose capitals are of a type frequent in Pompeii, although the bestknown example is that of the Temple of Vesta at Tivoli. The treatment of the acanthus leaves, however, is decidedly different from that of the ancient ex-These columns are of Hauteamples. ville marble, with an entablature imitating the same material. The walls and counters are also of Hauteville, and the warm buff color of this material gives a more friendly character to the monumental treatment of the architecture. The ceiling is in plaster of a lighter tone, with touches of brighter color, and the grilles of gold bronze.

All the interior treatment is most sumptuous in character, and the casual visitor canot fail to be impressed with the wealth of the institution that it houses. The architects have inspired themselves from many sources. Besides the Pompeian suggestion, we find Roman motives in the frieze above the columns, Italian Renaissance details in the metal grilles, while Greek coins have furnished the subjects for the carved medallions on the main counter. All these elements have been handled by the architects with the ability that has so long characterized



BANKING HOUSE OF THE GUARANTY TRUST COMPANY, NEW YORK CITY. YORK & SAWYER, ARCHITECTS.







BANKING ROOM-GUARANTY TRUST COMPANY, NEW YORK CITY. York & Sawyer, Architects.

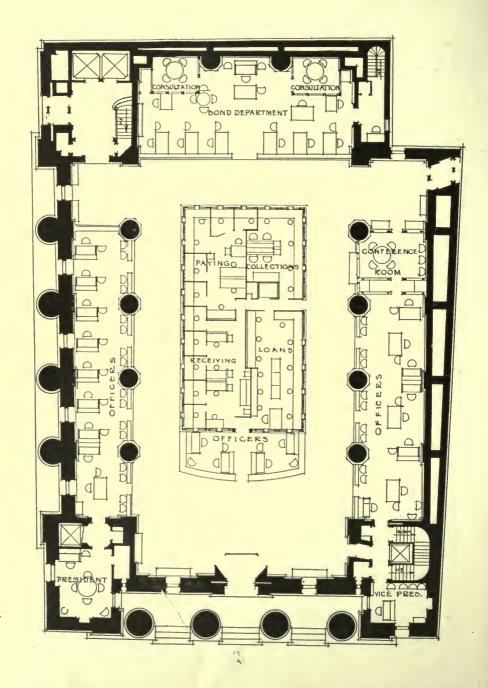
them, the whole forming a remarkably rich and harmonious ensemble.

The firm of York and Sawyer have been known for years as bank architects, though this is but one phase of their work. They have probably produced more banks than any other architects, either American or foreign, and one would have expected them long since to have exhausted all the possible types of bank plans. One is therefore agreeably surprised to find in the Guaranty Trust Company a type that is altogether new in its arrangement.

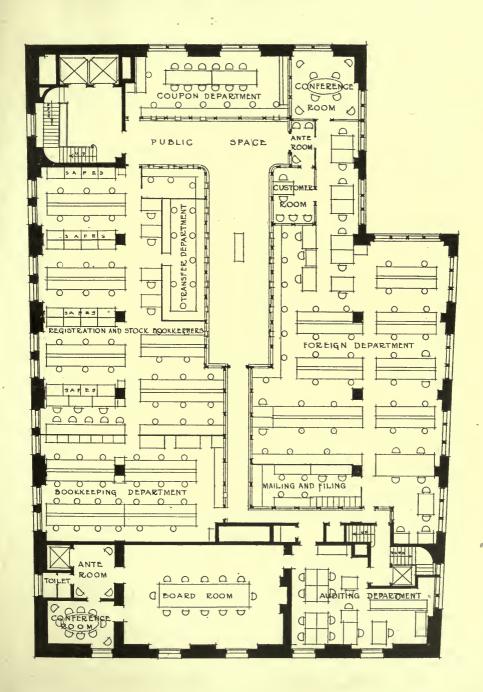
plan is its openness. While the total width of the interior is over eighty feet, and its length about one hundred and twenty, with a ceiling height of not less than fifty feet, the space enclosed by the bronze grille is only thirty feet by fifty. This unusual proportion is due to the great development of the officers' space, and the relegation to other floors of a great part of the bank's functions. The officers occupy the front part of the cen-

tral island, as well as the two platforms at the sides, behind the columns, and these spaces are quite open, being surrounded only by a low marble balustrade, the only exception being the conference room at the rear end of the platform on the right, which is enclosed by a grille similar to that of the central working space. The pylon on the left contains the president's private office, as well as an elevator and some minor conveniences; that on the right contains similar accommodation for the vice-president, though his office is reduced in size by the The most striking characteristic of the introduction of a staircase, thus preserving due hierarchic proportion.

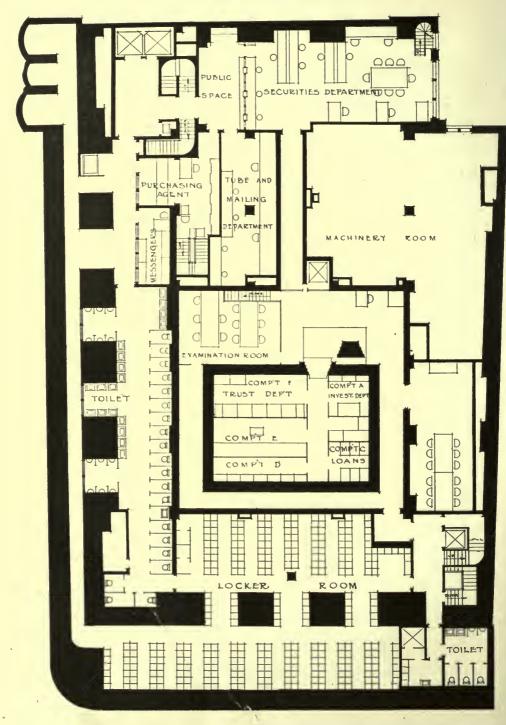
The rear portion of the central island, enclosed by a bronze screen, contains the working space for the money-handling departments that come in most direct contact with the public. Here are the paying and receiving tellers, as well as the collection and loan departments. The coin lift, situated near the center of the island, communicates with the vaults in the underground stories, rendering



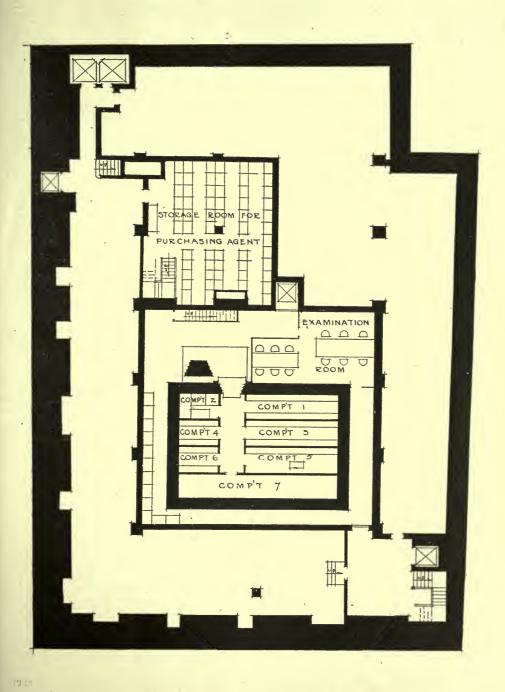
FIRST FLOOR PLAN—GUARANTY TRUST COMPANY, NEW YORK CITY. YORK & SAWYER, ARCHITECTS.



SECOND FLOOR PLAN-GUARANTY TRUST COMPANY, NEW YORK CITY. YORK & SAWYER, ARCHITECTS.



BASEMENT FLOOR PLAN—GUARANTY TRUST COMPANY, NEW YORK CITY. YORK & SAWYER, ARCHITECTS.



SUB-BASEMENT FLOOR PLAN—GUAR-ANTY TRUST COMPANY, NEW YORK CITY. YORK & SAWYER, ARCHITECTS.



DETAIL OF BRONZE SCREEN—BANKING ROOM, GUARANTY TRUST CO., NEW YORK CITY.
York & Sawyer, Architects.

them easily accessible to all the services here grouped together. In the extreme rear of the foor, separated only by a balustrade from the public space, we find the bond department, portions of which, however, are enclosed for greater privacy by a light screen which scarcely counts in the general effect of the room.

In the height of the main banking room, though not visible from it, three mezzanine floors have been arranged. The lower two are unimportant, being contained entirely in the corner pylons, but the third is far more extensive, being continued around three sides of the main room. It contains space for files and archives, as well as a large office for stenographers, and is reached by two stairs and three elevators. This mezzanine is contained in the height of the entablature, the central part of the banking room having a full entablature, while the aisles are ceiled at a lower level, the difference being sufficient for a working

Below the main floor is a basement ex-

tending under the entire building, only a small part of which is accessible to the public. Here we find the securities department, in the extreme rear, and near it the purchasing agent, the messengers, and the Lamson tube and mailing department. The tube system is of great importance, as it joins widely separated portions of the building, and greatly facilitates intercommunication between the different departments.

The basement contains also locker rooms, machinery rooms, and the like, as well as the vault, whose principal means of access is the coin lift from the center of the main banking room. This vault has walls two feet thick, and is surrounded by an observation passage, from which all sides of the exterior are visible. Near its entrance is an examination room. The interior of the vault is divided into separate compartments for the different parts of the bank. The sub-basement contains a similar vault, also divided into compartments, each of which forms a smaller vault independent of the others.



BANKING HOUSE OF J. P. MORGAN & CO., NEW YORK CITY.
Trowbridge & Livingston, Architects.

In the upper stories the functions of the bank are continued. The second story contains board and conference rooms, arranged as a separate unit, and reached by the elevator next to the president's office. This floor also contains the coupon department, foreign department, and bookkeeping department, as well as some others of less importance, communicating with the public space, reached by the Liberty Street elevator. Adjacent to these is the auditing department, in a more secluded location, and served by the elevator on the vice-president's side.

The third story contains the title department, and the remaining floors are partly occupied by the bank, and partly destined for its future expansion, but meanwhile leased as offices. Among the services housed here are the bond de-

partment, telegraphs and telephones, kitchens and dining-rooms for the use of the staff, machinery, and a special printing office.

Throughout the equipment of the Guaranty Trust Company the same spirit of thoroughness is to be noticed. Nothing seems to be overlooked. The fixtures are planned with the greatest care, every department having such special fixtures as are necessary to its highest efficiency. That the basements are artificially ventilated goes without saying, but the use of this system in the main banking room is less evident, the openings to the ventilating ducts being hidden by the mouldings of the architrave above the columns. It is regrettable that the reduction necessary in making the plans available for magazine reproduction precludes the



BANKING ROOM-J. P. MORGAN & CO., NEW YORK CITY.
Trowbridge & Livingston, Architects.

showing of the details of the equipment, as these are scarcely less interesting than the general disposition of the layout.

Another recent work of unquestioned interest, in which Mr. Boyd collaborated, is the banking house of J. P. Morgan & Co., at the corner of Broad and Wall The problem here presented was very different, and, in some respects, simpler than those discussed above, because of the lesser number of banking functions to be taken into account. On the other hand, the architects, Messrs. Trowbridge and Livingston, found themselves confronted with a problem of some difficulty in view of the peculiar form of the plot, and of the desire to make the banking room as large as possible, without any intermediate supports. In fact, as executed, this room includes the entire area of the plot, except a small space at the rear, in which stairs, elevators, and the correspondence department are included, and a still smaller space at the front, with the entrance lobby. The irregular form of this large room has been

disguised by a very ingenious treatment, all the more interesting because of the comparative rarity of such problems in our American work, and the small number of precedents to be found for them.

The entrance to the building is placed at the truncated angle of the two streets. a location all the more commendable because this corner, if not cut off, would have been unpleasantly acute. The bisector of the angle has been taken as the main axis of the decorative treatment. The location of a series of rooms along the sides of the lot, and the consideration of symmetry with reference to this axis, have produced a central space, hexagonal in plan, and capable of a symmetrical handling. This space is enclosed by a screen of pink Knoxville marble, with panels of openwork bronze grilles backed by glass; and columns of Skyros marble. Upon the screen is concentrated the richest ornament of the entire composition. It is enriched with elaborate carving, in the style of the Italian Renaissance, with a frieze, representing Greek and Ameri-



BANKING ROOM-J. P. MORGAN & CO., NEW YORK CITY.
Trowbridge & Livingston, Architects.

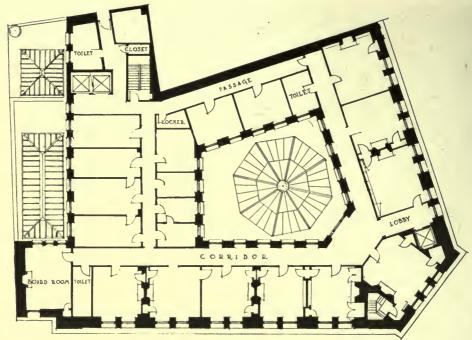
can Indian mythological subjects, by Mr. Charles Keck, one of the best known of the younger American sculptors.

The concentration of interest in this center is further emphasized by the great circular skylight almost directly above it. The rest of the ceiling is a repeating design of hexagonal coffers and circular roses, broken only by the large circular skylight and a smaller rectangular one in the rear. A further device to disguise the irregular outline of the walls is the omission of an order, its place being taken by a system of alternate wide and narrow mosaic panels, the latter decorated with trophies.

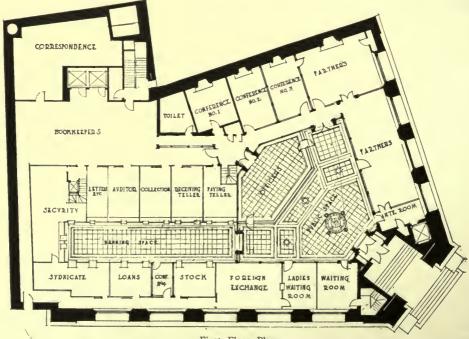
The space within the screen is partly occupied by an enclosure for the officers; the remainder is public space, with a mosaic pavement inspired from Florentine designs. Four large doors interrupt the screen, one of them being the main entrance to the building, and four smaller doors give access to the rooms on the street fronts.

The space on the right, as we enter, is devoted to offices for the partners, with a small ante-room and several conference rooms. On the left, beyond two small waiting-rooms and the foreign exchange department, one of the large doors gives access to the banking space. Around this are grouped the comparatively simple facilities for the handling of money, connected by stairs and an elevator with the basements containing the vaults and store-rooms, as well as the transfer department, which has a separate entrance from Broad Street, whose slope makes possible this access at two different levels. The space below ground contains also the usual heating and ventilating apparatus. The main vault is of the highest type of burglar-proof construction, the principles of its design being similar to those already discussed.

Above the main banking room, the second story contains the private offices of the partners and their secretaries, Mr. Morgan's office being directly above the



Second Floor Plan.



First Floor Plan.

BANKING HOUSE OF J. P. MORGAN & CO., NEW YORK CITY. TROW-BRIDGE & LIVINGSTON, ARCHITECTS.



MR. MORGAN'S PRIVATE OFFICE—BANKING HOUSE OF J. P. MORGAN & CO. Trowbridge & Livingston, Architects.

main entrance to the building. This construction, with no interior columns to support it from below, gave rise to a most complicated engineering problem, capable of solution only by the use of modern methods of steel construction. The third and fourth floors, not visible from the street, contain dining-rooms, janitor's quarters, and other minor divisions, as well as a roof-garden at the fourth floor level, facing the Stock Exchange. The private offices are panelled in oak, the designs being varied according to the taste of their occupants. They are accessible by an elevator from the anteroom to the right of the entrance, that of Mr. Morgan having also a private staircase from the waiting-room on the left.

The stairs and elevator in the rear give additional access to these offices, as well as to those of the different secretaries.

The exterior of the building is simple in the extreme. There are no columns, and scarcely any carving, excepting on the mouldings of the cornices and the mullions between the second-story windows. The elaborate bronze screen at the entrance is the only suggestion of the rich interior that appears on the rather unassuming façade, whose whole character seems intended to produce an atmosphere of serene reticence, contrasting vividly with its florid and pretentious environment, even as the modest altitude of the building differentiates it from the surrounding skyscrapers.



LOGGIA, WOMEN'S GYMNASIUM—JOHN C. PROCTOR RECREATION CENTER, PEORIA, ILL. HEWITT & EMERSON, ARCHITECTS.



VIEW OF SWIMMING POOL COURT AND PLAYGROUNDS—JOHN C. PROCTOR RECREATION CENTER, PEORIA, ILL.

Hewitt & Emerson, Architects.



HE will of the late John C. Proctor, a life-long resident of Peoria, devoted his entire estate, excluding a few personal bequests, as a public charity to be known as the John C. Proctor Endowment. A board of seven trustees was named whose duty it is to care for the funds and property, to administer the charities established during his life, and to provide, so far as the income of the endowment permits, such other aids to the welfare of the people of the city of Peoria as may suggest themselves.

Acting on the provisions of the will, the trustees projected and established the John C. Proctor Recreation Center, located in the midst of a great residential district occupied largely by people of the laboring class.

The aim of the trustees was to provide an institution with every facility for furthering the physical, social and moral

welfare of the community. Men, women, boys and girls are provided for, prop-

erly segregated.

The ground, 258 feet by 700, bounded by city streets on four sides, was purchased before the scope of the Center had been fully determined. As the problem developed, it was found that the ground, originally thought ample, was too small. This necessitated some restrictions in planning and some arrangements which might otherwise have been avoided, such as the placing of the tennis courts on the street front of the field house.

The problem required the planning of an institution, the best examples of which were probably to be found in the later Centers built by the South Park Commission in Chicago. Either the committee or the architects visited most of the more complete and recent institutions of the kind in this country; but the general scheme adopted was not modelled on any

precedent, owing to differing conditions. The difference in scale, the fact that the scope was to be wider than that of any example found, and the shape and size of the ground, required original treatment. The Peoria institution is considerably smaller than the Chicago institutions, but covers a wider scope than any of them, in that it includes bowling and billiards.

As finally developed, the problem included the fulfilling of the following re-

quirements:

Grounds—Provision for separate playgrounds for (1) small children, (2) girls and women, (3) boys and men; to be sufficiently separated from one another to prevent interference and allow proper supervision. The outdoor playgrounds were to be as complete and spacious as the ground permitted, and equipped with provision for the games, play and gymnastic apparatus adapted to each group. The grounds were to be provided with toilets for both sexes and convenient drinking fountains. Shelters, in the form of loggias connected with the field house and also in the form of separate structures, were to be included.

Building — Provision for individual baths for both sexes; gymnasiums, locker rooms, toilets and showers for both sexes; a large swimming-pool, with its dressing rooms and appurtenances. This feature was originally intended to be housed for use the year round. On investigation, it was found that experience in similar Centers elsewhere showed that a pool was not used enough in cold weather to justify the considerable extra cost for housing, heating and maintenance. An auditorium, with stage large enough for amateur theatricals, dressing rooms, coat rooms, and the like, was to be used both for audiences and for social affairs and dances. A library and reading room, and club rooms, with kitchen, bowling alleys, billiard and pool rooms were additional features.

In addition, the building must contain a rotunda and office, private offices for the director and his assistant; a laundry, a boiler room, space for ventilating apparatus, store rooms, custodian's room



ALLEN STREET ENTRANCE—JOHN C. PROCTOR RECREATION CENTER, PEORIA, ILL. Hewitt & Emerson, Architects.



ALLEN STREET FRONT-JOHN C. PROCTOR RECREATION CENTER.
Hewitt & Emerson, Architects.

and offices for the physical directors, male and female, and apparatus rooms in connection with the gymnasiums.

The problem of planning the building was, briefly, to separate the departments used exclusively by either sex; to place the principal departments used by both sexes so as to be available from both the male and female sides of the building; to segregate the boys from the men and the girls from the women as regards toilets and locker rooms; to provide ample circulation and co-ordinate the various parts; to so mask the boiler room as to make it inconspicuous; and, finally, to provide the maximum of supervision with the minimum number of attendants.

All departments, whether for man, woman, boy or girl, are reached directly from the rotunda and office. The boys' and girls' locker and toilet rooms are in the basement and are reached by special stairway on either side respectively. The gymnasium floors are directly on the ground, about midway between the basement and first-floor levels. This places the gymnasiums and exits to the swimming-pool and playgrounds in proper relation thereto, and facilitates the relation

of the boys' and girls' locker rooms with the circulation corridors and gymnasiums.

The swimming-pool approaches are so arranged that entrance to the enclosure is at one end only, directly in front of the shower baths, use of which is required before entering the pool. The ends of the circulation corridors act as waiting places when the crowds in hot weather exceed the capacity of the pool. The windows allow those waiting to witness the sport they are soon to enjoy.

Among the minor problems were the construction of the pool, containing about 150,000 gallons of water, the plumbing, heating, lighting, ventilating and sanitary arrangements; all of which were successfully handled by the architects. The water in the pool is heated throughout the season to take off the chill. The pool can be emptied, cleaned, refilled and heated in twelve hours.

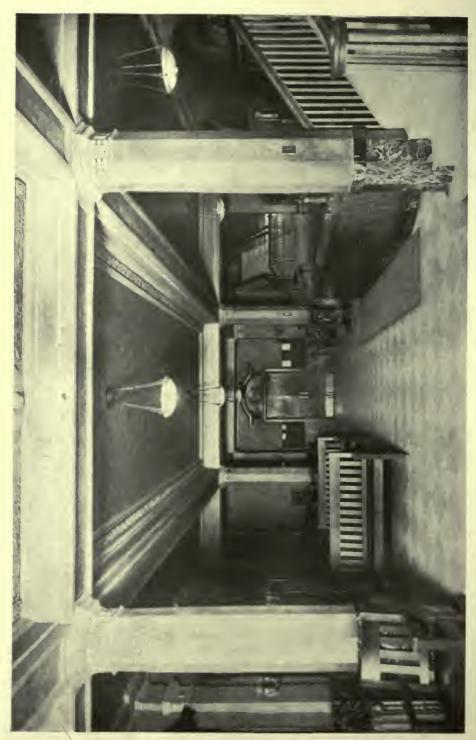
The building is of fireproof construction, except the roof. The exterior is faced with a gray mat brick in two shades, laid in double Flemish bond, a light shade double stretcher and a single stretcher of the darker shade alternating.



ALLEN STREET FRONT-JOHN C. PROCTOR RECREATION CENTER, PEORIA, ILL. HEWITT & EMERSON, ARCHITECTS.



WOMEN'S WING—JOHN C. PROCTOR RECREATION CENTER, PEORIA, ILL. HEWITT & EMERSON, ARCHITECTS.



ROTUNDA-JOHN C. PROCTOR RECREATION CENTER, PEORIA, ILL. HEWITT & EMERSON, ARCHITECTS.

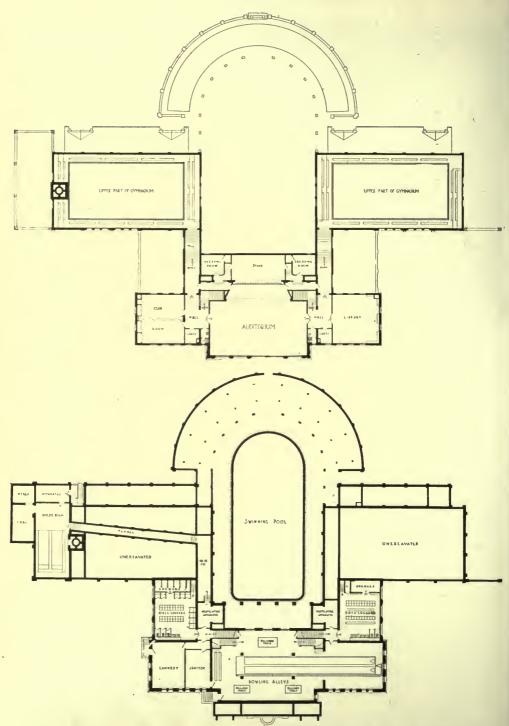


AUDITORIUM — JOHN C. PROCTOR RECREATION CENTER, PEORIA, ILL. HEWITT & EMERSON, ARCHITECTS.



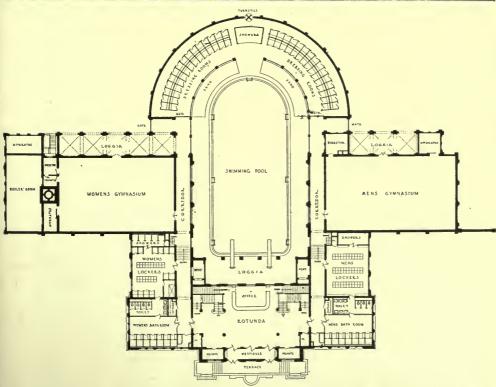


SWIMMING POOL LOGGIA—JOHN C. PROCTOR RECREATION CENTER, PEORIA, ILL. HEWITT & EMERSON, ARCHITECTS.

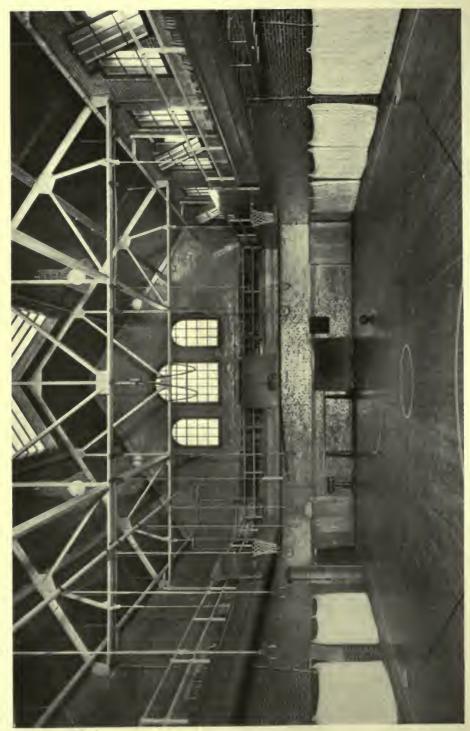


BASEMENT AND SECOND FLOOR—JOHN C. PROCTOR RECREATION CENTER, PEORIA, ILL. HEWITT & EMERSON, ARCHITECTS.

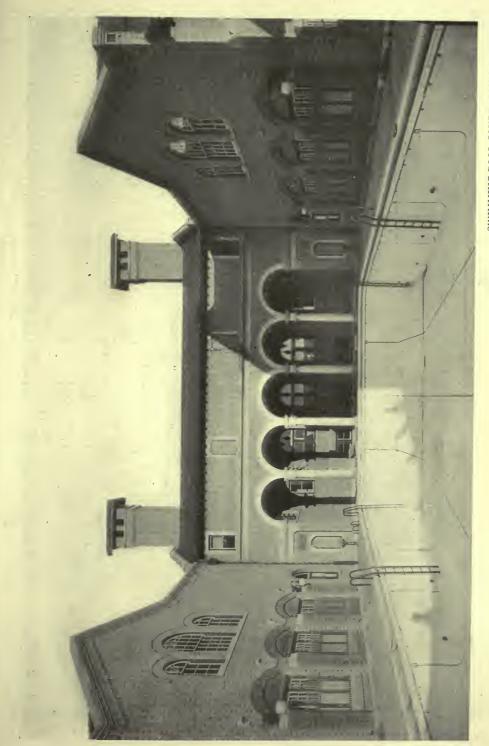




GENERAL VIEW FROM PLAYGROUNDS AND PLAN OF FIRST FLOOR—JOHN C. PROCTOR RECREATION CENTER, PEORIA, ILL. HEWITT & EMERSON, ARCHITECTS.



MEN'S GYMNASIUM-JOHN C. PROCTOR RECREATION CENTER, PEORIA, ILL. HEWITT & EMERSON, ARCHITECTS.



SWIMMING POOL COURT—JOHN C. PROC. TOR RECREATION CENTER, PEORIA, ILL. HEWITT & EMERSON, ARCHITECTS.



LOGGIA, WOMEN'S GYMNASIUM—JOHN C. PROCTOR RECREATION CENTER, PEORIA, ILL.
Hewitt & Emerson, Architects.



SWIMMING POOL COURT—JOHN C. PROCTOR RECREATION CENTER, PEORIA, ILL. Hewitt & Emerson, Architects.

The joints are five-eighths inch flush joints of natural color cement mortar, left with rough texture. Certain trimmings, such as arches, pilasters, and the like are entirely of the darker shade brick with horizontal joints deeply raked out. The stone is buff Indiana limestone. The roof covering is of red interlocking

shingle tile.

On the interior the architects were given practically carte blanche to use materials best fitted for the various purposes. Terrazzo and marble are used for floors, except rooms requiring finished oak or maple floors. All bath, toilet and locker rooms are of gray Tennessee marble and white enamelled brick with cove angles. The swimming-pool is lined with white tile, with sanitary overflow rim in white glazed terra cotta. All exposed metal in bath and toilet rooms has been reduced to a minimum and is of white metal.

The two things kept uppermost in the

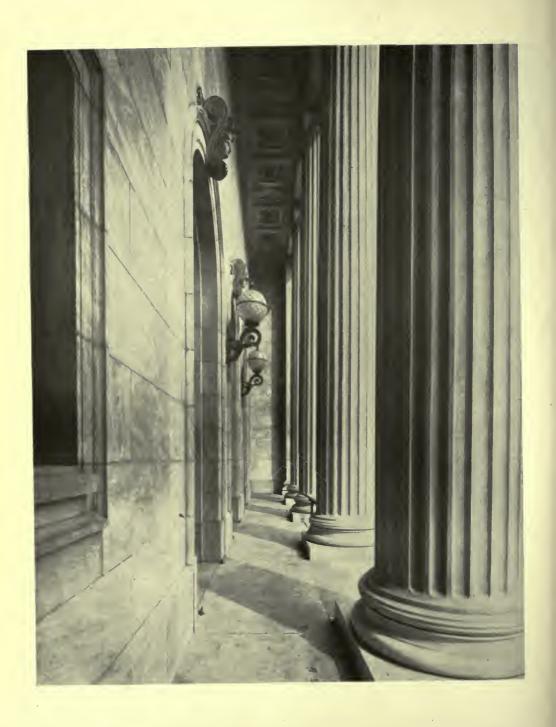
minds of the architects in designing interior details of the building were to use the most fitting and durable materials in the simplest and most cleanable forms and to make everything, so far as possible, "boy-proof." All pipes, tanks and valves in toilets and bathrooms are concealed in pipe corridors. All fastenings and removable parts are so far as possible concealed, and all construction is of the staunchest.

Hot, cold and circulation water supplies for building and grounds are controlled from the valve pit, convinient of access by the engineer by means of a tunnel from the boiler room. This tunnel also contains heating mains, water

service and other pipes.

The entire grounds are lighted, for night use, by means of tungsten clusters and outlets on the semi-circular wall around the swimming-pool enclosure and on the brick posts of the iron ferce enclosing the grounds.

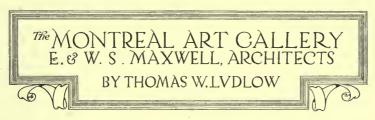




DETAIL OF COLONNADE—MONTREAL ART GALLERY E. AND W. S. MAXWELL, ARCHITECTS.



TYPICAL GALLERY SEAT-MONTREAL ART GALLERY. E. and W. S. Maxwell, Architects.



HE present building for the Art Association of Montreal had its when the Council for the Association decided to hold a limited competition for the selection of plans for a new gallery. Three of the leading local architectural firms were asked to submit schemes on conditions drawn up by the late Mr. Edmund M. Wheelwright, who was selected as assessor on account of his experience with the Boston Museum of Fine Arts, and the valuable data collected by him in this connection was placed at the disposal of the competitors. Messrs, E. and W. S. Maxwell were adjudged the winners in the competition and the erection of the gallery was intrusted to them.

The site of the new structure on Sherbrooke Street, flanked for half a mile or more on either side with great houses in large terrace gardens, was an ideal one for the style selected—Neo-Classic—although there was some criticism at the time the competition was awarded that the severely classical design chosen reflected the modern French school rather than the purely British

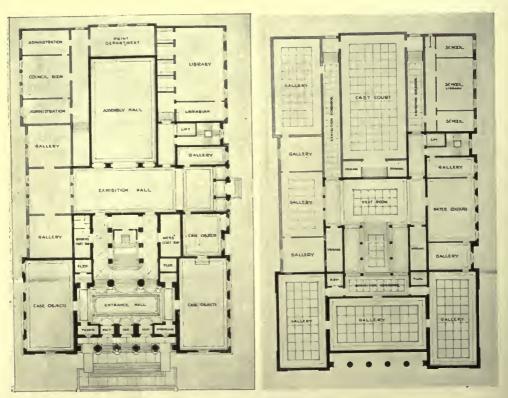
spirit of the other designs.

The building is compose

The building is composed on its main front of a central colonnade of the lonic order, forming a portico flanked by two slightly projecting wings which frankly express the internal disposition of the exhibition halls—a lateral one over the entrance, having on either hand smaller galleries at right angles to it. The side elevation on Ontario Avenue, incomplete at the moment, will consist of a composition in three parts—a central feature and two side pavilions joined to the central mass by connecting links. The completed portions of the main and side façades



MAIN FACADE ON SHERBROOKE STREET—MONTREAL ART GALLERY. E. and W. S. Maxwell, Architects.



FLOOR PLANS OF THE MONTREAL ART GALLERY. E. and W. S. Maxwell, Architects.

are built of blue-white marble from Vermont; and the base course, entrance steps, and coping enclosing the low grass terrace surrounding the building are of gray granite, which almost matches in

frieze placed directly under the ceiling of the pteroma, to emphasize the toplighted galleries on the main floor. The ceiling of the pteroma is deeply coffered in the rich traditional manner. The col-



DETAIL OF MAIN FRONT-MONTREAL ART GALLERY. E. and W. S. Maxwell, Architects.

color and completely harmonizes with the marble above.

The main entrance is approached by a broad flight of steps enclosed between pedestals leading up to the colonnade, behind which are three arched entrance doors. Above these the wall is left plain, except for a delicately carved Greek fret umns themselves are beautifully cut monoliths, considering they are over thirty-one feet in height.

The doorways are treated in the straightforward Italian manner with a continuous undecorated architrave and have no elaboration, excepting the richly carved key-blocks that project too far



DETAIL OF PAVILION WINDOW-MONTREAL ART GALLERY,

and in consequence have the appearance of applied rather than structural ornament.

The flanking pavilions are treated in the same direct manner as the central portion, only here the windows lighting the lower galleries are framed in by a nicely proportioned slightly recessed panel. The windows are of the simple console or bracket type without chambranles. Above the openings are placed sculptured plaques, approximately three and one-half feet high by ten feet long, filling out the panels. These plaques are carved in white marble in low relief and represent the spirit and traditions of Classic art.

The side elevation presents a very interesting and practical adaptation of U-Bar greenhouse construction over the studios of the Art School. In employing this method of lighting, the architects have successfully overcome one of the greatest difficulties of using skylights in this northern climate—the joint on the inclined surface that will keep tight under the varying and trying conditions of snow and ice which have to be reckoned with for at least five months each year.

Below the Art School are a series of

side-lighted exhibition rooms, which are adequately expressed on the exterior by a row of square-headed windows over the side entrance. Although these look amply large from the outside, the natural illumination within these rooms is not as good as one would suppose from the size of the openings.

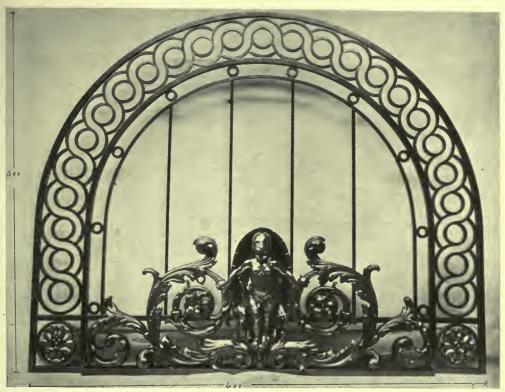
The only decorative feature on the lateral front is the well proportioned and delicately treated doorway, that is nicely combined with the flanking windows into a distinctive feature by means of a

cornice and pilasters.

The chief features on the ground floor are the almost extravagantly commodious entrance and stairhalls on both the Sherbrooke Street and Ontario Avenue



MAIN ENTRANCE DOOR-MONTREAL ART GALLERY.



DETAIL OF BRONZE GRILLE OVER ENTRANCE DOORS-MONTREAL ART GALLERY.
E. and W. S. Maxwell, Architects.

fronts, an exhibition hall for casts, a lecture hall and three rooms for showing case objects, two of which, those on the right of the main entrance, are being used until the completion of the building as a library and council room, and secretary's office, respectively.

The main entrance hall, which is sixtytwo feet long by twenty-four and onehalf feet wide, is reached through three small vestibules. It is a well proportioned room, covered with an elliptical plaster barrel vault with penetrations. The walls and piers of this hall are of Botticino marble. This great hall depends entirely for effect upon its proportions and upon the color of the marble, and the only decoration used, a molded band of flowers and fruit forming a panel in the plaster vault, seems a trifle heavy for the architecture below, and is decidedly out of scale with the delicately designed and beautifully carved marble and alabaster lamp standards which at the same time illuminate and are the only

furnishings in this part of the building. The main stairs are reached by ascending a few steps from the entrance hall and crossing a narrow circulation passage. These stairs, as well as all of the architecture surrounding them, are of Botticino marble treated in the most severe manner, without moldings. Here, as in the entrance hall, the ceilings of the passages surrounding the stair well are vaulted in plaster, only in this case they are divided into square bays covered with groined vaults, excepting the compartment immediately in front of the stairs, which on account of its greater width is covered with a flat panel. This latter treatment, that is, the increased width of the central bay, seems to have caused the architects trouble on both sides of the archway, as on the hall side the flatter penetration gives unequal warped surfaces. On the stair side a very flat oblong groined vault would certainly have been more pleasing than the flat ceiling and might have sug-



ONTARIO AVENUE FRONT-MONTREAL ART GALLERY.

gested another method of artificial lighting than the rather awkward appearance of the bowl, like those used in side passages, but hung in this case without the chains.

To the right and left of the entrance hall are two lateral galleries treated in a direct and sensible manner without ornamentation. The lighting in these rooms, both natural and artificial, is exceedingly well disposed, and the walls are covered with a neutral gray burlap, which at the same time affords an excellent background and is exceedingly restful to the eyes. The gallery to the right, temporarily used as the library, is shown on page 147.

The council room, reached from the library by going up a few steps, is treated and decorated in a similar manner to the adjoining room, only here the electric fixtures are hung from the underside of the beams instead of from the

panels, a wrong use æsthetically for structural forms even though one knows that in present-day construction there is ample room for the conduits inside of the false beam shell.

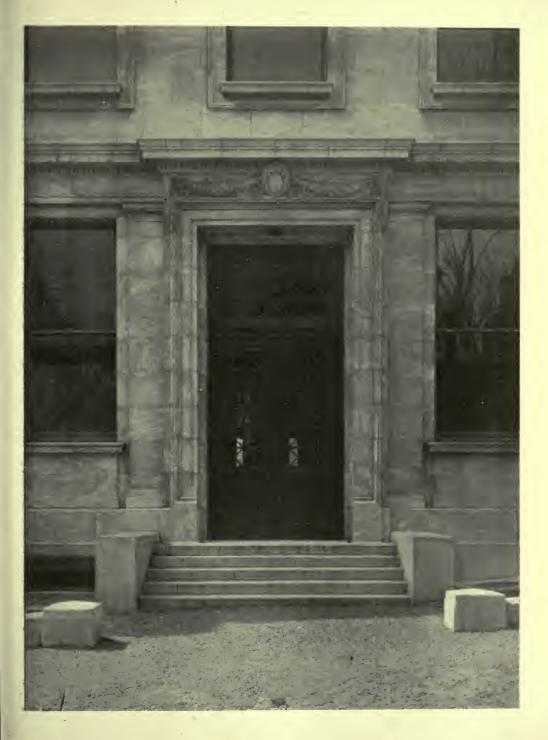
The Ontario Avenue entrance is intended for the use of the art students and the administration. It opens into an ample vestibule which gives direct communication to the offices, stairs to the studios, and the transverse sculpture gallery.

Besides the various rooms mentioned or described, ample provision is made on the ground floor for coat rooms, ticket offices, shafts for both passenger and freight elevators and other accessories, skillfully arranged in inconspicuous places, but accessible from the point of administration.

The main stairs from the ground to the chief exhibition floor lead from the entrance hall in straight easy runs with ample landings into a spacious top-lighted gallery. Generous as this space is, sixty-six feet long by twenty-nine and one-half feet wide, the proportions and handling of the stairs are so fine that one is met on ascending with a sense of disappointment to find them blocked, so to speak, by a wall instead of a vista of galleries or, at least, some striking architectural feature on the axis.

The stairwell is flanked on either side by exhibition passages twelve feet wide, which give access to the main gallery. On the well side of these passages there are Doric colonnades of Botticino marble that support the superstructure of the roof. The capitals and bases of these columns are of bronze, as is also the handrail between them. The walls on the opposite side of the passages are unbroken for exhibition purposes, the colonnade being recalled at the corners only by pilasters.

The main gallery over the entrance hall and vestibule and the flanking side galleries are rooms of considerable size, being sixty-three feet long by thirty-three feet wide and sixty and one-half feet long by thirty-one feet wide, respectively. These rooms are top-lighted, the skylights filling the whole of the ceiling, except for a deep coved cornice.



DETAIL OF ENTRANCE ON ONTARIO AVENUE—MONTREAL ART GALLERY. E. AND W. S. MAXWELL, ARCHITECTS.



MARBLE AND ALABASTER LAMP STAND-ARDS—MONTREAL ART GALLERY. E. AND W. S. MAXWELL, ARCHITECTS.



FOOT OF MAIN STAIRS, TOWARDS ENTRANCE HALL-MONTREAL ART GALLERY.



ENTRANCE HALL ON SHERBROOKE STREET FRONT-MONTREAL ART GALLERY.



DOORWAY TO EXHIBITION GALLER-IES-MONTREAL ART GALLERY. E. AND W. S. MAXWELL, ARCHITECTS.



PASSAGE AND COLONNADE FLANKING MAIN STAIR WELL—MONTREAL ART GALLERY.
E. AND W. S. MAXWELL, ARCHITECTS.



MAIN EXHIBITION GALLERY-MONTREAL ART GALLERY. E. and W. S. Maxwell, Architects.



TYPICAL EXHIBITION GALLERY-MONTREAL ART GALLERY.

E. and W. S. Maxwell, Architects.



MAIN STAIRS-MONTREAL ART GALLERY.
E. AND W. S. MAXWELL, ARCHITECTS.

This arrangement has two advantages; first, the glass area is sufficient to give excellent lighting to the pictures and, secondly, it leaves large uninterrupted wall spaces, which are so important in a structure of this kind.

There is no pretense of any architectural treatment in the galleries themselves; the only decorative notes are the brocades, old rose or light green, which are hung on the walls, and the door trim, which is treated like a great picture frame. The colored brocade wall coverings above mentioned were put on at

the instigation of the building committee with the idea of imparting a homelike appearance to the galleries and has always proven a disappointment, because the pattern and the color of the material detract from the pictures, and in a gallery where the pictures are constantly changed, the permanent collection being taken down several times a year to make room for special exhibitions, the walls have become patchy from uneven fading. This, however, is soon to be obviated, as a neutral tinted burlap is to replace the brocade as a wall covering.

Continuing the circuit, there are three side-lighted galleries on the Ontario Avenue front of the building. These rooms, on account of the Art School above them, are considerably lower than the main galleries. They are also less satisfactory from a point of view of illumination, the ceilings not being high enough to admit sufficient natural light for the depth of the rooms, and the artificial light, besides being insufficient as to volume, is poorly placed, the alabaster bowl being hung from the underside of

the beams; and the light supposed to be reflected by the ceiling, from the design of the fixtures, is broken up and lost almost entirely by the sides of the beams.

The Art School on the top floor is splendidly arranged, both as to light and convenience, and consists of three large top-lighted studios, two for cast drawing and one for life work, with the necessary toilet accommodations for men and women students, storage space, and the like. The walls in this portion of the building are all covered with neutral

tinted burlap, which affords the best possible background for all objects of art.

The major part of the basement is devoted to the apparatus for heating, ventilating, and vacuum cleaning; the rest of the space is devoted to a large modeling room in connection with the Art School, a lunch room for the students, ample janitor's quarters, public lavatories and storage.

Particular attention should be paid to the finely designed and beautifully executed bronze work used where occasion demands in the different parts of

the building. The grilles over the entrance doors typify the arts by means of a small figure supported by acanthus scrolls; the grilles themselves are of an open design, in order that light may penetrate the vestibules and entrance hall when the doors below them are closed. The newels and hand-rail of the main stairs are a splendid combination of wrought and cast forms in bronze; the designs have a distinctly metal character and are well proportioned to the space which they have to fill.



BRONZE NEWEL AND HANDRAIL— MONTREAL ART GALLERY.



COUNCIL ROOM-MONTREAL ART GALLERY. E. and W. S. Maxwell, Architects.



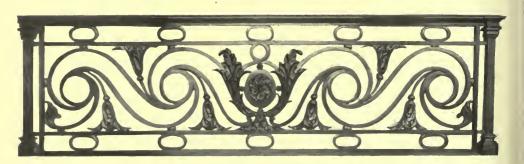
LIBRARY ON GROUND FLOOR-MONTREAL ART GALLERY. E. and W. S. Maxwell, Architects.

THE ARCHITECTURAL RECORD.

The furniture, also designed by the architects, shows a simplicity and dignity that make it harmonize with the architecture about it. The table in the gallery at the head of the main stairs is a rich and pleasing 'Renaissance design; the gallery seat shown on page 133 is severe in its straight classical lines that are relieved from monotony by charming bits of decorations on the supporting standards and back. The

furniture throughout is of oak with a natural flat oil finish to match the architraves, doors and the little other woodwork found in the building.

In conclusion, the Montreal Art Gallery is a carefully designed, well thought out, and finely executed piece of work, which, notwithstanding the criticisms in the preceding paragraphs, is a worthy monument and one that should serve as an inspiration to those who study it.



DETAIL OF BRONZE HANDRAIL-MONTREAL ART GALLERY E, and W. S. Maxwell, Architects.



THE ARCHITECT'S PART IN THE WORLD'S WORK

AN ADDRESS BY FREDERICK L ACKERMAN

N giving this talk before the students and the faculty of the College of Architecture of Cornell University, I had in mind to awaken

in the students an interest in a phase of our work which is given but scant consideration in our schools—to open for discussion the need of a material revision of school curricula in harmony with the efforts of the American Institute of Architects, the Beaux-Arts Society, and similar bodies, for the furtherance of educational facilities both within our schools and during the years immediately following graduation. The question is this: Are we devoting any serious effort in the direction of showing students clearly the need of a greater degree of co-ordinated effort with civic, State and national bodies whose aims are directed toward developing a better physical condition within our communities? What are we doing to instill in their minds the idea that it is through voluntary and unremunerative service on the part of the architect that we can approach, within a reasonable degree of attainment, our ideals, both aesthetic and utilitarian? Do we in any way prepare them for this service which is of right demanded of them by the communities when they enter upon their life work and accept the responsibilities of citizenship? Do we open their eyes to the fact that it is alone through this voluntary service, the giving of time and energy to community problems, that we can provide the conditions through which there may be developed a vital, indigenous architecture, expressive of democracy?



These questions are not the result of speculation but, instead, have been suggested by talks with students and recent graduates of our schools, in

which it was made clear that they did not understand or even hold the vaguest conception concerning the relation of their work to the problems of the community at large.

AFTER GRADUATION.

After leaving the school the draughtsman passes through an apprenticeship of some years of office practice. During this period his horizon is limited in most cases by the office in which he works; he rarely comes into close personal contact with the clients; he is not interested personally in the community problems, because we have developed in him an attitude of self-complacency. He is not made aware of the efforts of our own professional bodies toward developing and maintaining higher ethical standards in the profession and toward the improvement of community conditions related to our work. He is left unconscious of this through lack of effort on our part to better acquaint him with the nature of the problems and the methods of solving them. We do little to stimulate in him a desire to aid in the solution of these problems, and still less to awaken in him a greater appreciation of his responsibility toward the community in which he lives.

We do little, indeed, to instruct him in the complicated processes by which we translate, through the efforts of our societies, our ideals into actual conditions. We do still less toward showing him the methods through which our ideals and the vague aspirations of our people can be translated into laws and ordinances pro-

viding the conditions which will permit us to express, in terms of steel and stone, a vital, living architecture of our own time and country.





I have not been so long away from the school that it is at all difficult for me

to recall distinctly the ideas and the ambitions which I possessed when I was a student like yourselves. The times have changed somewhat during the intervening period of years, but the change has not been so great as to warrant me in assuming that you now possess a different set of ideas or entertain other ambitions.

THE DIFFERENCE BETWEEN PRESENT AND PAST CONDITIONS.

The scope of your work has broadened; the efficiency of those directing your work has greatly increased; and your powers, therefore, I assume are greater. My case is somewhat different. A number of years ago I left this school with its traditions and went out into the world of practice, and with me I took a certain definite idealism, such as you possess today. I have seen that change from year to year in contact with the world as opportunities for service were opened to me; I have seen that idealism grow, and I now bring the result to you.

Today I shall not talk at any length about the past, and I shall use the present only as an example. The future with its infinite possibilities, your opportunities, and the part you should play in the world's work, is the subject of my talk.

WHAT DOES ARCHITECTURE MEAN?

I shall throughout use the term "architecture" in a broad sense and I want you to conceive that term as embracing and including all that is generally associated with the term "art" as applied to painting and sculpture. In truth, the two latter elements are but parts when we conceive architecture as the physical expression of a civilization.

I shall not attempt to define the term "architecture" nor the term "art." Definitions are but relative. I want you to think of architecture

in a much broader sense than is our custom. Consider the term, eliminating entirely from your mind the ideas so generally associated with the words "art and beauty." Think of architecture as an expression of conditions, the resultant of complex forces. Architecture may be a beautiful or it may be an ugly expression. Whether or not the term "art" presupposes an element of beauty contained, matters little. We surely all recognize the fact that "architecture" is sometimes inexpressibly ugly.

I am not going to consider with you or discuss the relative beauty of different architectural expressions of the day; that enters into your day's work. I shall not consider with you the adaptability of certain styles of architecture to present conditions; that is an academic question. I shall not attempt to compare what we are doing today with the effort of the past; that again concerns the work of the school. As I have said, my topic concerns the future, and it shall be my endeavor to awaken in you a broader conception of the great problems before you than I possessed when I left the school.

My purpose is not to change the nature of your idealism; my object is to point out to you the absolute necessity for your performing certain acts and sharing individually certain responsibilities which I shall discuss with you, for it is through such acts alone that you will be able to turn your idealism, a shadow form itself, into definite realities.

We have not lacked, nor do we now lack, idealism. That we have been utterly impotent to create beautiful or even utilitarian cities does not prove that our idealism is at fault. I suggest, however, that we do not individually, or as a body, understand the nature of the processes necessary to a fruition of our ideals. We

must stoop to conquer.

What is the relation of the architect to his ideals, to his own work, and to the age in which he lives? What are the



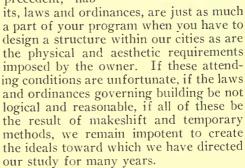
methods whereby he may be able to interpret the age in which he lives and to mould it, and, in turn, express not only what is best in himself but the best that is in his age as well? Upon this latter phase of his work I wish to lay particular emphasis, for it will become in later years, if you are serious in your endeavor, the subject of your greater interest. It is my wish to make it the subject of your most serious consideration now.

We are all too apt to think only of the problem at hand. We look forward to that time when we shall be given important commissions to execute and our assumption is that we shall then proceed to execute them, depending upon our own individual ability and our imagination to find the proper solution. We have not fully awakened to the reality, to the fact that in many phases of our work the surrounding conditions are such that a good solution of the problem is utterly impossible.

There are certain structures, such as isolated buildings, country houses and the like, in which this thought does not apply; but in the vast majority of cases there are conditions which prohibit the working out of our ideals. In the problem of the country house, if the needs be well defined, if the program of requirements be reasonable, it becomes a matter of individual effort on our part; and the result is a measure of our ability to design, to influence the client in the right direction, and to exercise that all-important quality—executive ability. If, however, the problem be of another class, viz., any of the structures found in our cities or the plan and arrangement of the cities themselves, we find that we are confronted with quite a different question. There are on every hand unnatural conditions which hamper and restrict us. We are

brought face to face with that accumulation of conditions which is but the product of badly-governed municipalities.

These accumulated conditions of the past, wrought into precedent, hab-



THE TANGLE LEFT US BY THE PAST.

What is our relation to these attending conditions, to our practice and to the conditions themselves? I shall confine myself almost entirely to the municipal problem, for it is in the cities that most of us must live and labor because of the nature of our calling.

Let me quote a paragraph from Walter Wevl's "The New Democracy." In the chapter wherein he traces the growth of the many interests which have brought about the present political, social, economic and moral conditions he says: "Like the continent, the city has been scarred by the same waste and pre-emption, and the same insensate optimism, the same utter lack of prevision. Cities destined to be the homes of multitudes have grown up with the abandon of petty villages. Streets have been made narrow; parks have been forgotten; houses had been built upon the theory of packing-boxes; drainage, water supply, fire protection everything had been left to chance and the play of the instinct for gain. The theory of the American city was that of the pioneer's camp. People were there Their living conditions for business.

Their living conditions must work out themselves." This is a fair and a just statement of the conditions surrounding our work in the cities of America today.



These are the conditions which will confront you upon entering the field of prac-

tice. They will stand as a Chinese wall about your idealism and imagination.

Let us pause and take stock, as it were, of these unfortunate conditions. Out of such an analysis we may find the key to this exceedingly difficult problem. It is our problem first to understand clearly the aims and activities of the general public of which we are a part; we must also understand the complex social, political and economic structure of our civilization, municipal, State and national, if we are to be a factor in finding the remedy. Moreover, it is the duty of the architect to know these things, for it is his task to mould and unite these exceedingly diverse elements into a simple unit. He must lead through greater knowledge than that of his fellow man: at the same time he must follow. He must be able to analyze the individual: must be able also to analyze the powerful undercurrents of his time before he can either express the civilization in which he lives or express even himself. THE ONLY SOURCE OF ART.

Any art must be an unconscious expression of its cause; a great art can only be produced through strong, positive forces demanding that art. To say that an art is bad is saying that art does not exist at a given time and place; and it is likewise true that a vast amount of artistic activity, so-called, may go on, producing nothing, simply because there may be no demand for that particular form of expression at that particular time. Genius is not individual, but it is an individual expression of what time has accumulated in the minds of men; and there has never existed a genius both out of

time and place. Beware of those who would walk only in the paths of the past as well as of those who would work ages ahead of their time.



Returning to the statement quoted, this is the sort of expression that comes with an awakening, and we already see in every branch of governmental activity the acceptance of a broader policy. As yet, however, we have achieved comparatively little, and particularly is this true in all of those conditions with which we are brought into close contact in our work. The public as well as ourselves are vainly groping for better physical conditions within our cities, but as yet the effort amounts to but little, owing to the nature of the endeavor rather than the amount of work done.

THE LACK OF CO-ORDINATION.

There are many groups of citizens working for the same end, but their efforts lack co-ordination and are therefore void of any great effect. Our architectural societies throughout the country have been very active. The members of our societies have striven hard and have worked with enthusiasm, but their effort has lacked one fundamental quality that must needs be found in such an endeavor if we are to be reasonably sure of success—we have not taken the people into our confidence in regard to the nature of the work which we have been doing. If we have desired more progressive legislation in questions involving Federal competitions or a better plan for our capital city of Washington, or if we have desired better tenement house laws or better factory regulations or a more reasonable building code, we have simply gone to the committees of Congress, or to our State Legislatures, or to the Board of Aldermen in our cities.

We have not shown through our past efforts that we understand the nature of our own problem, for it does not appear that we have yet grasped the fundamental idea that it is alone from the people themselves that the initiative must come which

will, in its turn, produce the conditions and create the laws through which our ideals may in the end find expression We have not taken the issues to the people with a plain statement of what we desire so that they might bring pressure to bear upon their representatives. We have made the error of allowing the rank and file of the people to see only our artistic side. We have talked too early about the "City Beautiful"; we have not put due weight upon the fact that our aim is first to create the "City of Common Sense." We have not considered with them the penalty which we are to pay for

our present slipshod methods.

Our American cities are confronted with a grave problem, a problem so serious, so generally acknowledged, that the people would respond to our call if we would but point the way in terms expressive of utility and economy as well as of beauty. They know well enough that the conditions are bad; they have a vague idea of why they are bad, but they do not know the remedy to apply. In some of our cities the time is approaching when any effort on the part of its citizens will be in the nature of locking the barn door after the horse has been stolen.

As a result of the wonderful advance made in the art of construction during the last quarter century, we have a condition in our cities today that absolutely and utterly upsets all of the old traditions and customs regarding not only the plan of the city but the laws governing the erection of buildings therein. No longer do the old relations and harmony between the width of street, the size of block, the restricted area for light and air within the block, the height of building upon the street—no longer do these relations of harmony hold. There was a certain harmony between these relations which came as a result of years of evolution. This harmony was reasonable and in the course of time became precedent and

later was acknowledged in our statutes and laws. In this old relation there was a certain permanence of value established through the limitations of the strength of materials.

It is this idea that has created

the present congested condition within our cities. The complete change from masonry to steel, when confined to a single building, was a step in the *evolution* of building, but when applied to a whole city it was more in the nature of a *revolution*. Within the structure itself our laws acknowledged this evolution, but within the city as a whole they did not. Streets that were wide became narrow in comparison. The streets which cared for the daily crowds with ease have now become packed to a degree that is intolerable.

I have spoken of the "City Beautiful" and the "City of Common Sense." In passing let me say: Do not lose sight of the fact that all the buildings erected within our cities are built not because of any desire on the part of the owner to make something beautiful, but rather from considerations purely commercial and economic; that as an architect you are bound to satisfy his desire within the limitations of your own ability, on the one hand, and the laws and ordinances, on the other; that you cannot work out in a single problem any of your general ideals. Keep in mind that the people today will not listen to nor favor any attempt upon your part to provide the aesthetic alone, but they will accept it, and accept it gladly, if you can show them that it will come as the result of better economic conditions. Your measure will be taken more often by this standard than any other.

HOW THE PRESENT LAWS HINDER A CONSISTENT EXPRESSION.

Beyond the questions of economic construction, we have in our cities as a framework for all of our problems certain definite building laws that are as

much a part of the program as the physical requirements. These laws have come to us through a very gradual and retarded process of evolu-





tion of many years, and they are so inwrought into the life and structure of a

city that not only the public but we ourselves accept them as a perfectnatural condition, an established The primary object of these laws is one of safeguarding individual rights and providing general welfare, but exactly like all instruments of similar nature, these laws have not kept pace with the remarkable advance of construction or social welfare of the last quarter-century. In these laws we have not acknowledged the advance of the new democracy, the awakening of this nation to a sense of greater moral and social responsibility or the crying need of a policy of conservation within our cities.

In our cities throughout the length and breadth of our land these laws do not insure the proper light and air for our streets, for the restricted area within the block, or for the rooms within the buildings. We have towering buildings of fifty stories in height upon streets sixty feet in width. We have lofts and factories rising ten, fifteen and twenty stories in height with so little light and air at the bottom of the open courts provided at the side or the rear that we shall soon be brought face to face with the old conditions of the sweat shop if we continue to allow the erection of these buildings under the present conditions. We have apartment houses rising to an unlimited height and covering so large a percentage of the lot that, where the block has been completely built up, there remains little light and air for the rooms facing upon the courts or open spaces within. This can be characterized by no other terms than plain stupidity on the

part either of the city or of the individual owners, for all that area within the block has little earning power compared with what it might

earn were the laws and ordinances so designed as to prohibit building over so large an area. If the city permits this condition to continue, it is only a matter of time when we may again characterize the period as the Dark Ages.

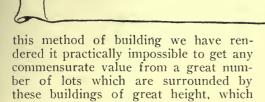
THE STUPIDITY OF OUR PRESENT METHOD

OF BUILDING CITIES.

I have said this was stupid on the part of the city and also on the part of the owner. The condition comes about through the activities of promoters who select a portion of the city wherein small buildings only exist; they erect there a tall loft, office building or apartment house, utilizing every inch of space allowed within the law, fill it with tenants —and sell. The purchaser, an individual oft-times who does not look to the future, sees only the excellent income from the building and does not consider the fact that when his neighbors build in like manner they will take from him a large proportion of his own property, which means that in the end his property will not only shrink in its earning capacity but will also depreciate in value. This is not all. It leaves his property for a cheaper class of tenants employing a cheaper class of labor, and we have as a result an anxious landlord and a great number of employees laboring in the semi-darkness.

This method of building our cities is foolish and stupid, for it results in an endless shifting and changing of the many groups of interest and a constant condition of uncertainty as regards character of locality and land values. Moreover, when we consider that we are advancing in our ideas of industrial justice and social welfare, it is pertinent to ask whether such a stupid policy will not ultimately end in a serious depreciation of property, such as we already see

in certain sections of our cities filled with oldfashioned tenements, office buildings, lofts and factories. This method is not economical. By



have shut off their neighbors from light and air, elements to which they have as fundamental a right as they have to

the land itself.

If the owners of these tall buildings were made to pay their proper share of the construction of transit facilities necessitated by their erection and necessary to maintain the value of the property, there would be less exploitation along that line of development.

THE ELEMENT OF FIRE DANGER.

Beyond providing for the proper amount of light and air for the workers in factories and offices and for the dwellers in tenements, we have the question of protection from fire to consider. In this same connection should be considered all of the great class of other buildings, such as department stores, theatres, and buildings of public assemblage. In our laws, as now framed, a proper protection has not been provided, because light and air have not been conserved.

The violation against human rights in this particular is flagrant in our lofts and department stores. Up to the present we have been allowed to build over vast areas structures which not only provide insufficient means of exit in the case of fire, but which allow the fire to spread easily and with great rapidity over the entire area of building, and from the

basement to the roof.

THE SUGGESTED REMEDY.

I have made note of but a few important points wherein our laws are at fault, where they do not recognize the principles of economy, utility or beauty in building our cities. Before suggesting

definite remedial measures. I wish to consider the relation of the law and ordinance to art. They are closely related, in fact, they are so

closely related that you cannot separate them; one is dependent upon the other.

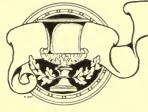
Through a knowledge of the state of one you can easily tell what is the state or condition of the other. I hope you will consider well this thought; it is alone through its recognition that we can advance. Look at our cities, the product of what we consider a great civilization. What is there in the scheme of things to inspire the architect to create, to invent, just so long as there exists as the framework of it all our stupid ideas regarding the conservation of our resources, light and air, or our even more stupid ideas concerning the economic use of the city block, or our utter misconception of the relation between individual and community right? I tell you that, so far as our art is concerned, we are working without a foundation just so long as we accept these relations without vigorous protest.

From my point of view it matters little indeed how we adorn or drape our steel frames, what masks we place upon them, just so long as there exist in our cities the conditions which we see at present. The conditions of our program are: A facade rising hundreds of feet, forming the wall of a narrow canyon, behind which we are to provide for thousands of workers, and of these nearly half spending their days behind windows opening upon narrow light wells, hundreds of feet deep, into which the sun never shines and where the phrase "light of day" would seem but a mockery. I ask you, before I proceed, what power of imagination could make of such conditions the inspiration for a work of art?

Before going further with remedies

I wish to emphasize that, while these suggestions may appeal to you as being the obvious remedy, it is not so with the majority of our peo-





ple. In the way of all reform measures stands indifference and a gross miscon-

ception of the relation of individual and community rights. In giving to the individual almost unlimited rights, we have thought that he would thereby be benefited. As this has worked out, it has resulted in quite the opposite. The rights of the community must be dominant, else the individual will suffer.

ZONES.

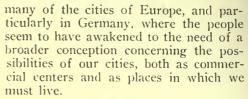
Now, of the schemes, one is that we divide the city into sections, divisions, or zones, restricting each in such a way that it will be advantageous to build only one class of building therein, and of course, in this limitation definitely defining the maximum height upon the street and the size of enclosed restricted area within the block in such a way that there will always be ample light and air for all rooms.

Needless to say, such a limitation should not only concern itself with the nature of the occupancy, but it should also be so constructed that the frightful congestion of some of our streets, such as obtains today in many parts of our larger cities, would not be possible.

The suggestion of segregation appeals to me more forcibly than any other, for it seems to be of broader scope. It is in the nature of a real city plan, which has through years of development been overlooked. It would tend toward more permanent land values, a steadying appreciation of values, and toward the erection of a better and more permanent class of buildings. Lastly, it would tend also toward a greater uniformity of architectural treatment within certain well defined zones.

This is exactly what we would do if

we were writing a program for a new city, as was done in the competition for a new capital city in Australia; it is what is being done in



TENEMENT LAWS.

Our tenement laws are of the most vital importance, for upon the proper housing of our working classes depends in a very large measure our future economic success. Great strides have been made during the last twenty years; better laws have been framed; better conditions have resulted. The solution of this problem is not as yet at hand. We must provide that there will be cheap land upon which these may be built. We must provide a law that allows the most inexpensive fireproof construction possible. All of the elements must be so arranged that the occupant can live in a fireproof, sanitary structure which pays the owner a good return. There are many groups of citizens laboring upon the problem today, but the difficulties are such that only through the most conscientious effort may we expect to find a solution.

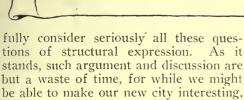
These are but a few of the many suggestions. Together their name is legion, but I hope that I have pointed out enough for you to see, in view of what I said in the beginning, that there are attending conditions which dominate your abil-

ity to create and design.

Again I state, it is not pertinent for us to argue too long or too earnestly over the form and nature of structural expression where there are fundamental questions, such as I have pointed out to you, still to solve.

If our laws governing the erection of tall buildings were such that we could erect these tall buildings, never encroaching upon our neighbors' light

and air, nor congesting our streets, nor jeopardizing the light of those who dwell or work therein, then I would say that we could right-



the very fact that it is not sound economically or built with a proper consideration of conservation makes the idea that it may be beautiful an absurd assumption.

sumption.

THE DANGER OF CONSIDERING ONLY THE SINGLE PROBLEM.

The major part of your time and the greatest interest in your endeavor centers around specific and definite problems having both paper programs and paper limitations. Through the constant exercise of certain faculties in your endeavor to solve your problems, and the repeated application of certain principles which you are taught in the school, you grow gradually to feel that architecture is closely related to an abstruse science and also that the art which is therein can only appear as resultant of your own personality. Always it is the single problem. which engages your attention, and therefore the building or the group of buildings becomes a measure, as it were, of its designer. Its plan appears to be the result of his ingenuity, its character and expression the result of his cleverness.

Your whole training keeps your mind well within certain limitations. Your inspiration comes through a study of the results of conditions and not from conditions themselves; you learn to make use of elements which you find in books and to vary these elements to meet and satisfy certain fixed conditions imposed upon you, with the result that you grow naturally to look upon architecture as a personal achievement, simply the result of individual effort applied to a particular problem rather than, as I suggested be-

fore, an expression of constantly changing forces.

You try, and you use our own terms, to define an architecture expressive of our day, and you conclude that we have failed; but when you try to put

into words your vague ideas of what it should be, or to create with your pencil an image which will express the thing after which you are groping, the result on the one hand is simply words, and on the other a graphic imitation of an old form

Coming fresh from school, with its associations, its traditions and the material in the library, you realize, as do we all, that there is a vast amount of ugliness in the world today, and it is easy for you to attribute this to an utter lack of taste on the part of our people. You straightaway divide our people into two divisions: We, the architects, the artists, and they, the great mass of people of all classes who should be taught to understand. You see before you the problem and you say "we must educate them," and your method is this: You would gradually educate them by example, showing them beautiful designs and compositions of your own standard of art and beauty, designs which you would evolve from your minds in the studio.

THE DIRECTION IN WHICH WE MUST GO. In conclusion let me suggest that if a remedy is to be found for these conditions much depends upon you. I take it for granted that each of you desires the better conditions suggested, and I say this to you: Better conditions will obtain, your ideals will be satisfied, and you will be responsible for better conditions just in proportion as you exercise the powers and perform the duties of citizenship in your community. You may indulge in flights of fancy if you like, but do not forget the fact that it is through the exer-

cise of the franchise alone that there can be obtained for your program the conditions absolutely necessary for the working out of your ideals.



In our cities today there are many societies, and groups of individuals ambitious for better social, economic, physical and political conditions. When

you consider carefully the work they are doing you will be surprised to find that they are in the main working for the betterment of our architectural programs, in other words, they are striving for our ideals. In the work of the many societies laboring for better housing, better fire protection, better sanitary conditions in stores, lofts and factories, greater safety and the reduction of congestion in our streets, the development of civic centers and the general aesthetic development of the city, we see but the furtherance of our aims. In the work of the American Institute of Architects and other architectural societies there is the same field open to you for service. In our own publications and in the daily press, through which alone we may hope to consider this matter with the people at large, a great and as yet almost undeveloped

field is open to us, provided we can but come to realize the importance of considering seriously subjects of this sort with the people.



I have but pointed the direction. know very well that I cannot bring these great problems fully home to you; but I want you to remember when you feel the conditions of practice choking your spirit, that there is a field of labor outside your offices and that there are problems which go far beyond your powers to solve in terms of steel and stone alone. In this broader field of service you are building into future ages, a spiritual structure lasting centuries beyond the life of material forms. If you, through your endeavor, after you have studied well and come to understand the problems, can take this message to the people and so state it that they will understand, then you will have achieved not only your right to your title of Architect, but a right also to the full significance of that far greater title-Citizen.





SOUTH FRONT-CLIVEDEN, GERMANTOWN, PHILADELPHIA.

THREE TYPES OF CEORGIAN ARCHITECTVRE

The Evolution of the style in Philadelphia

By Harold Donaldson Eberlein

PART II.*

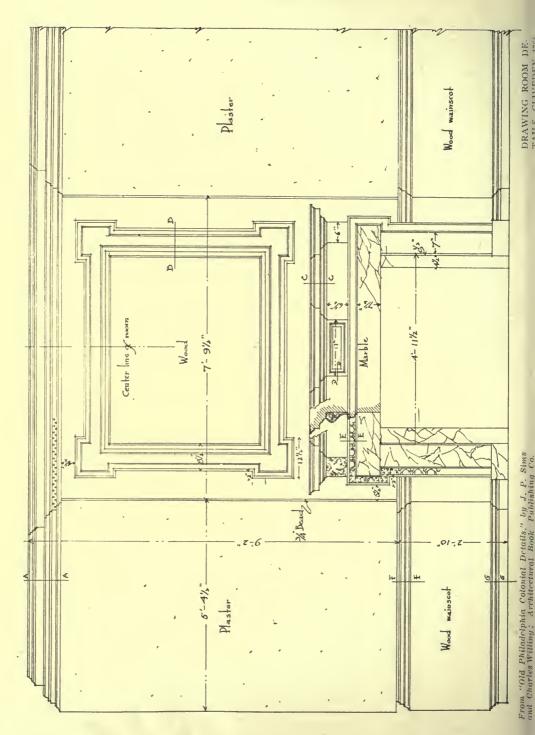
A NOTHER house of the second Georgian type is Mt. Pleasant, or Clunie, as it was at first called, in Fairmount Park, built in 1761 by Captain John Macpherson, and in later years the home of Benedict Arnold. Mt. Pleasant is a structure of almost baronial aspect, with east and west fronts alike of imposing mien.

A high foundation of carefully squared stones is pierced by iron-barred basement windows set in stone frames. Above this massive, grisly base the thick stone walls are coated with yellow-grey roughcast. Heavy quoins of brick at the

corners, and, at the north and south ends of the building, great quadruple chimneys joined into one at the top by arches, create an air of more than usual solidity. A broad flight of stone steps, their iron balustrades overgrown with a bushy mass of honeysuckle, leads up to a doorway of generous breadth. The pillars at each side of the door and the superimposed pediment, the ornate Palladian window immediately above on the second floor and, above that again, the corniced pediment springing from the eaves, all contribute to set a stamp of courtly distinction upon the pile.

Above the second floor the hipped roof springs, pierced east and west by two

^{*}NOTE.—The first part of this article was published in July, 1913.



graceful dormers and crowned by a well turned balustrade that traverses nearly the whole distance between the chimneys. The fan-light over the door has remarkably heavy, fluted mullions and much of the detail throughout the house. though highly wrought, is heavy. The two flanking outbuildings, set thirty or forty feet distant from the northeast and southeast corners of the house, designed for servants' quarters and domestic offices, give Mt. Pleasant a peculiarly striking appearance. Without them it would be only an unusually handsome Georgian country house, with them it at once takes on the manorial port of one of the old Virginia mansions. The interior woodwork, both upstairs and down, is rich in elaboration of detail and the door-frames. with their heavily moulded pediments, are exceptional.

Cliveden, the third member of the second group, was built in 1761 by Chief Justice Chew. Its solid and heavy masonry is of carefully dressed Germantown stone, and at the peaks of the gables and corners of the roof are great stone urns. Back of the house are two wings, one semi-detached and the other entirely so, used for servants' quarters and domestic offices. All the features and detail about Cliveden are thoroughly in keeping with the same characteristics of the other two

houses already described.

The windows are broad and fill a great part of the wall space in the façade and the doorway is a central feature that has been made the most of by the architect. Both indoors and out the strongly classic feeling has been emphasized in pillar and pediment, pilaster and entablature. Triglyphs, guttae and all other details of classic embellishment have been wrought with the nice precision due a

worthy subject.

Comparing Whitby, Mt. Pleasant and Cliveden with the former houses of the first Georgian type, certain differences at once strike us. The whole aspect is changed by the greater breadth of windows and doors. The houses look wider awake. This change in the size of the windows means, of course, that the rooms within in most cases were lighter and more cheerful than before. Then,

too, the Palladian window has appeared. Both Mt. Pleasant and Cliveden afford good examples, Cliveden's being placed at the side, while at Mt. Pleasant it forms an important feature in both the east and west fronts.

At Mt. Pleasant and Cliveden we see that the door has become a subject for elaborate treatment, quite in contrast to the extremely simple and unassuming manner of dealing with the same feature in the earlier houses. At Mt. Pleasant the severity of the roof line is tempered by a balustrade and the effective management of the chimneys, while at Whitby and Cliveden urns embellish the peaks and corners. Within we find that acanthus leaves and thistles have begun to grow, the rose has blossomed, other conventional flowers and foliage have budded and egg and dart mouldings have appeared. In other words, carving as a mode of embellishment has attained an established vogue. The moulding profiles have lost some of their trenchant boldness, and though the ornamental detail, both indoors and out, is still vigorous, and at times massive, there is generally visible an air of delicacy and refinement not present before.

The Woodlands, the Highlands and Upsala exemplify for us the third type of Georgian. William Hamilton built the Woodlands about 1770, Anthony Morris finished the Highlands in 1796, and Norton Johnson began Upsala in 1798 and completed it three years later. Across the north front of the Woodlands, at regular intervals, are six Ionic pilasters above whose tops runs an entablature whose frieze is adorned with paterae and fluting, the whole surmounted by a pediment. Before the house is a low and broad paved terrace filling the space between the semi-circular bays that project from the ends of the building. Between the two middle pilasters a round-arched doorway with a fan-light opens into the hall. On the south or river front a flight of steps ascends to a lofty white-pillared portico, from which a door opens directly into the oval-shaped ballroom.

In another respect the whole exterior aspect of the Woodlands is different from that of houses of the second type. Win-



From "Colonial Homes of Philadelphia," by H. D. Eberlein and H. M. Lippincott; J B. Lippincott Co. PARLOR OF WHITBY HALL, KINGSESSING, PHILADELPHIA. BUILT IN 1754.

dow treatment is always a most important item in determining architectural character, and it is just here that a significant change is to be noted. The size of the opening is, in some cases, the same, in others it is larger but, more noticeable still, the muntins are far smaller and we lose the bold, trenchant barring of white that emphasizes the aspect of windows in the earlier buildings.

The interior is finished with all the delicacy that one might expect, judging from the evidences of Adam influence without. One highly significant feature of interior treatment in the houses of the third type is the change made in the arrangement of the mantels. We have seen that in houses of the first type, such as Graeme Park, and in houses of the second type, such as Whitby Hall or Mt. Pleasant, the overmantel panelling and embellishment were accorded much care and elaboration. The chimney breast often extended a considerable distance into the room and the orna-

mental superstructure above the fireplace reached all the way to the ceiling.

Although these ornate overmantels reaching to the ceiling had begun to fall into disfavor in England a little after the middle of the eighteenth century, when houses of the second Georgian type were being erected in the Philadelphia neighborhood, Colonial conservatism disregarded the newer style and clung to the mode approved by timehonored precedent. The fireplace with its setting has always held a position of such exalted honor as the centre of family life that the following extract from Clouston's treatise on Chippendale is particularly illuminating in this connection. In speaking of the influence exerted by Sir William Chambers on architecture as well as furniture, he says, "when he returned to England in 1755 [from the Continent] he was accompanied by Wilton and Cipriani, afterwards so well known as an artist and decorator. He also brought Italian



MANTEL DETAIL—WHITBY HALL, KINGSESSING, PHILADELPHIA.

An Example of the "Second Type" of Georgian.

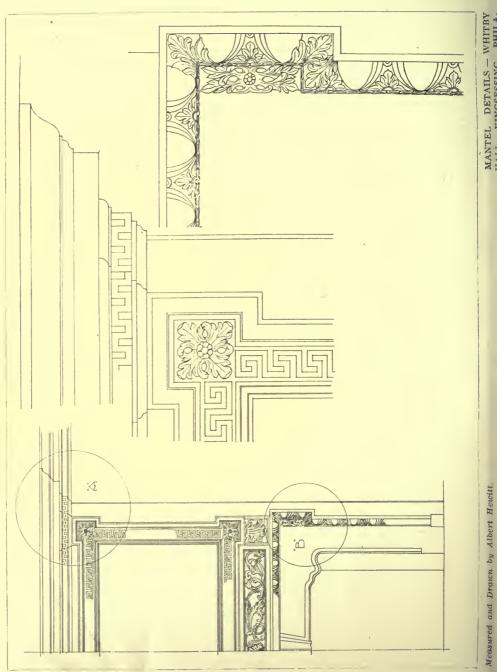
sculptors to carve the marble mantelpieces he introduced into English houses.

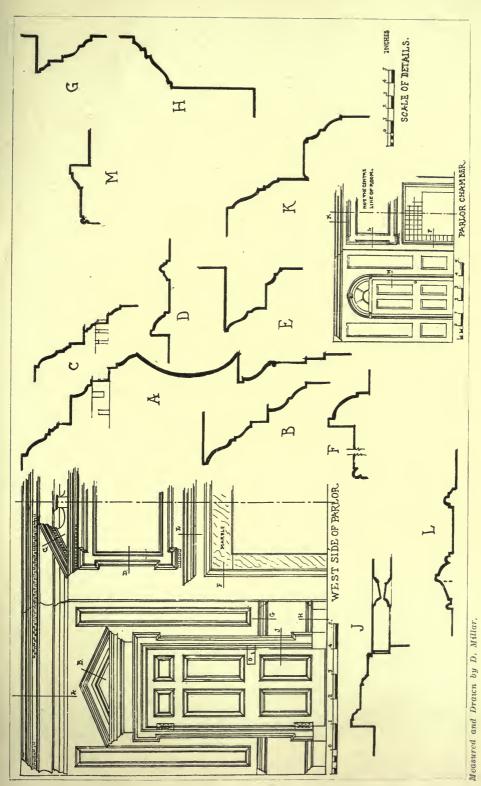
"These were made from his own designs, and the ornament of figures, scrolls and foliage was free in character. Strange to say, these mantelpieces, designed and made by an architect, were yet the means of taking away this important part of interior decoration from the hands of the architect altogether and causing it to become quite a separate production, made and sold along with the grates.

"In former times it had been an integrant portion of the rooms, reaching from floor to ceiling, balanced and made part of the wall by having its main lines carried round in panelling and enriched friezes. It was the keynote of decoration, and the master builder of the times grew fanciful and exerted his utmost

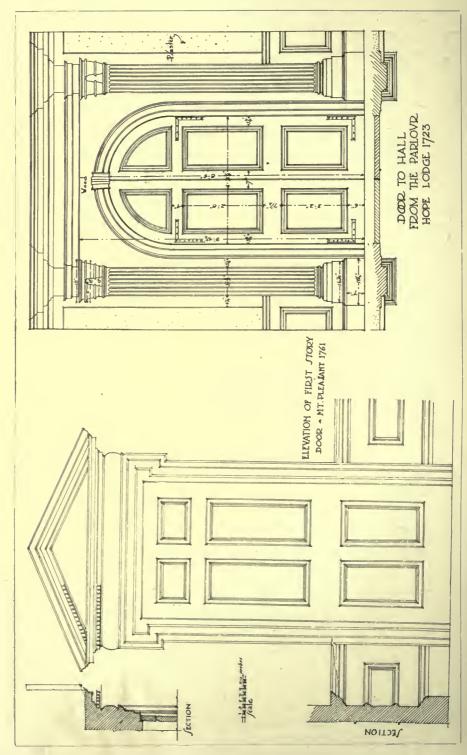
skill upon its carving and quaint imagery, centralizing the whole ornament of the room around this household shrine.

"Mantelpieces had gradually come down in height, though still retaining much of their fine proportion and classic design. Many causes had contributed to this, the chief being the disuse of wood panelling and the preference given to hangings of damask, foreign leather and In the reigns of Queen wall paper. Anne and the Little Dutchman the custom of panelling was partially kept up, but the lining was only white painted deal, after the fashion in Holland. At this time the upper part of the chimneypiece was still retained, but only reached about half-way up the wall. Kent and Ware kept the superstructure as much as they could, but Sir William

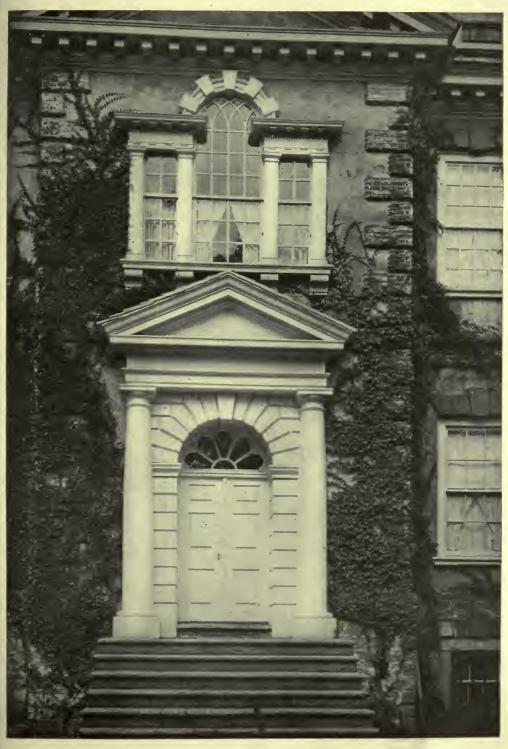




DRAWING ROOM DETAILS—GRAEME PARK, 1722;



Measured and drawn by Joseph Patterson Sims.



WEST FRONT-MOUNT PLEASANT, PHILA-DELPHIA. BUILT 1761. AN EXAMPLE OF THE "SECOND TYPE" OF GEORGIAN.



EAST FRONT-MOUNT PLEASANT, PHILADELPHIA.



From "Colonial Homes of Philadelphia."

WEST FRONT-MOUNT PLEASANT, PHILADELPHIA.



DETAIL OF WOODWORK—GREAT CHAMBER, MOUNT PLEASANT, PHILADELPHIA.



S T A I R W A Y-M O U N T PLEASANT, PHILADELPHIA



PARLOR — MOUNT PLEASANT, PHILADELPHIA



DETAIL OF NORTH FRONT—THE WOOD-LANDS, PHILADELPHIA,

Chambers dealt it the most crushing blow it had yet received by copying the later French and Italian styles and giving minute detail more consideration than fine proportion. He discarded the upper part altogether and helped to make 'continued chimney pieces' things of the past."

The much used Adam oval found expression even in the shapes of rooms and, besides the oval ball-room at the Woodlands, we frequently find in houses of the third type rounded or elliptical

hallways and chambers.

At the Highlands, in the Whitemarsh Valley, we see the front of the house adorned with tall Ionic pilasters rising from base course to cornice, which is itself elaborately wrought. The woodwork inside is excellent, but unfortunately the Adam mantels with their compo decoration, have been removed and now grace another house some miles distant. At Upsala, in Germantown, however, we are in better luck, for there the Adam mantels have remained untouched. The illustrations show the rest of the house sufficiently to make further specific comment unnecessary, save to remark, regarding the windows, that here, as in other houses of this latest type, larger panes of glass than in the two earlier types are met with in not a few instances.

Before proceeding further in the course of comparison, a word ought to be said about the color of the paint used for the interior woodwork of the Georgian houses of all three types. For some reason there seems to be an impression abroad that white was employed to the exclusion of everything else. was, it is true, a preponderance of white, but its use was by no means universal. A close examination of successive layers of paint on some old woodwork reveals various shades of greys, blues, drabs, brownish yellows and other hues beneath one or more coats of white. Grey seems to have been one of the earliest variants from white and, in some places, nothing else was ever used. At Graeme Park, for instance, the first coat of paint was grey and no other color ever adorned its panelling and door and window trims. At Stenton, on the other hand, the taste of the occupants dictated a change of color from time to time, and we find a good deal of variety in the successive coats. During the prevalence of the second Georgian type white seems



NORTH DOOR—THE WOODLANDS, PHILA-DELPHIA. BUILT ABOUT 1770. AN EXAMPLE OF THE "THIRD TYPE" OF GEORGIAN.

to have found more general favor. With our last type delicate colors again be-

gan to be used.

Contrasting the Woodlands, the Highlands and Upsala with the houses illustrating the second Georgian type, we find still further evidences of architectural evolution. During the prevalence of the second type individual features were singled out for decorative emphasis, but in the days of the third type the entire front of a house or sometimes the whole exterior was regarded from a decorative point of view. At Cliveden the treatment of the doorway and the urns on the roof are the features relied upon for the embellishment of the façade. At Mt. Pleasant the doorways of the east and west fronts, the Palladian windows above them, the balustrade on the roof and the treatment of the chimneys supply a fuller and more ornate decorative effect. But when we reach the third period we see that the architect has considered carefully the decorative element in both the proportions and detail of the whole building. It would be hard to believe that the designer of the Woodlands, in drawing his plans, had not carefully aimed at the pleasing ensemble of his masses. The effect of the rounded ends is agreeable, and a marked departure from the straightforward rectangularity of most of the houses of preceding types. The lofty portico of the Woodlands' south or river front had no precedent in Philadelphia. Vaux Hill or Fatland, erected about the same time, and Loudoun, a few years later, had the same motif, and even John Bartram, in his last addition to his house, adopted the same treatment. Neither was there a precedent for the method of dealing with the north front, so we see that the Woodlands struck two new notes in local architecture.

At the Woodlands and the Highlands we find pilasters carried the full height of the walls—a new feature. The fenestration is arranged with more regard to outward appearance and not solely from a utilitarian point of view. We find that the high panelled overmantels which constituted an important architectural feature had given place to the low and elab-

orately adorned mantel that ought to be regarded rather as a piece of furniture than an architectural entity. Fireplaces had grown smaller. Fan-lights above doors had become common and were enriched with beautiful and sometimes intricate metal tracery. The comparison between these later fan-lights, with their airy grace, and the earlier fan-lights of Mt. Pleasant, with their ponderous mullions, is instructive. In the detail of all ornament heaviness has vanished and the polished elegance of Adam influence has taken its place. Everywhere we find paterae, drops and swags, fluting and quilling, oval fans and dainty urns and vases with delicate leaf and flower treat-

Regarding the texture of stone walls, we ought also to note that in the second and third types we find neatly squared and dressed stones used to a considerable extent. At Cliveden, the Highlands and Upsala the fronts alone are of cut stone, while at Whitby Hall the walls on all sides are treated with the same formal

precision.

Briefly summing up, then, it is clear that three distinct types exist. The first has Queen Anne affinities, but is Georgian in time and much of its feeling. Ornamental detail is simple and bold and at times a trifle heavy. The profiles of mouldings are strong and in high relief. Simplicity and strength, combined with grace, give the prevailing note in every The second type is lighter and more ornate, but, with characteristic conservatism and abhorrence of the new-fangled whims of Sir William Chambers and the Brothers Adam, Philadelphia adhered to the modes in vogue in England from twenty-five to fifty years before and kept Ware in countenance, who, in 1750, was still crowning his buildings with heavy Queen Anne urns.

Notwithstanding this staunch adherence to conservative architectural principles, however, a new feeling is everywhere perceptible. Though the overmantel decorations still extended all the way to the ceiling, the character of the ornamentation employed was vastly more elaborate and graceful than anything to be found in buildings of the first type.



SOUTH OR RIVER FRONT-THE WOODLANDS, PHILADELPHIA.

If the profiles of mouldings were not so bold and insistent they were, nevertheless, quite as graceful. With the advent of floriated and foliated motifs in the carving we naturally find a closer care to detail of all kinds. At the same time there is to be seen a more punctilious heed to all the little niceties and characteristic distinctions between the classic orders.

By the time our third Georgian type appears Adam influence has become paramount and put to flight all mid-Georgian ponderosity. Even in the cases of manifestly "carpenter-built" houses of the period where, quite unlike the three excellent examples which were chosen to represent their particular classes, no especial architectural merit is to be looked for, we find no heaviness of line and the character of ornamentation employed is distinctly either a copy or an echo of Adam motifs and in not a few cases has caught much of their spirit.

It must be understood that the houses used for illustration have been chosen because they represent their many contemporaries in the same neighborhood, all of which display the same characteristics according to the dates at which they were built. The foregoing analysis does not pretend to be complete—it would take far more space to trace all the subtleties of the subject—but aims only to direct attention to certain facts that may conduce to clearer understanding of American Georgian and its resources in supplying our present needs.

In considering the variations between the Georgian types of the Philadelphia neighborhood, it must be borne in mind that they ought not to be judged too strictly by contemporary work in England. Such comparison would only be misleading and unfair for several reasons. In the first place, at the beginning of the Georgian period, local conditions forbade the lavish display of carved ornamentation that marked so many houses of the same date in England. At that time there were few craftsmen in the Colonies capable of executing the elaborate carving in vogue on the other side of the Atlantic. The builders of mansions, therefore, must perforce content themselves by a close adherence to lines and proportion and do without the highly wrought carved embellishment. Then,

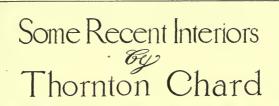
too, besides this difficulty, many of the builders of these early houses belonged to the Society of Friends and from their religious principles they were averse to a wealth of ornament.

In the second place, judgment by contemporary English standards would be misleading, because at the time the second Philadelphia Georgian type began to flourish, and the means and inclination for elaborate ornament were both present, Colonial conservatism had become an important factor in the dictation of styles and, however closely Philadelphians might copy the current modes of London in matters of dress, in their

manners and architecture they chose to cling to well established precedent and always remained thenceforward from twenty to thirty-five years back of their British cousins in the method of their architectural expression. Hence, for instance, overmantels reaching to the ceiling were built as late as 1765. In all its phases, however, Philadelphia Georgian, whatever minor differences there might have been, was true to the traditions of the great English architects and because of its purity of style is worthy of close study to-day for the vital inspiration it can supply to our own generation.



EAST FRONT-UPSALA, GERMANTOWN, PHILADELPHIA.
An Example of the "Third Type" of Georgian.





Library. Residence of Dave H. Morris, Esp. New York



ENTRANCE HALL—RESIDENCE OF DAVE H. MORRIS, ESQ., NEW YORK CITY. THORNTON CHARD, ARCHITECT.



RECEPTION ROOM—RESIDENCE OF DAVE H. MORRIS, ESQ., NEW YORK CITY. THORNTON CHARD, ARCHITECT.



OWNER'S ROOM—RESIDENCE OF DAVE H. MORRIS, ESQ., NEW YORK CITY. THORNTON CHARD, ARCHITECT.



MUSIC ROOM—RESIDENCE OF DAVE H. MORRIS, ESQ., NEW YORK CITY. THORNTON CHARD, ARCHITECT.



DINING ROOM-RESIDENCE OF DAVE H. MORRIS, ESQ., NEW YORK CITY.
Thornton Chard, Architect.



DINING ROOM—RESIDENCE OF DAVE H. MORRIS, ESQ., NEW YORK CITY.

Thornton Chard, Architect.



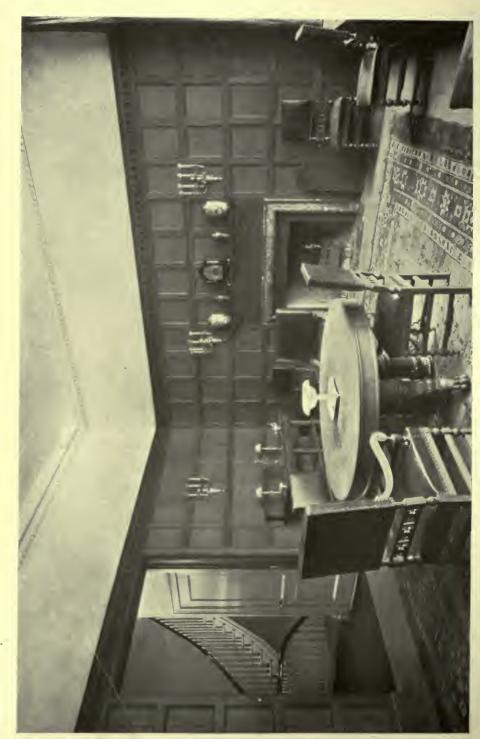
ENTRANCE HALL—RESIDENCE OF JAMES L. BARCLAY, ESQ., NEW YORK CITY. THORNTON CHARD, ARCHITECT.



DRAWING ROOM—RESIDENCE OF JAMES L. BARCLAY, ESQ., NEW YORK CITY. THORNTON CHARD, ARCHITECT.



SITTING ROOM — RESIDENCE OF JAMES L. BARCLAY, ESQ., NEW YORK CITY. THORNTON CHARD, ARCHITECT.



DINING ROOM—RESIDENCE OF JAMES
L. BARCLAY, ESQ., NEW YORK CITY.
THORNTON CHARD, ARCHITECT.



TWO BOOKS BY PRACTICAL THEORISTS

By RICHARD FRANZ BACH

Gurator, School of Architecture, Columbia University

PART II.

HE utterances of Professor Cram of the Massachusetts Institute of Technology are not to be taken lightly. He is a thinker of discernment and brings to his work a varied experience, making contact with the world of art at many points. His mind is an admirable crucible in which this experience tempers theory and produces wisdom. In The Ministry of Art (Houghton, Mifflin; 8vo, \$1.50) Mr. Cram has brought together a number of papers upon a series of topics ranging from the purely theoretic essay "Art the Revealer" to the historical and critical "American University Architecture." But though there may be diversity of title there is in all of these discussions a unity of purpose a purpose common to all artists and shunned by many of their numbernamely that of teaching, a mission which a person of sterling worth in the fine arts cannot well avoid. But few of us play our "full part in God's cosmogony" and it is to assure us that we have yet much to attain before satisfying that full part that Mr. Cram sets out to clothe art, and inferentially artists, with the proper

ministerial dignity. Early in his book he quotes Protagoras: "Man is the measure of all things" and cannot resist the epigram: "Art is the measure of man."

But let us first examine the avowed purpose of this volume; we find it definitely stated in the first few pages. For instance: ". . . by the words 'The Ministry of Art' I mean that function which I think art has performed, and always can perform, as an agency working toward the redemption of human character; and in this aspect . . it takes on something of that quality which characterizes ministers of the Christian . . And this I conceive Church. to be the highest function of the artist and the art that is his agency of operation. Not that I would for a moment make this an exclusive property; art has sufficient reason for existence in its quality as a creator of simple, sensuous joy and refreshment, as a beneficent force expressing itself through . . pure beauty. . Art may do more than make life beautiful, in that it can act symbolically, tropically, sacramentally, and so become the supreme means of

expressing and of inciting and exalting, those emotions which transcend experience and may not in any degree find voice through those channels of expression which are entirely adequate for the

purposes of the intellect."

We may sum up in a few words the burden of the first paper, entitled "Art the Revealer," delivered at the inauguration of Rice Institute, Houston, Texas. Mr. Cram considers art "an indispensable means toward the building of char-The older educational systems failed to recognize this fundamental truth and they taught art as they did engineering, from the purely vocational standpoint. In great measure we are yet guilty of such methods. But art has a greater scope, "for in all its manifestations . . it is the only visible and concrete expression of the mystical power in man which is greater than physical force, greater than physical mind, whether . . we call it intuition or . . immortal soul." Art functions as the "symbolic expression of otherwise inexpressible ideas," it is the splendid realization of the striving that tortures the artist. We see it well illustrated in the greatest of artists, Michelangelo himself, whose conceptions were snatched from the peaks of heaven, only to leave him discontented in the paucity of their tangible form. In this connection we recall Browning's words: "A man's reach must exceed his grasp, or what is heaven for?" We may take our lesson from the latter part of this lecture; it is of value for him who paints and for him who writes, for him who carves and for him who builds. "I find in many places laboratories of art industry where, after one fashion or another —and not always well advised—is shown how to spread paint on canvas; how to pat mud into some quaint resemblance to human or zoological forms; how to produce the voice in singing; how to manipulate the fingers in uneven contest with ingenious musical instruments; how to assemble lines and washes on Whatman paper so that an alien mason may translate them, with as little violence as possible, into terms of brick and stone or plaster and papier maché. And I find

names and dates and sequences of artists taught from text-books, and sources and influences taught from fertile imaginations, together with erudite schemes and plots of authorship and attribution; but where shall we find the philosophy, the rationale of art, inculcated as an elemental portion of the history of man and of his civilization? build our little categorical box-stalls and herd history in one, art in another, religion in a third, philosophy in a fourth, and so on, until we have built a labyrinth of little cells, hermetically sealed and securely insulated, and then we wonder that our own civilization is of the same sort, and that over us hangs the threat of an ultimate bursting forth of imprisoned and antagonistic forces, with chaos and anarchy as the predicted end.'

Mr. Cram is on his own chosen ground in "The Philosophy of the Gothic Restoration." We have often been charmed by his Romanticism, and his gauntlet always bears the challenge when Gothic art is mentioned. As a faithful champion, then, he plunges into his theme of the Gothic Restoration with a fervor that recalls his earlier work The Gothic Quest. In the course of this paper two-edged tribute is paid to Richardson: "The first great genius in American architecture, he rolled like an æsthetic Juggernaut over the prostrate bodies of his peers and the public." We are not a little surprised that the author found some of the Richardsonian influence at work in Japan. "Richardson will be remembered, not as the discoverer of a new style, but as the man who made architecture a living art once more."

Then follows a warning cry to avert the ultimate horror of steel. "The steel frame is the *enfant terrible* of architecture, but like so many of the same genus, it may grow up to be a serious minded citizen and a good father. It isn't that now; it is a menace, not only to architecture, but to society, but it is young and it is having its fling. . Like all good servants it makes the worst possible master; and when it enables us to reproduce the Baths of Caracalla, vaults and all, at half the price, or build a second Chartres Cathedral with no danger

from thrusting arches, and with flying buttresses that may be content beautifully to exist, since they will have no other work to do, then it is time to call a halt. The foundation of architecture is structural integrity; and it does not matter if a building is as beautiful as the Pennsylvania Station in New York, if its columns merely hide the working steel within, if its vast vaults are plaster on steel frame and expanded metal, then it is not architecture, it is scene-painting, and it takes its place with that other scene-painting of the late Renaissance to which we mistakenly apply the name architecture." This and many other poignant paragraphs we find in this paper, full of truth, and with a depth of significance that assumes now the tone of admonition and now that of prophecy, and the prophecy is that most readily to be expected of the author of St. Thomas' Church and the Graduate College at Princeton; it is that "now is the time . . to gather up once more the priceless heritage of mediævalism." But why

of mediævalism, why not of something else? If we are working out our artistic destiny, at the moment expressing ourselves in a number of styles, how can we in justice to ourselves go back to yet other forms and warp them to our needs? To be sure there is no lack of beauty in such resuscitated forms, witness the Pugins of last century, and witness Bryn Mawr and the University of Pennsylvania and West Point; but there is on the other hand no reason to suppose that the beauty of the spirit of Gothic can be revived in any greater degree than the beauty of the spirit of any other style that finds ephemeral favor in the year 1914. It must be a beauty of the letter only, of the hard and tangible form, which breathes an atmosphere of a dead past only because of its earlier association with that past. There is lacking what some philosophers would call the reality of the spirit. But then, when men of Mr. Cram's dignity and authority have formulated their theses, we have not to cavil, but simply to await the realization, be it a glorification or a fall. To Mr. Cram, at least, Gothic is the oriflamme, or the fiery sign adopted by Constantine after the battle of the Milvian Bridge, and its legend is: "in hoc

signo vinces.'

Other good papers in the volume are entitled "The Artist and the World" and "The Craftsman and the Architect," again prompted by the assured mediævalism of the author; but we hasten on to a fine paper on "American University Architecture" read before the Royal Institute of British Architects. The subject matter is treated historically, through old Harvard, the "Jeffersonian" of the University of Virginia, Upjohn and the American reflection of Pugin, and the more modern congeries of styles. McKim and the buildings at Columbia, the "Boulevardesque" of Yale and of Annapolis, and the modern Gothic—forerunner of the great restoration to come, if you choose—at West Point, Princeton, Chicago, Bryn Mawr, not to mention the projected designs for the Virginia Military Institute.

Next we have a suggestive and interesting discussion of the differences between American and English planning with reference to purpose in the universities. Much space is given to Princeton, of which the author is the supervising arch-

Finally comes the excellent article which provides the title for the volume. It is a parting shot; a sort of æsthetic moral to take with you to your study and to make part of your reflection. Michelet said that "history is only a series of resurrections." After we are through with The Ministry of Art we readily consider architecture one of the greatest of history-makers. In the course of the last paper we find this lucid passage: "..art..is neither a commodity, nor a form of amusement, nor an amenity of life, but a wonderful attribute of man who is made in God's image, a subtle language, and a mystery that, in its nature, we may with reverence call sacramental."

We shall keep the book near us, for it affords a wealth of inspiration for the Gothicist and for his enemy, nor can we faithfully say, after reading the last page, with which camp we desire to

throw our fortunes.

BOOKS RECEIVED FROM PUBLISHERS

DEALING WITH ARCHITECTURE AND ALLIED ARTS

Design in Landscape Gardening. By Ralph Rodney Root, assistant professor of landscape gardening, University of Illinois, and Charles Fabiens Kelley, assistant professor of art, Ohio State University. Ill., 8vo. 265 p., index. New York: The Century Co. \$2.

Early American Churches. By Aymar Embury II. III., large 8vo, 184 p. Garden City, N. Y.: Doubleday, Page & Co. \$2.80.

Country Houses. By Aymar Embury II. Selected and edited by Henry H. Saylor. A collection of photographs of exteriors and interiors, with floor plans. 4to, 135 p. Garden City, N. Y.: Doubleday, Page & Co. \$3.

Power, Heating and Ventilation, Part II: Heating and Ventilating Plants. A treatise for designing and constructing engineers, architects and students. By Charles L. Hubbard, consulting engineer. 2d ed. Ill., 8vo, 302 p., index. New York: McGraw-Hill Book Co. \$2.50.

The Commercial Problem in Buildings. A discussion of the economic and structural essentials of profitable buildings, and the basis for valuation of improved real estate. By Cecil C. Evers, vice-president of the Lawyers Mortgage Co. Ill., 8vo, 271 p., index. New York: The Record and Guide Co. \$1.50.

Nineteenth Annual Report, 1914, of the American Scenic and Historic Preservation Society to the Legislature of the State of New York. Submitted by George Frederick Kunz, president; Edward Hagaman Hall, secretary. 8vo, 716 p., and 76 plates, index. Assembly Doc. No. 57, Albany, N. Y.

Old Philadelphia Colonial Details, Measured and Drawn by Joseph Patterson Sims and Charles Willing. Large folio, 55 plates. New York: The Architectural Book Publishing Co. \$10 unbound, \$12 bound.

A Monograph of the Work of McKim, Mead & White, 1879-1915. To be published in about twelve parts. Large folio. Parts I, II and III, each with 20 plates. New York: The Architectural Book Publishing Co. \$5 a part.

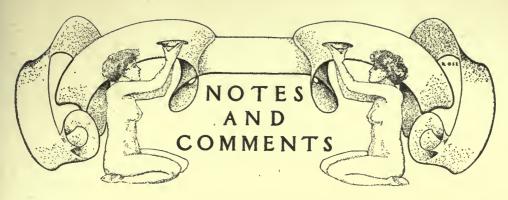
The Preservation of Structural Timbers. By Howard F. Weiss, director, Forest Products Laboratory, U. S. Forest Service. Ill., 8vo, 303 p., index. New York: McGraw-Hill Book Co. \$3.

The English Parish Church. An account of the chief building types and of their materials during nine centuries. By Charles Cox, LL.D., F.S.A., author of "English Church Furniture," etc. Ill., 8vo, 318 p., index. London: B. T. Batsford. New York: Charles Scribner's Sons, \$3.

A Book of Architectural and Decorative Drawings by Bertram Grosvenor Goodhue. Text includes "An Explanation and Acknowledgment" by E. Donald Robb, "An Architect's Renderings and Some of His Works" by Frank Chouteau Brown, and "As to Types and the Decoration of Books" by H. Ingalls Kimball. Large folio, 134 p., with many full page plates. New York: The Architectural Book Publishing Co. \$9.

Universal Safety Standards. A reference book of rules, drawings, tables, formulae, data and suggestions for the use of architects, engineers, superintendents, foremen, inspectors, mechanics and students. By Carl M. Hansen, M.E., consulting safety engineer, member American Society Mechanical Engineers. Compiled under the direction of and approved by the Workmen's Compensation Service Bureau of New York. 2d ed. New York: Universal Safety Standards Publishing Co. \$3.

American Art Annual. Vol. XI, 1914. Florence N. Levy, editor. New York: American Federation of Arts. \$5.



Sculpture and Architectural Design. Quite recently a well-known architect explained, presumably by way of apology for certain large groups of sculpture he had included in the design for an important public build-

ing, that Americans had "gone sculpture mad." And when one takes into consideration some of the latest results obtained with buildings upon which sculpture has been employed, it will be acknowledged that this architect was justified in his use of the word "mad." Two recent examples in New York have been most unsuccessful, and the reason for the failure is not hard to find.

That American sculptors can work with architects to their mutual advantage and with still greater advantage to the subject of their collaboration has often enough been demonstrated. As a single example, because it was the earliest, the buildings at the World's Columbian Exposition at Chicago may be recalled. Never before that time had American architects been given so splendid an opportunity to do their best. Not even had the competition for the Federal Capitol at Washington in any sense, actually or comparatively, put so many possibilities before the architects of the last years of the eighteenth century.

And never before the Columbian Exposition, or since then, have American architects so splendidly taken advantage of the opportunities offered in large public or private work, excepting, possibly, that not a few of our architectural forefathers who submitted designs in the Washington competition, had, as shown by the original drawings preserved in the library of the Maryland Historical Society, included most ambitious but rather top-heavy, not entirely structural or constructable, but altogether amazing groups of statuary in their designs. Not that we have not had sculpture

and mural decorations enough in our work, but much that we have shows that it was produced in an unfortunate and ill-advised manner.

The buildings at Chicago, designed, as Henry Van Brunt said, "in a style evolved from, and expressive of the highest civilizations in history," were far from perfect, and to be sure they gave visitors some wonderful surprises. The Iowa State Building, for instance, as an early French Renaissance chateau shocked the feelings of both European and the better informed American visitors. McKim, Mead White's Villa Medici, as the New York State Building, and many others, had "just a touch of genius," as one visitor said, that made them not only inoffensive, but actually interesting and inspiring. Many architects date their first architectural ambition from the day they visited the World's Columbian Exposition.

The one circumstance, aside from this "touch of genius." that made the exposition an architectural success was the policy of co-operation between architects and sculptors, that had been decided upon at the very start by Daniel Burnham as architect in chief and I. W. Root as consulting architect.

Only by such joint work in other cases can sculpture regain its place, so long lost, as a means of architectural decoration. The modern method of designing "nice" or "ideal" statues without regard for a relation to the architectural background has done as much, on the one hand, as the method of designing the statue in direct elevation by the architect and then handing the sketches to a sculptor for execution has done, on the other, toward spoiling a large part of modern work upon which architects and sculptors have collaborated.

There are as great possibilities before the architect now as there were before Greek, Roman or Gothic architects in the use of sculpture in connection with American building, and we may well look forward to splendid things to be accomplished when this proper spirit of mutual co-operation and sympathy by the various artists concerned—architects, painters and sculptors, is at last realized, but recent work seems only to emphasize the total lack of any such sympathy as well as a complete indifference to the necessary limitations of sculpture as the highest form of decoration in connection with beautiful buildings.

Architectural Competitions.

The present system of choosing an architectural design in competition, rather than holding a competition for the purpose of choosing an architect to study the problem at hand is mani-

festly a bad system for architects as well as for their clients. "The Nature and Function of Art, more Especially of Architecture," a book by the late Leopold Eidlitz, published in 1881, is seldom read by architects of the present time. But it contains an amount of suggestion and practical, helpful criticism not often met with in books of an earlier or later date. Eidlitz felt as he wrote, and he wrote independently and fearlessly, with full confidence in his own convictions. In spite of his interest in the larger aspects of ideals and aesthetics, space was found in the book for a discussion of competitions. This is under the general heading of Architecture and Its Patrons.

All art, he says, "finally seeks appreciation and a market with an audience; but it is successful art only in the ratio inversely proportional to its dependence upon immediate popular approval. Architectural art is especially unfortunate in this respect; it submits to popular interference while in the process of creation." Against this interference he vigorously protests. "There is no art or trade—there never was one outside of modern architecture—which is found to be willing to court popular criticism and to abide by its decision before its works are executed."

An architectural design, he continues "is a conventional geometrical representation of an imagined object, the merits of which laymen attempt to determine by looking at

this conventional drawing." If it were possible to have juries composed entirely of architects this objection would be done away with, but even a single architectural adviser is lacking in the great majority of competitors. "It is true the architect is supposed to assist the process by furnishing a perspective view; but here the layman is more at sea than ever. He is pleased with the technical skill and the artistic feeling which are displayed in the production of this picture. He admires the picture, and imagines the architecture it represents to be good; or he is displeased, or left indifferent by the picture and condemns the architecture.'

That the architect, working as he does with the client's own material and upon his client's land, must be willing to make clear to the owner just what the results are going to be is perfectly natural, but it would seem that architects should protest against too great interference by owners or committee. Eidlitz says, "IInd the architect the authority to correct his client in the same sense in which it is conceded to the lawyer, the doctor, the shipwright, or even the tailor or shoemaker, he would be employed by reason of the merit of his finished work, and would not be asked to submit a design for approval.

"It is time he is granted a polite hearing on all questions relating to his work, but is time accorded to him to educate his clients to the degree necessary to comprehend his arguments? Is he himself master of the theory of his art, and trained to debate these questions? Can he, if personally able to do so, impart to a client in a reasonable series of conversations what can be acquired only by a long professional education and practice?"

Quite obviously, as Eidlitz concludes, he cannot always do so. In fact, he argues, that the architect in competition submits to laymen "a design of what he intends to do, and thereby admits, what is utterly false, that laymen are competent to compare a series of such designs, and select the best, or that they can form a correct judgment of any one of them."

Naturally, the conclusion is that so long as this system is followed "architecture must range with the fashions" and not with the arts.