

THE AMERICAN ARCHITECT

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THE BERKELEY ARMS

The Conversion of an Old Mayfair Tavern

"THE Berkeley Arms," John Street, Mayfair, was built about the beginning of the eighteenth century in that part of London directly north of the fashionable quarter of Piccadilly. Its proximity to the Mayfair, from which the district now takes its name, rendered it, at that time, unsuitable for other than small houses inhabited by the humbler members of the community. About the middle of the eighteenth century owing to the abolition of the market, or fair, the district began to be used by the fashionable elements of society, who built houses in the neighborhood. Doubtless the old Inn first served liquor under the direction of a retired man servant from one of the larger houses in the vicinity, and its patrons included probably butlers and footmen. In recent years, particularly since the war, many of the large houses of this now fashionable quarter have let or sold the rear portion of their properties for flats, and small dwelling

into a small house without destroying the character of the original building. Comfort being one of the essential features of a dwelling, the convenience of the kitchen and the welfare of the domestic staff were given a place of importance, as in England today the servant problem is rapidly becoming as difficult as it is in America.



THE BERKELEY ARMS

Few West End houses can claim to have the kitchen on the same floor as the dining room, but here this arrangement was made possible by sacrificing a part of the ground floor space for this purpose, and by placing the drawing room and boudoir on the first floor. The lighting of the kitchen has been cleverly arranged, having both side and top lights and ventilation. The flat roof over the kitchen forms a small trellaged court leading off the boudoir. The new dining room takes the place of the old bar. This room and the drawing room over it, get sun from the south and west. Whenever possible the panelling has been reused, as in

houses, the owners condensing into the front of the buildings facing the main street. The result has been the formation of new side streets, where before had existed stables, out-buildings and mews. Such is the origin of the Berkeley Arms.

When Mr. Arthur J. Davis discovered it, the whole building was in a lamentable state of repair, but he approached the problem of its adaptation to a town house with definite considerations. Here was an old inn in a bad state of repair, but with many possibilities. It was to be constructed

the drawing room and boudoir. The single story projection now thrown into the dining room has been extended to form a small entrance porch.

Above the ground floor no alteration of any importance was made to the original elevation, save that shutters have been added, an old flue removed and the roof rebuilt, to include a servants' floor. A conveniently placed lift serves all floors and the house is easily run with a cook, housemaid and occasional outside labor. Central heating is installed throughout, and the modern bathroom

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is finished with vitrolite, and has everything that could be desired for its purpose.

Nowhere was comfort sacrificed to appearance, yet the character of the house has in no way suffered, and the final result is a house of unusual charm, quiet dignity and undoubted comfort. What more could be desired? An examination of the illustrations will show that the traditions of that rich and satisfying period of English archi-

narrow streets have many houses, now gone to the dogs, but at one time the aristocratic homes of opulent residents. These houses, at one time marked by stately dignity and general aspect of good architecture, became through neglect but a shabby lot of buildings. But the saunterer whose artistic perceptions were founded on practical knowledge, saw the possibilities that were latent in these old buildings.



THE REMODELLED LOWER STORIES

itecture have been carefully guarded in the reconstruction of this old inn.

J. D. HOSSACK, A. R. I. B. A.

Mayfair, as to its location with reference to the City of London, may be likened to the northeasterly part of Greenwich Village in New York, where Macdougall Alley and the Washington Mews, old Patchin Place and Gay Street are. The same periods of decadence and rehabilitation that have marked the history of Greenwich Village, find a parallel in Mayfair. The winding and

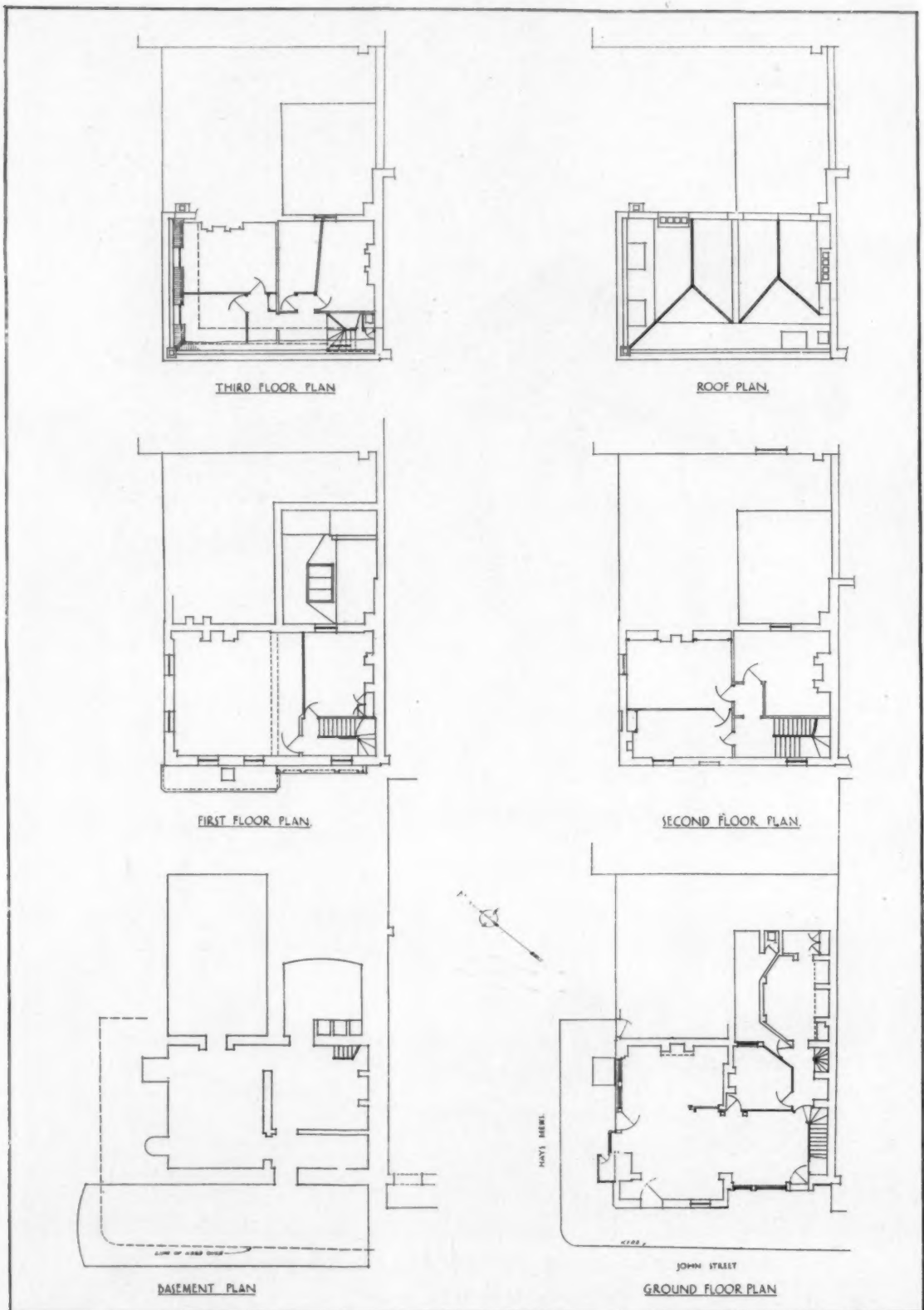
There are many such buildings and sections in all old cities, and this Mayfair tavern is an excellent example. It is fortunate when a man, trained as is Mr. Davis, sets his hand to the remodelling of such a fine old relic, for with a well grounded knowledge of architecture and artistic sense of restraint, he has sought to lead the building gently back to its one-time architectural excellence, carefully preserving all the many characteristics that made it, at the outset, something worth while.

There are, fortunately, some compensations to old age both in man and buildings. The man

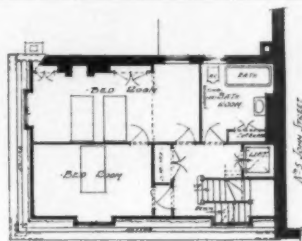


TOWN HOUSE OF ARTHUR J. DAVIS, F.R.I.B.A., AFTER REMODELLING

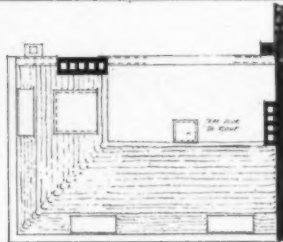
MEWES & DAVIS, FF.R.I.B.A., ARCHITECTS



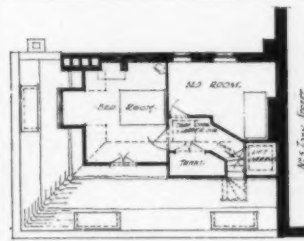
THE AMERICAN ARCHITECT



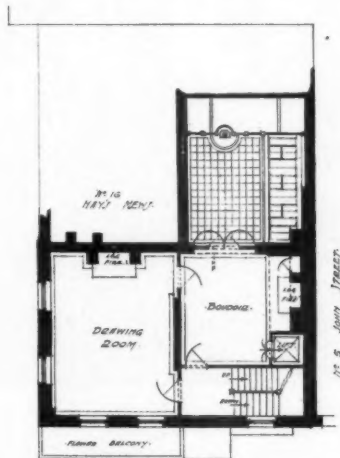
THE THIRD FLOOR PLAN.



THE ROOF PLAN.

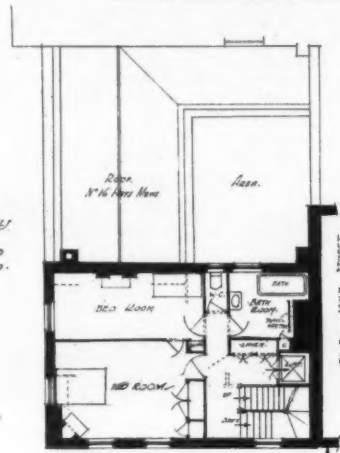


THE FOURTH FLOOR PLAN.

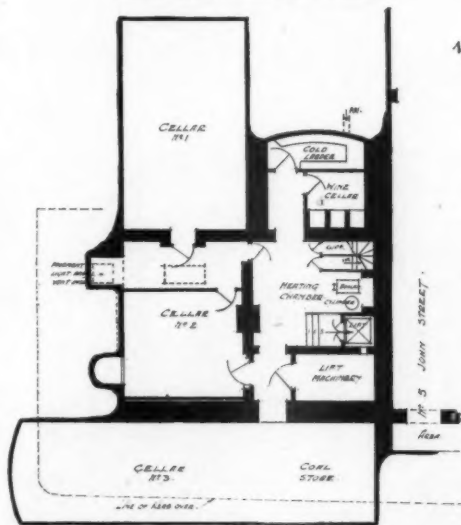


THE FIRST FLOOR PLAN.

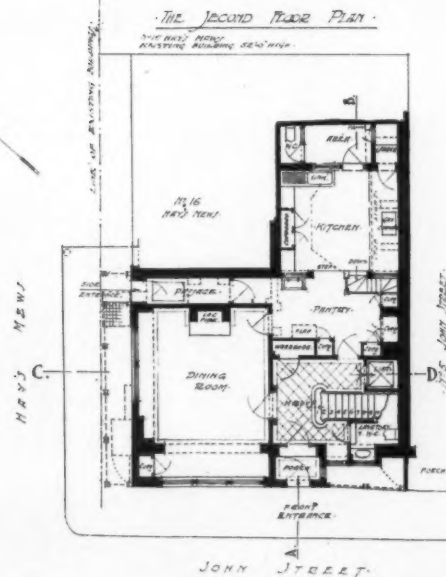
NOTE: ALL EXISTING MATERIALS AND FITTINGS TO BE STORED ON SITE AND REUSE AS DIRECTED.



THE SECOND FLOOR PLAN.



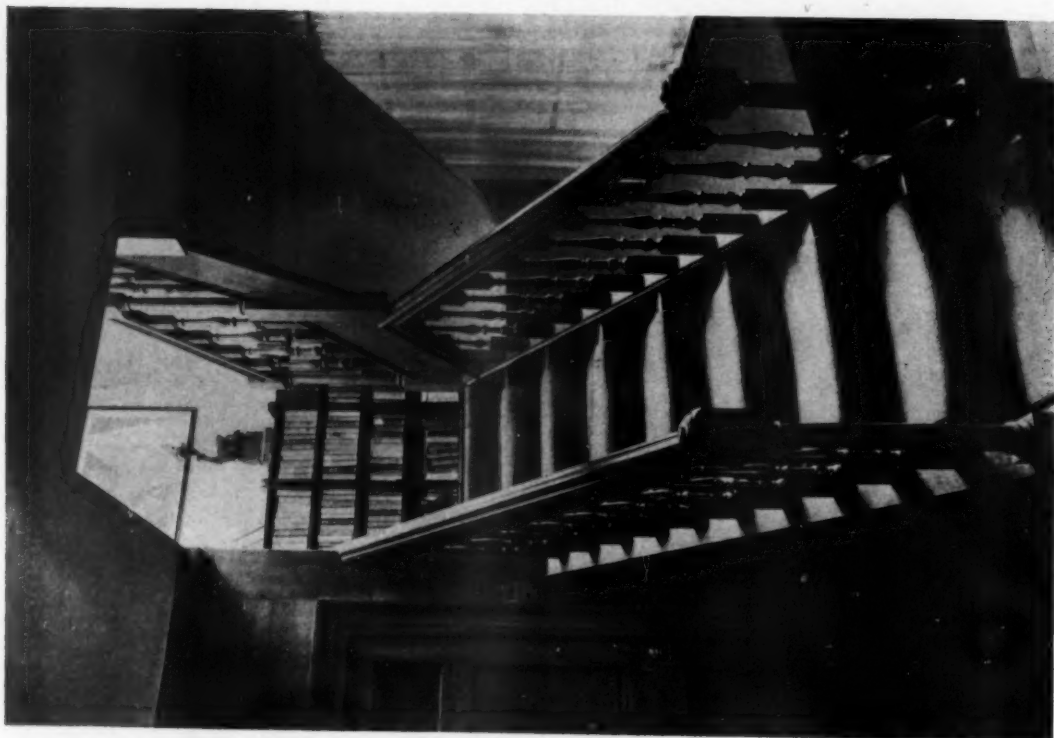
THE BASEMENT PLAN.



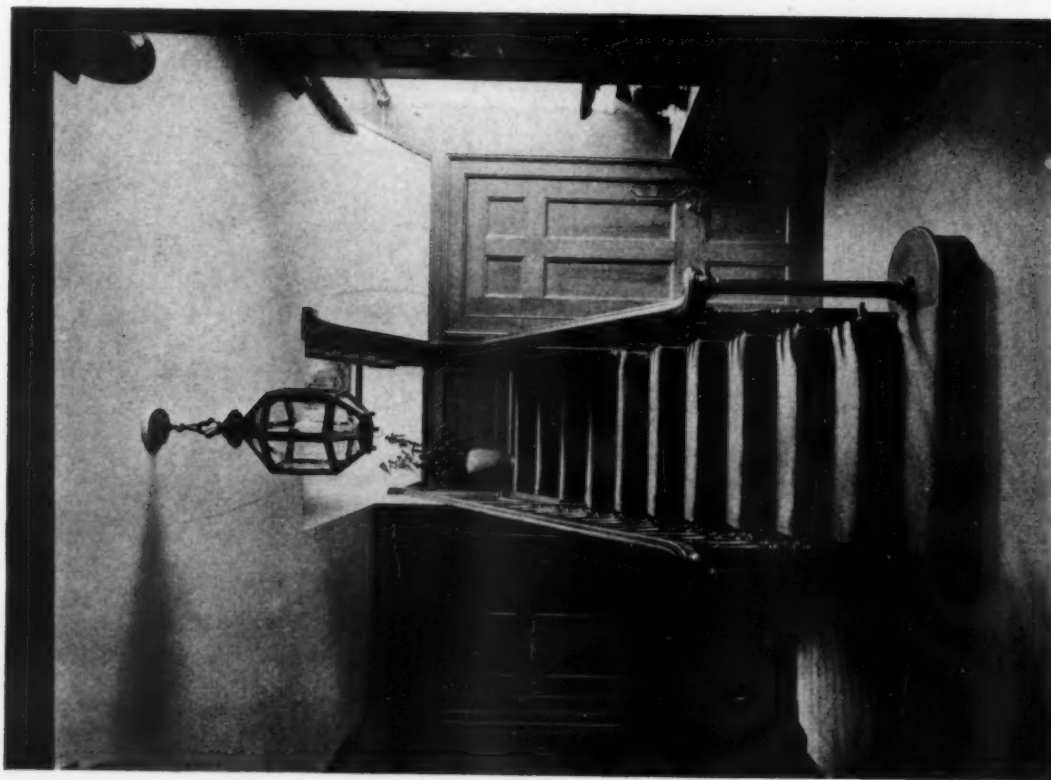
THE GROUND FLOOR PLAN.

ON THE OPPOSITE PAGE IS SHOWN A SURVEY OF THE ORIGINAL PREMISES, WHILE ABOVE IS THE PLAN OF THE RECONSTRUCTED PREMISES

MEWES & DAVIS, F.F.R.I.B.A., ARCHITECTS



SECOND FLOOR STAIRWAY
TOWN HOUSE OF ARTHUR J. DAVIS, F.R.I.B.A.—MEWES & DAVIS, F.R.I.B.A., ARCHITECTS

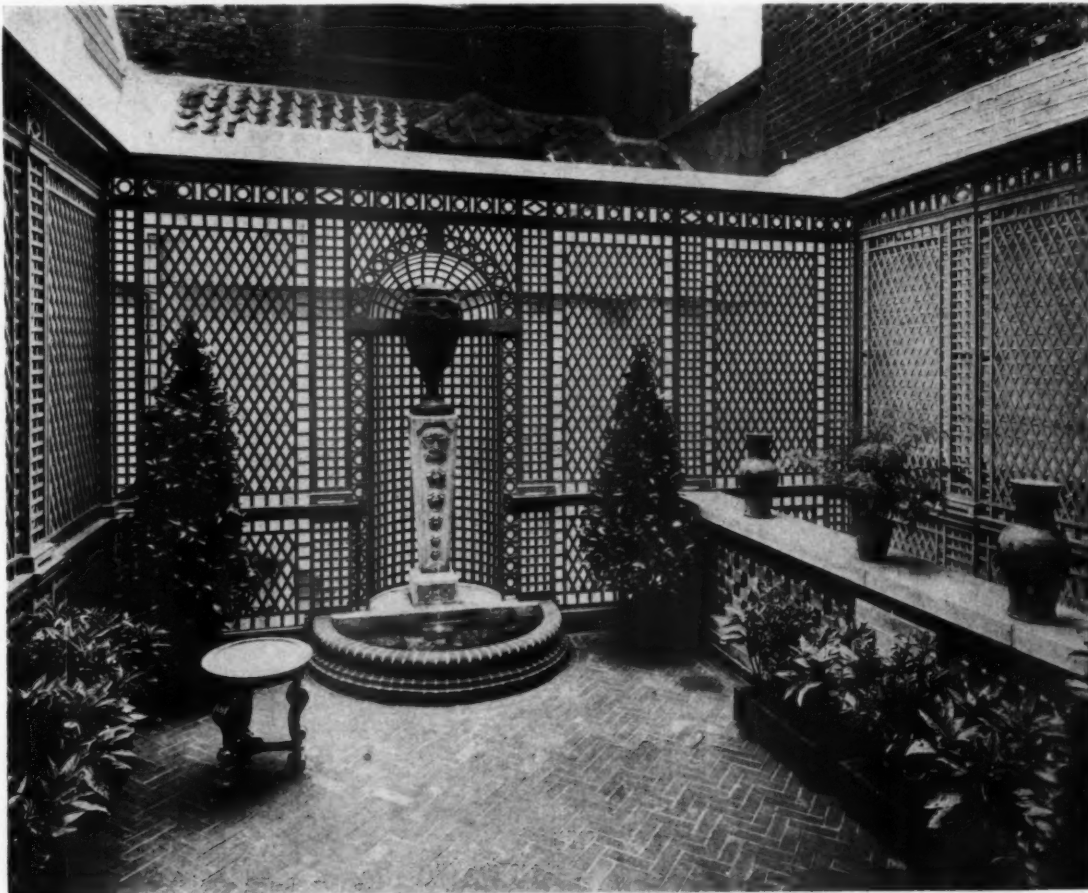


GROUND FLOOR STAIRWAY

THE AMERICAN ARCHITECT

who visits London today after a lapse of fifty years will look long and patiently for interesting landmarks that impressed him on the occasion of his earlier visit. Fifty years ago, the early 70's, the time was not so far removed from stagecoach and tavern days, and it is highly probable that, as in the case of the writer, the voyage to England was made in a sailing ship, one of the famous old "Black Ball Packets." Fifty years ago, the towering spars and taut rigging of main skysail clip-

the end of his long journey and it was here that the curious idle mob, to be found in every city, watched the arrival of the stagecoach. One may enjoy the ownership of one's house, one may feel the gratification that accompanies proprietorship, but it all fades to the commonplace when one owns and lives in an old house, where in every shadowy corner lurk the spirits of people who centuries ago pursued their daily lives within its walls. We all indulge in day dreams. Ours are, in



LOOKING FROM BOUDOIR ON GROUND FLOOR

pers formed a network against the background of the sky at Liverpool's docks and along the Thames. Fifty years ago was not so very far removed, as we measure time today, from the old George and Vulture, and the Great White Horse or from those rare old inns from which the Pickwick Club set forth on the most delightful of adventures. One can imagine a prototype of Tony Weller, smartly fetching up his smoking four horses in front of this Mayfair tavern, while he lumberingly descends to reach the tap room of this fine old inn. It was at this point that the tired traveller found

part, to read the last half of Bulwer-Lytton's *Pompeii* at Pompeii; William Winter's *Gray Days and Gold*, in Westminster Abbey,—and *Pickwick Papers* in the tap room of an old English inn.

BRITISH WAR MEMORIALS IN FRANCE

THE Imperial War Graves Commission has erected three more tablets in French cathedrals in honor of the One Million Dead of the British Empire. They are identical with those installed in Notre Dame, Paris, and Rouen.

INTERIOR ARCHITECTURE

The Fountain-head of Georgian Architecture

IN our failure carefully to draw distinction between words we use in our everyday conversation, it would seem that we have little or no appreciation for architectural style, in its true meaning. We have become so accustomed to associate modern designs in architecture with some one or another of the old historic styles or periods, that we are apt to overlook entirely the very truths for which style stands, and have come to consider style more as a type of design, and as such we lose the feeling of dignity and respect with which style in architectural design should be enshrouded. Architectural style is first based on character. It is an expression of the personality of a people in terms of materials and methods of building peculiar to their age and generation. Lacking, on account of the European blood that still flows in our veins, a style of our own, we adapt, as we say,

ideas in design, which originated in a foreign country centuries ago, to our modern needs and requirements, construct them in materials of modern invention and by methods of modern conception, and stamp them as of such and such a period, seemingly to relieve us of the responsibility which some one must share. But we very often fail to retain in the finished work either the spirit or the character of the original. Therefore, our designs often lack style, and we then become copyists, not stylists, for by reproducing the old designs only as to the surface,—which is not reproducing at all, in its true meaning,—we shatter the very fundamental principle on which architecture is founded—that design or form arises naturally from structure.

A style, unless minutely reproduced, can be seen only in the country in which it originated,



DINING ROOM WHICH WAS THE BAR IN THE OLD INN BEFORE BEING CONVERTED

MEWES & DAVIS, F.F.R.I.B.A., ARCHITECTS



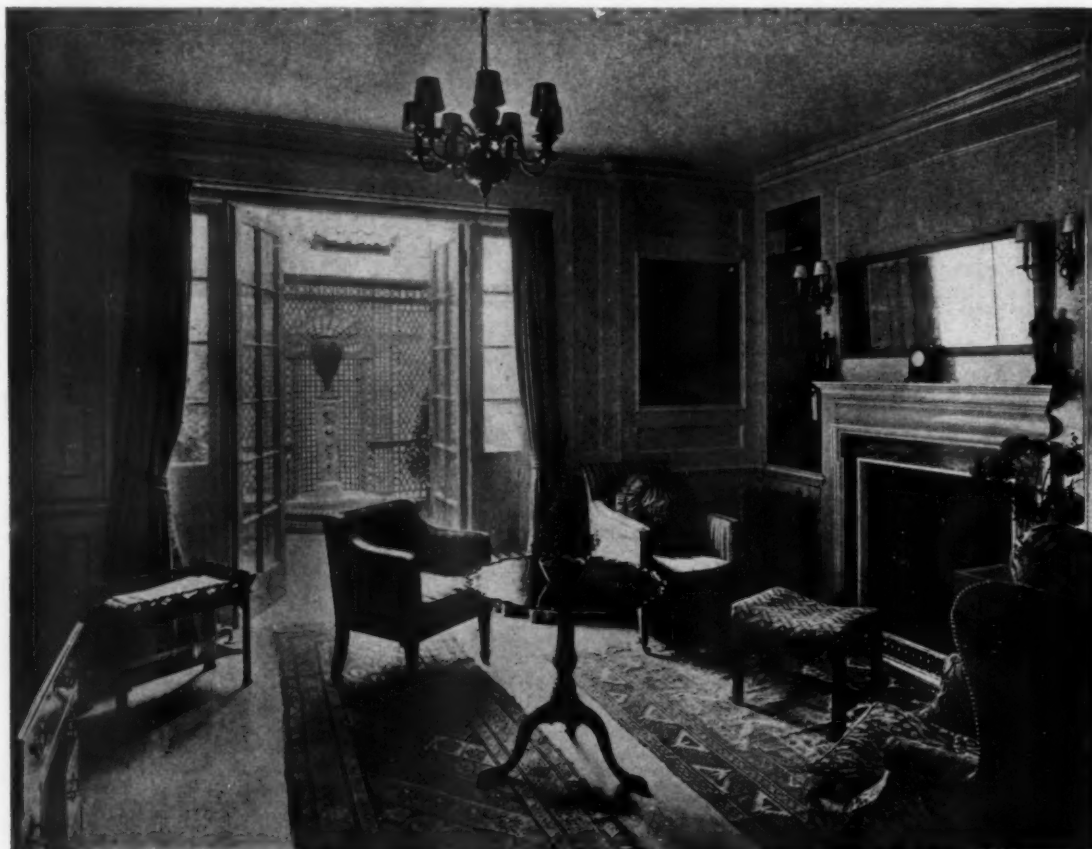
ENTRANCE TO DRAWING ROOM IN CONVERTED HOUSE AT 6 JOHN STREET, LONDON, ENGLAND
MEWES & DAVIS, F.F.R.I.B.A., ARCHITECTS

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and the illustrations offered here only further prove that statement. They are reproductions of photographs of the interior of a house in London, England, the history of which is more fully described in the leading article in this issue. It was at one time an inn in an even disreputable quarter of the city and more recently converted into a house by an architect who is also the owner. It is not an adaptation of a style, as we use the word, for it was designed by the architect in a style which represents his character and the customs and habits of the people of his time. It is typical of the Georgian period of English architecture, and, although many of the tendencies of that period may have only been inherited by him, they are in his blood, nevertheless, and are, therefore, rightfully a part of his character. There is not a single detail throughout the entire house that is open to criticism, as far as its style is concerned. It is thoroughly English, and, as such, it stands as a representation of a style of interior architectural design. Yet it is not the unsatisfactory "as it used to be" type of restoration, complete with

dark corners, trip-steps, head-traps and faded damask, but charming, curious, picturesque, and smart and efficient as well.

The dining room is, perhaps, the most interesting room in the house from an architectural standpoint. This room was formerly the old bar in the Inn, and the old wood panelling has been retained and added to as necessary. The furnishings are simple and in perfect harmony with the architectural treatment, as they are in every room of the house. The small formal garden which is located on the roof of the kitchen allows of an attractive lookout from the doors of the boudoir. It will be seen that a balustrade cleverly screens the kitchen skylight, and the trellis work at the far end screens the area that lights the east end of the kitchen. Above the drawing room are two bedrooms. In the one illustrated, there is a complete absence of visible cupboards, all being secreted in the thickness of the wall and so contrived that when both doors are open the interior is automatically lit by a little electric light. On the second floor are two more bedrooms and a bath.



THE BOUDOIR WHICH LOOKS OUT ONTO A GARDEN, LOCATED ON THE ROOF OF THE KITCHEN

MEWES & DAVIS, F.F.R.I.B.A., ARCHITECTS



DRAWING ROOM IN THE HOUSE WHICH WAS FORMERLY AN OLD MAYFAIR TAVERN, 6 JOHN STREET, LONDON, ENGLAND
MEWES & DAVIS, F.F.R.I.B.A., ARCHITECTS



IN THE BOUDOIR OF THE HOUSE AT 6 JOHN STREET, LONDON, ENGLAND
MEWES & DAVIS, F.F.R.I.B.A., ARCHITECTS



A BEDROOM IN WHICH ALL CUPBOARDS ARE CONCEALED IN THE WOOD PANELLING
MEWES & DAVIS, F.F.R.I.B.A., ARCHITECTS

A RELIC OF AN OLD CERAMIST

THE panel illustrated herewith, representing the King of Castile and the King of Aragon giving thanks to the Virgin Mary for the delivery



of Spain from the bondage of the Moors, was recently presented to Cardinal Mundelein of Chicago by an architect, Gustave E. Steinback, a

specialist in ecclesiastical work. The panel was in the palace of the Duke of Luna of Valencia, Spain, for more than three hundred years.

PRESERVATION OF OLD HOUSES

AN interesting phase of the subject of the preservation of old houses is brought up in a recent editorial of *The Providence Journal*:

"Houses without their furnishings are empty shells, deprived of much of their meaning; and houses in which great minds fashioned enduring words or planned immortally significant deeds suffer a lost glamour of association when they are no longer equipped with the chairs and tables, the pictures and ornaments, the trivia of daily contact among which the creative spirit worked.

"The Alcott house at Concord is a fine example of what should be saved. Here, under the same brooding elms, in the shadow of the same wooded hillside, where Louisa May Alcott lived and played with her little games and wrote her books, stands the home (not merely the house) which she knew. The very carpets are the same. The portieres that served in real life as stage curtains for the curious little domestic plays of the Alcott family, and which crept into the printed adventures of 'Little Women' and 'Jo's Boys,' hang where they hung in her day."



SOLDIERS' MEMORIAL, RED HOOK PARK, BROOKLYN, N. Y.

AUGUSTUS LUKEMAN, A.N.A., SCULPTOR



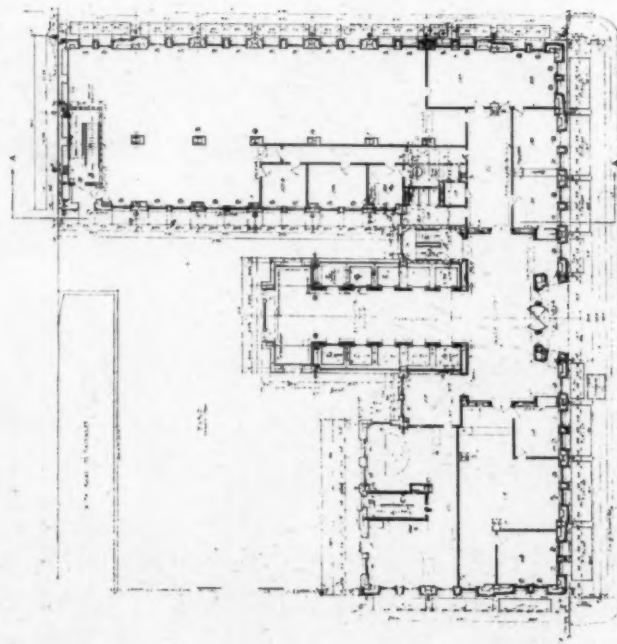


NATOMA AND MONTGOMERY STREET FACADES, TELEPHONE BUILDING, SAN FRANCISCO, CALIF.

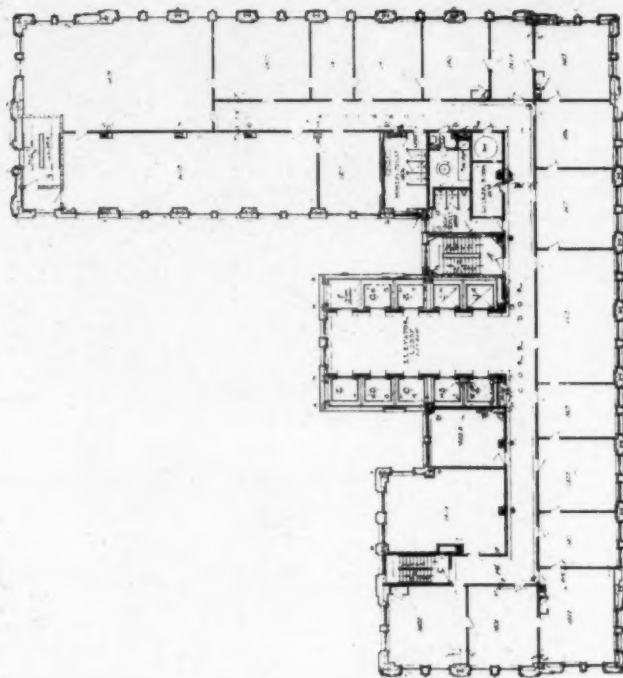
J. R. MILLER AND T. L. PFLUEGER, A. A. CANTIN, ASSOCIATED ARCHITECTS

(See plans on back)

THE AMERICAN ARCHITECT
March 20, 1926. Plate 49



FIRST FLOOR PLAN



FOURTEENTH FLOOR PLAN

TELEPHONE BUILDING, SAN FRANCISCO, CALIF.
J. R. MILLER AND T. L. PFLUEGER, A. A. CANTIN, ASSOCIATED ARCHITECTS



ENTRANCE ON NEW MONTGOMERY STREET, TELEPHONE BUILDING, SAN FRANCISCO, CALIF.

J. R. MILLER AND T. L. PFLUEGER, A. A. CANTIN, ASSOCIATED ARCHITECTS

THE AMERICAN ARCHITECT
March 20, 1926. Plate 50



MAIN ENTRANCE, LOOKING OUT, TELEPHONE BUILDING, SAN FRANCISCO, CALIF.

J. R. MILLER AND T. L. PFLUEGER, A. A. CANTIN, ASSOCIATED ARCHITECTS

THE AMERICAN ARCHITECT
March 20, 1926. Plate 51



CAFETERIA FLOOR, TELEPHONE BUILDING, SAN FRANCISCO, CALIF.
J. R. MILLER AND T. L. PFLUEGER, A. A. CANTIN, ASSOCIATED ARCHITECTS

THE AMERICAN ARCHITECT
March 20, 1906. Plate 52



ASSEMBLY ROOM, TELEPHONE BUILDING, SAN FRANCISCO, CALIF.
J. R. MILLER AND T. L. PFLUEGER, A. A. CANTIN, ASSOCIATED ARCHITECTS

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March 20, 1926, Plate 53

TELEPHONE BUILDING, SAN FRANCISCO, CALIF.

J. R. MILLER and T. L. PFLUEGER, A. A. CANTIN, Associated Architects

BY B. J. S. CAHILL, Architect

Extracts from a descriptive article in *The Architect and Engineer*, reprinted by permission of that journal and the author

A TWENTY-SIX story building, 150 by 160 feet, rising 436 feet from sidewalk to base of flagpole with nearly six acres of exterior wall surface and costing four millions of dollars is, in itself, an architectural event of the first magnitude. There are bigger and loftier buildings in the country but this one has other claims besides its colossal dimensions.

The design of this architectural Titan, so solid in fact, so ethereal in effect, is a complete departure from the precedents of old Europe. Throughout the entire structure there is scarcely a trace of school tradition. Early "studies" of the building reveal hints of Gothic influence. But these practically faded out as the design neared maturity and, of all the definite historical styles extant, this building shows a frankly expressed trace of only one, and that, strange to say, is Chinese!

The conception of the whole building is daringly original. The minutest details are worked out with deliberate and consistent logic and the whole quaintly charged with symbolism which places it, as a work of creative art, immeasurably above the stodgy materialism of the conventional skyscrapers so happily defined by Montgomery Schuyler as "the common parallelopipeds of commerce."

The plan, the principal part of any important building, has in the special case of the modern commercial skyscraper, passed

already through three stages of development. First it did not differ from that of the usual plan to suit any given lot, except that it was repeated vertically with added elevators and added altitude only, to distinguish it from



MONTGOMERY STREET FACADE

THE AMERICAN ARCHITECT

a seven story building on the same lot. That is to say, it carried up with it into the air the "finished front," the blank brick sides and the nondescript "rear," brutally regardless of the esthetic consequences. Secondly came the period when some concessions to appearances were made by various means and the plan was simplified and rectified to the parallelopipeds aforementioned. Quite often the upper stories were treated as street fronts on all four sides and a cornice carried around the top, with perhaps some attic feature of gable, dome or pyramid to crown the whole. But during this period of development, without full confidence in the resources of steel construction and somewhat in awe of the new principles involved, the architects subordinated their work for a while to the sudden importance of the structural engineer whose logical insistence on a severe rectangularity (involved in a uniformly loaded steel floor grid) completely dominated the interior plan as well as the exterior form. In the third or final stage we find that the architects, having familiarized themselves with the principles of beam and column construction, come once more into their own, with steel as their servant instead of their master.

This final metamorphosis came about through a world-wide recognition of the fact that the American skyscraper, far from being a mon-

strosity as many feared at first, was in reality cast for a most heroic role in the history of architecture, comparable to the part played by the temples, basilicas and cathedrals of old.

This is neither a plea nor a prophecy in favor of the capricious or wanton use of steel. It is merely a statement of what is now happening all over the country. The manner in which a steel frame can logically acquire "form" is in the main twofold. By articulation: in which the upper plan is a symmetrical group of unit pavilions growing up and out of the often amorphous lower portion as delimited by the lot lines; or "form" is achieved by regression: by which the outer steel columns are stopped off and the face of the building made to retreat as it ascends.

It is at once obvious that a well planned unit pavilion of a commercial building of two rooms and corridor between, with an eccentrically placed column, will not stand a treatment of regression except at the ends. An extra wide pavilion can be reduced by about a third of the outer span without spoiling the floor above; in which case, however, the regressed columns and wall above must be carried on special beams over a void. It is also clear that where two typical pavilions meet and miter at right angles, a regression of the corner panel is possible. This eliminates the usual inaccessible corner room and gives a max-



ELEVATOR LOBBY

imum effect of regression at a minimum sacrifice of space, more especially when the building is seen diagonally.

It will be a surprise to most readers to learn that the Telephone Building as it now stands is incomplete. The completed structure is in plan a perfect block letter "E," the lower bar on Minna Street, the upper one on Natoma and the vertical stem on New Montgomery Street. These three pavilions contain the working part of the floors, while the middle bar of the "E" contains the ten elevators. But in actual execution the upper bar of the letter has been cut back to within a dozen feet of the stem so that the plan is shaped like an "F" upside down or reflected.

Now it may be laid down as an axiom that, on a tower building, all sides are fronts. That is to say that above the roof line of surrounding blocks the word "rear," "front," "side" or "back" ceases to have any meaning. All boundaries are of equal importance. Indeed we might say that in special cases the real rear on the ground may become the real front in the air. As a matter of fact, this happens to be the case in this particular instance.

Attention has been drawn to the principle of regression which is now being adopted to give novel and organic form to the "solid" or mass of many of the more recent skyscrapers and note was made of the fact that this process, unless confined

to the ends or corners, was likely to embarrass a well considered plan for renting purposes. The Telephone Building, however, is not for renting purposes in small office units; most of the space being, in fact, undivided, or of the loft type; so that the narrowing of the three main pavilions above the regression of the 22nd floor does no harm to the five floors above.

We have seen how mass composition has been attained in the solid by vertical articulation and horizontal regression yielding a form and silhouette of decided distinction and dignity. In treating the various vertical planes of this structure in detail the designer had three dangerous things to avoid and two very desirable things to attain. He must avoid the mechanical monotony of vast plain surfaces uniformly punctured with windows. He must avoid the horizontality of classical tradition unsuited for vast high expanses. He must also avoid the elaborate detail of the logical Gothic treatment on account of its expense. But he must achieve unity and he must achieve simplicity in deference respectively to the eternal decrees of all the Fine Arts as well as to the drastic demands of finance.

These negative and positive conditions have been met with success by methods demanding not only courage and unusual initiative but by positive creative genius. In the first place the use of



BRONZE DOORWAYS, FRONT ENTRANCE

THE AMERICAN ARCHITECT

any historical style was deliberately tabooed. This did away with all belt courses, cornices, ornaments, mouldings and projections of every kind whatsoever. In such vast facades, almost of the El Capital order of magnitude, this rejection of subordinate parts and piecemeal divisions makes enormously for unity, simplicity and economy at one stroke. Next, having ruled out all horizontal lines still further unity is given by added emphasis to the vertical ones. The entire structure thus becomes reduced to a cluster of perpendicular piers ascending the full altitude of the building with naught but an occasional ripple of interruption from pavement to parapet. This emphasis on the piers produces a still further

sense of unity, by a method as logical as it is novel.

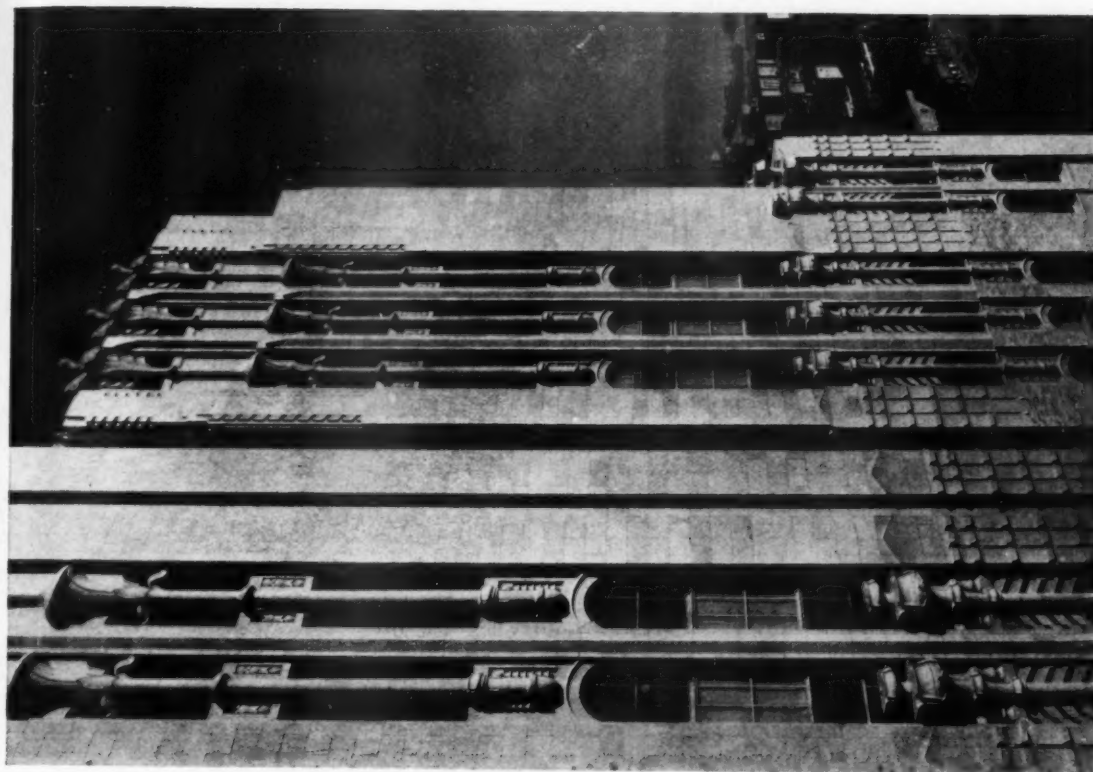
Immensely reinforcing this linear impression of oneness is the uniformity of color throughout the entire surface attained by the use of speckled terra cotta of the exact tone of pale gray granite. Having secured this basic unity it now remains to diversify it with some elements of organic variety and contrast, and this without the use of any horizontal lines whatever. Paradoxical as it may seem, diversified bands of horizontality are produced not by crossing or omitting vertical lines but by reduplicating them! To halve the window openings in the upper part of a building is no new device. It is, in fact, just now very much in vogue. In the Telephone Building the

same effect is worked out in an entirely novel way which will well repay a little careful study.

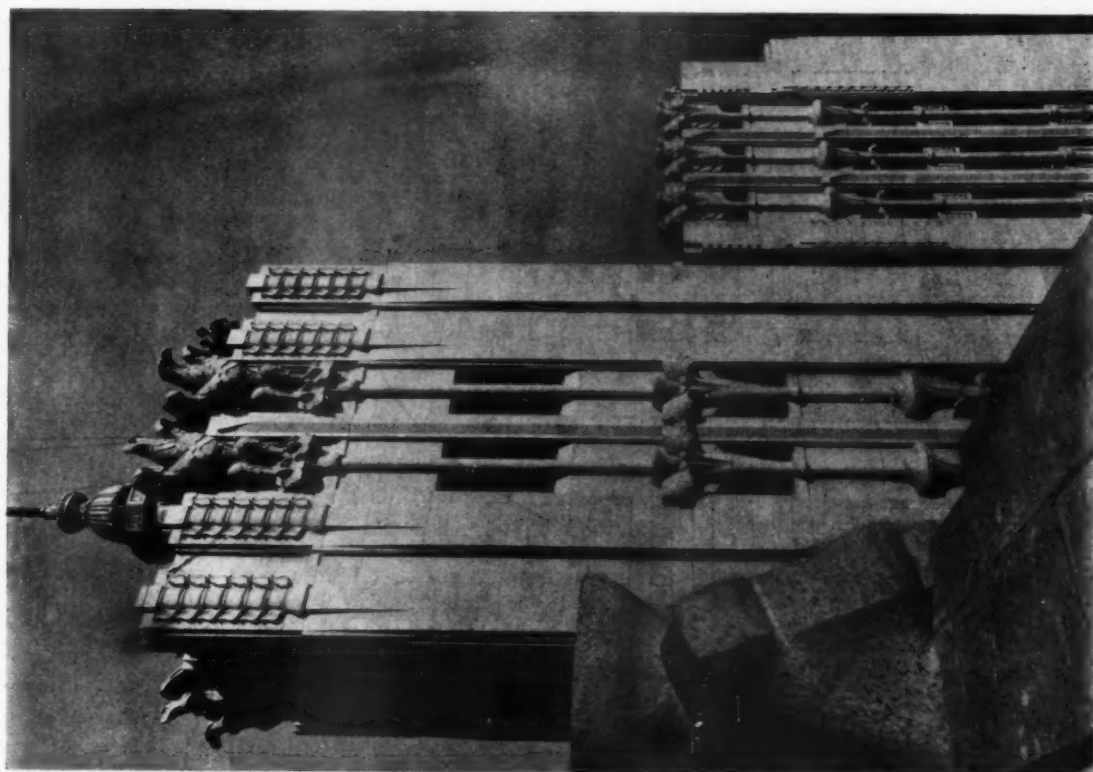
The whole building is divided into nine structural bays on the entrance front and eight on the side streets, (when completed). Each of these structural bays is divided into two window spaces by a secondary narrower mullion pilaster midway between the wider pilasters which follow up the steel columns of the frame. Seven central bays on the front and six central bays on the side define pavilions very slightly in advance of the corner bays. They continue on the elevation sheer to the top of the building with a 9 feet 6 inch regression, however, over the 22nd floor which, by the way, is an extra high one. The end bays on both facades, forming the slightly set-back corners, extend vertically as far only as the 18th floor where the square corner "panels" which they define (in plan) terminate in a deck with square topped parapet walls. These square corner bays do not belong to the main body of the building considered as a design. This fact is indicated at the outset in the shape of the three pilasters enclosing them, for their faces are flat in plan, whereas the pilasters of the central



REAR VIEW



DETAIL OF UPPER STORIES



DETAIL OF PENTHOUSE

TELEPHONE BUILDING, SAN FRANCISCO, CALIF.

J. R. MILLER AND T. L. PFLUEGER, A. A. CANTIN, ASSOCIATED ARCHITECTS

THE AMERICAN ARCHITECT

pavilions are all convex on the face with a reversed ogee curve to each corner, in plan like a section through the back of a violin. The re-entrant angles of the main pavilions are now revealed from the 18th floor up clear to the top. We see them as solid looking clustered pilasters forming great holding pylons at the four corners of the main turret of the building. In horizontal section each shows twenty running feet of solid masonry from the jamb of one window to that of the next around the corner. This creates a splendid sense of strength and makes at the same time a striking foil to the super-fenestration of the walls between.

In contrast to the round-fronted main pilasters are the sharp fronted intermediate ones, which, in plan, show diagonally splayed reveals meeting at a right angled edge. These softly shaded and sharply shadowed alternating vertical piers, especially when seen sideways and blended into one fluted shaft of sheer masonry, create an extraordinary illusion of both light and lightness beautiful and baffling to behold. They seem no longer clay blocks piled up from the solid ground, but dimmed sunbeams shot from fretted clouds!

It is noteworthy that the piers between the win-

dow openings both great and small ascend with unruffled smoothness to the top of the building except for a slight ripple of incised ornament where they recede a few inches at the 4th and 18th floors following the reduced section of the steel "H" columns as the loads on these get lighter. This shrinkage of the bulk of the building as it ascends is comparatively so slight that it is felt rather than seen. Otherwise, excepting for regressions of the fronts before mentioned, the pilasters both wide and narrow serve no part in giving horizontal variety to the fronts. Nor is any projecting ornament carried on them.

It is perfectly clear that this, the principal and only decorative feature of the building is carried and developed on a system all its own. It does not grow out of any existing part of the front, nor is it related to any members of the structural frame. It is independently created for the sole and only purpose of diversifying the fronts. In a sort of compensating spirit it makes up for the extreme parsimony of horizontal projections by a prodigality of perpendicular ones. It is a novel and striking innovation managed however with consummate artistic insight.



SAN FRANCISCO, CALIFORNIA, SHOWING LOCATION OF TELEPHONE BUILDING

ENGINEERING *and* CONSTRUCTION

THE NEW UNION LEAGUE CLUB SWIMMING POOL

An electric arc welded steel plate tank with concrete *and* tile lining

MUNDIE & JENSEN, Architects

TIGHTNESS and lightness are two important qualities of an above-ground swimming pool. Tightness is essential in order that escaping water will not disintegrate the construction below and adjacent thereto, or corrode its metallic parts and supports. Lightness is purely an economic consideration which affects the cost of the pool itself and its supporting construction. These two qualities have been secured in the construction of a swimming pool between the twentieth and twenty-first floor levels of the new Union League Club located at the west corner of Federal Street and Jackson Boulevard, Chicago, Illinois.

Adjoining the pool, on the twenty-first floor, are its shower, dressing and toilet rooms. A large lounge is provided on the west side of the pool and also an alcove at the south end. On the same floor are the two story gymnasium and a one story special exercise room, the accessory rooms for which are on the twenty-second floor over the similar rooms which serve the swimming pool. The

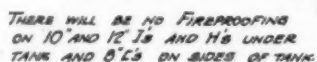
swimming pool room is also two stories high with segmental arched ceiling lights and skylights over it, which permits direct sunlight to enter the room. Windows are placed high along the eastern wall which also give additional daylight and ventilation.

The pool consists of a $\frac{7}{8}$ " steel tank, lined with reinforced concrete and $\frac{3}{4}$ " ceramic mosaic tile. Its main support is provided by 36" and 39" plate girders in the twentieth floor level. The 36" plate girders run longitudinal with the tank, under the center and near each side. On these girders are placed 5" H struts of varying length to give the required pitch to the bottom of the tank. On top of these struts rest 12" I's, placed transversely to the tank, which are laterally braced with 6" channels. Six bays of each row of struts are braced with diagonal angles. At the ends of each transverse 12" I is an 8" vertical channel which supports the side plates of the tank. Entirely around the top of the tank is a 30" flat plate

(Continued on page 376)

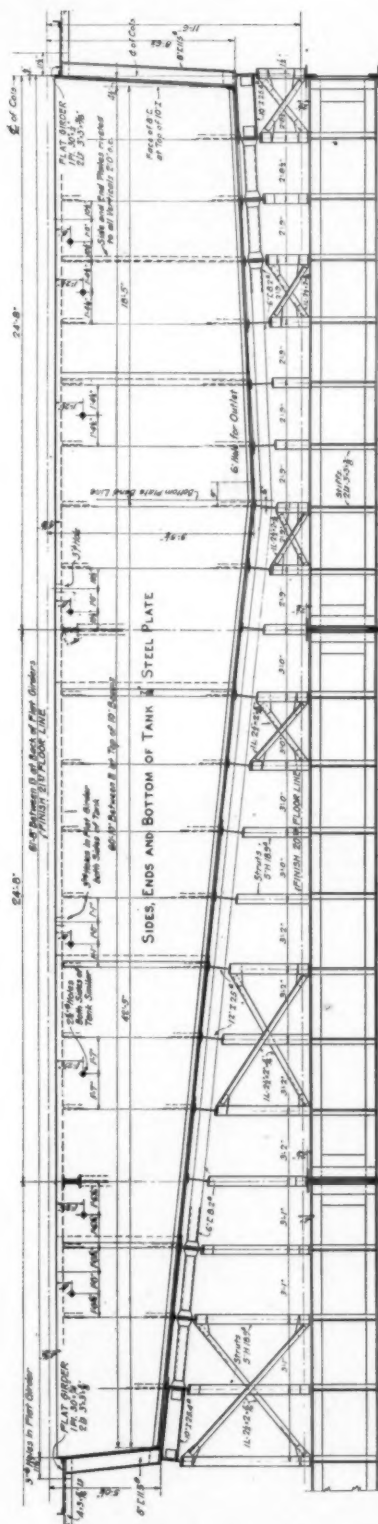


VIEW OF SWIMMING POOL DURING PROCESS OF ARC ELECTRIC WELDING THE SEAMS. THE FOUR ELECTRIC CONTROL PANELS ARE SHOWN AT THE LEFT TOP OF THE TANK
SWIMMING POOL, NEW UNION LEAGUE CLUB, CHICAGO, ILL.—MUNDIE & JENSEN, ARCHITECTS

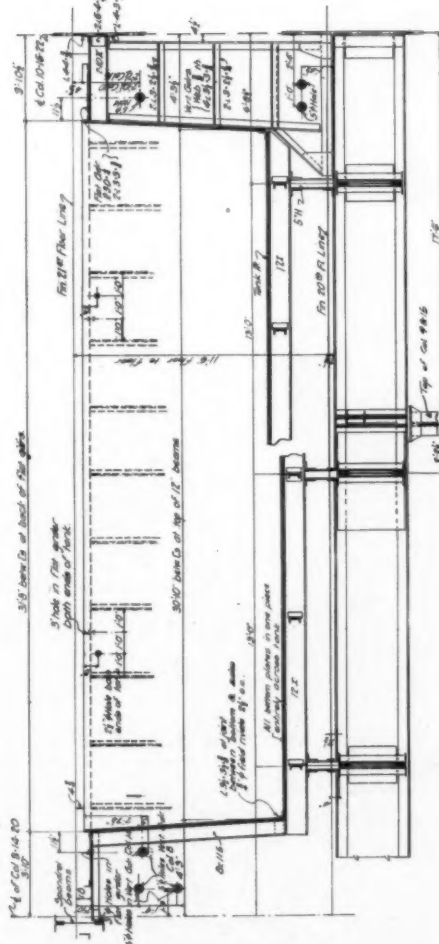


SWIMMING POOL, NEW UNION LEAGUE CLUB, CHICAGO, ILL.

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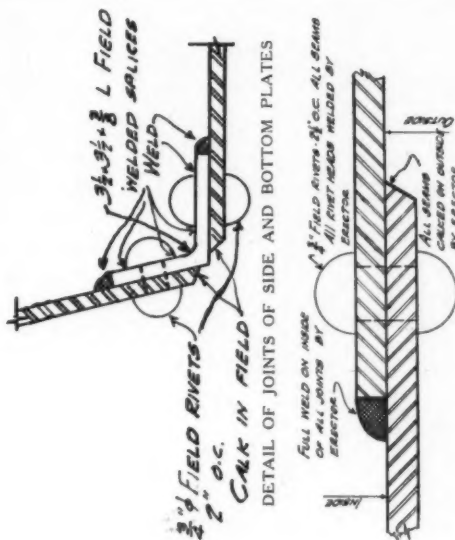


SECTION AA, PLAN OF FRAMING UNDER SWIMMING TANK



SECTION BB, PLAN OF FRAMING UNDER SWIMMING TANK

SWIMMING POOL, NEW UNION LEAGUE CLUB, CHICAGO, ILL.—MUNDIE & JENSEN, ARCHITECTS



DETAIL OF JOINTS IN TANK

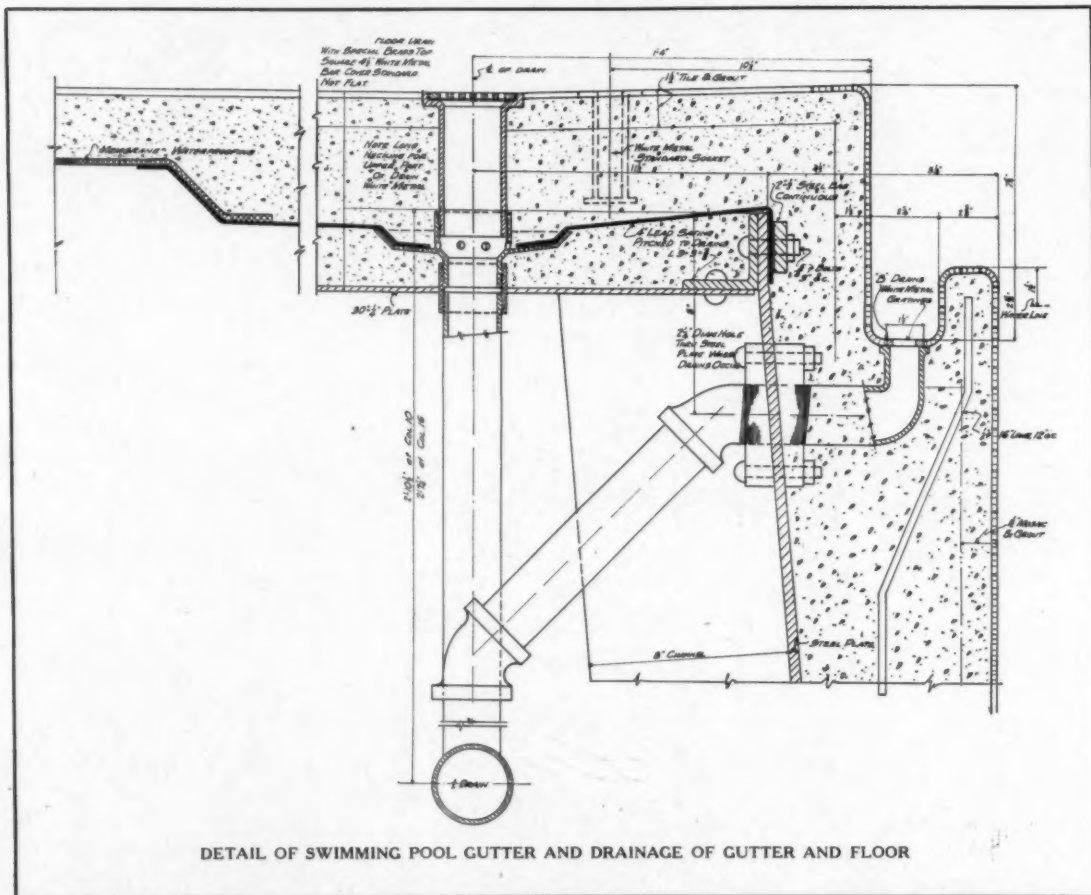
(Continued from page 373)

girder which resists the outward thrust of the tank plates. The reaction in these flat plate girders is transmitted to the supporting tank girders through vertical plate girders of tank height.

The tank is made of $\frac{1}{8}$ " steel plates throughout. At the joints, the plates are lapped 3", single riveted with $\frac{3}{4}$ " rivets, $2\frac{1}{2}$ " on centers. The joints between the sides and the bottom of the tank are made with an angle iron, single riveted through each leg. On the outside all seams are caulked. On the inside all seams are electrically welded with No. 3 coated, $\frac{3}{8}$ " welding wire; also welding was done around inside rivet heads.

capable and conscientious welders shall be employed. Scarfed joints must be given particular care. Strips on the bottom and sides of the tank for attaching reinforcing shall be tack welded to the inside of the tank. After the welding is completed, the tank shall be tested full of water and where leaks occur, the places must be gone over and welded and the tank again tested full of water until it is found absolutely watertight." Before the concrete lining was installed the tank was filled with water and left standing for a period of ten days with no leakage.

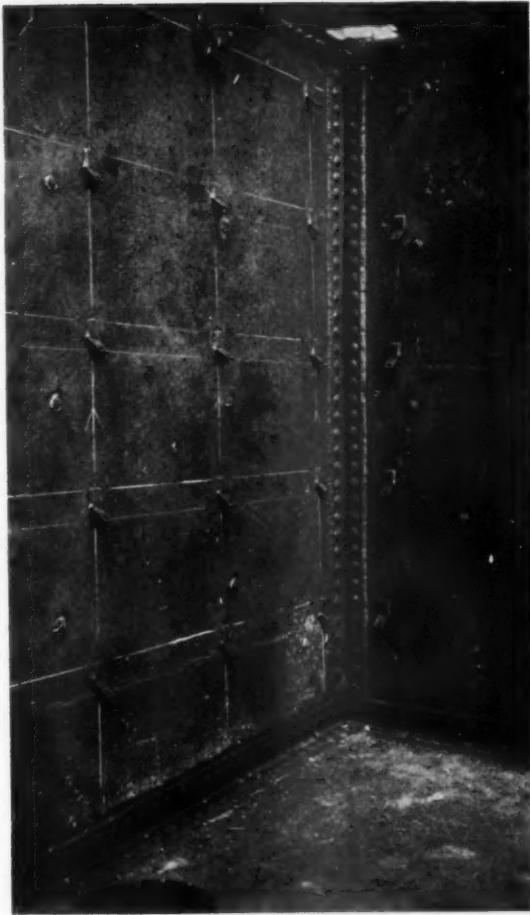
The entire inner surface of the tank is covered with reinforced concrete. Bent clips $1\frac{1}{2}$ " x $\frac{1}{4}$ " x



It was specified that "the seams before welding must be cleaned of grease or rust by sand blasting with a jet of compressed air. All welds must be full welds as detailed and the welding and filling must be done in one operation. When operating the arc in windy weather, a screen or shield shall be provided to break the wind. No welding shall be done in rainy weather except when protected. A short arc must be used and only experienced,

4", perforated in the free end, were tack welded to the inner surface on 18" x 24" centers. To these clips were attached by wiring, 3/8" round rods. To the rods was attached .058 Triangular Mesh, lapped 12" at end splice and 4" at side splice and turned out 24" around top of tank.

The floor of the pool room, the lounge and alcove is finished with non-slip tile with art marble cove base. This floor and the floors of the lobby and



VIEW OF A CORNER SHOWING REINFORCING CLIPS TACK WELDED TO SIDE PLATES, ALSO THE JOINTS BETWEEN SIDE AND BOTTOM PLATES AND THE CORNERS

shower room have a membrane waterproofing which extends up 6'-0" on the tile partitions behind all shower stalls.

Standard sockets are placed in the floor along the side of the tank. These sockets have a tight fitting metal plug with polished top. All railings, ladders, standard sockets, and drain gratings, are made of white metal.

The pool has a capacity of 92,000 gallons. The water is recirculated every 10 hours and is sterilized with the ultra violet ray method.

Access space is provided under and about the sides of the tank for purposes of inspection and repair if necessary. The outside of all seams in the tank plate are accessible for recaulking from this space.

The inside of the east exterior wall is insulated for heat transmission and over the insulating material are placed steel furring channels and metal lath for plaster.

The design of this swimming pool was decided



VIEW UNDER THE TANK SHOWING ACCESSIBILITY FOR INSPECTION, REPAIRS AND THE SUPPORTING COLUMNS

upon only after the most careful investigation. The usual method employed in steel tank construction has been the double riveted caulked joint. This form of joint is naturally heavier than the 3" lap, single riveted joint finally adopted. The welding process combined the plates, angles and rivets into one solid piece of metal, entirely free from seams.

Electric welding is a comparatively new process as applied to building construction and the necessary apparatus and technique have been perfected so that it is to be considered as a definite element of steel construction. THE AMERICAN ARCHITECT of October 5, 1925, contained an article describing tests made on electric arc welded joints in structural steel frames. The results were such that serious consideration is being given by engineers and manufacturers to this method of assembling structural steel. That the use of electric arc welding will become a universal practice is not beyond the limits of good, substantial construction. As a consciousness of welding gains a foothold many of its applications will develop by reason of its economy in the cost of labor and material and probably ultimate better construction.

RESEARCH GRADUATE ASSISTANTSHIPS

TO assist in the conduct of engineering research, the University of Illinois maintains fourteen Research Graduate Assistantships in the Engineering Experiment Station. Two other such assistantships have been established under the patronage of the Illinois Gas Association. These assistantships are open to graduates of approved American and foreign universities and technical schools for graduate study in engineering, physics, or applied chemistry and lead to a degree of Master of Science. Applications must be made before April first. For information address The Director, Engineering Experiment Station, University of Illinois, Urbana, Ill.

THE AMERICAN ARCHITECT

RECOMMENDED PRACTICE FOR ARRANGEMENT OF BUILDING CODES

THE Department of Commerce Building Code Committee has recently completed a report on Recommended Practice for Arrangement of Building Codes. The present report is the fifth of a series on building codes. The report presents a recommended outline for writing a building code, arranged by chapters, sections and subdivisions in the order in which reference is necessary to code provisions when a building is planned, designed and erected.

It is expected that the outline not only will be useful in drafting building codes but that it will be very helpful to those designing buildings in the examination of unfamiliar codes to make sure no important requirements have been overlooked.

The report describes at length the customary methods of writing or revising codes and emphasizes the need of employing experienced consultants in such work. Directions are given for stating code requirements in a manner readily intelligible to the building public, and a strong plea is made for reduction in the number and

variety of permits necessary for each building.

The keynote of the report throughout is greater convenience for those planning and erecting buildings where this is consistent with the purposes of building regulation.

The report contains 30 pages and can be purchased from the Superintendent of Documents, Washington, D. C., for 10 cents.

THE "BLUE STAIN" HOODOO

"BLUE Stain," a name applied to certain discolorations on lumber and regarded as a blemish in lumber grading, is said by the National Lumber Manufacturers' Association to result in a yearly loss of ten million dollars to lumber producers. Officials of the Association state that they have the assurance of the Forest Service that this stain does not detract from the usefulness of the lumber so affected. No practical means have as yet been found to remove the stain and the Association believes that a new name for "Blue Stain" may be less obnoxious and turn it into an asset.

CONCRETE COLUMN DESIGN BY C. A. WILLSON*

COLUMN LOAD IN THOUSANDS OF POUNDS

SINCE the publication of the article on Concrete Column Design which appeared in the December 5, 1925, issue of THE AMERICAN ARCHITECT, a part of the information contained therein has been condensed into a convenient table which is given herewith. In this table the column core diameters range from 9 inches to 18 inches, the percentage of vertical steel varies from 1% to 5% and the strength is based on the use of a 1:1½:3 mixture of concrete having a 28-day compressive strength of 2,500 lbs. per sq. in. It will be evident to anyone familiar with designing methods that this table can be used much more readily than either the original formulas given in the 1924 Joint Committee Specifications or the design diagrams contained in the article mentioned above.

* Engineer, Office of the State Architect of Wisconsin, Madison, Wis.

Vertical Rods	9"	10"	11"	12"	13"	14"	15"	16"	17"	18"	Core Diam- eter
6—½" φ	56	64	72	81							¾" φ
8—½" φ	64	72	81	90	100	110					
7—⅝" φ	76	83	90	100	110	122	134	145			
6—¾" φ	87	95	103	111	121	132	144	156	170	184	¼" φ
7—¾" φ	100	106	113	120	129	141	154	167	180	193	
8—¾" φ		117	123	131	141	151	162	175	189	203	
7—⅞" φ			140	147	155	166	177	189	203	217	⅝" φ
8—⅞" φ			155	160	168	178	188	200	212	227	
7—1" φ				181	188	195	204	215	226	243	
8—1" φ					205	215	225	235	246	260	⅞" φ
7—1" sq.						230	240	251	262	270	
8—1" sq.							264	275	283	294	
Spiral Pitch	1½"			2"			2½"				Spiral Size

1924 Joint Committee Spiral Columns. The load is based on the use of a 1:1½:3 mix having a 28-day strength of 2500 lb. per sq. in.

DEEP FOUNDATION in an OLD RIVER BED

Numerous steel pneumatic caissons sunk simultaneously expedite the work

BY FRANK W. SKINNER, C. E.

THE sixteen story building on West and Carlisle Streets, New York, which will house the *New York Evening Post*, required 86 separate foundation piers sunk to a depth of more than 50 feet through made ground, sand, and silt to bearings in hard stratum sufficient to sustain loads of 10 tons per square foot.

The site is located on low level ground that has encroached far beyond the original margin of the North River. The soft saturated soil and quantities of old structures known to be embedded in it above the sand and boulders extending down to hard pan more than 50 feet below curb level presented an unusually difficult foundation problem.

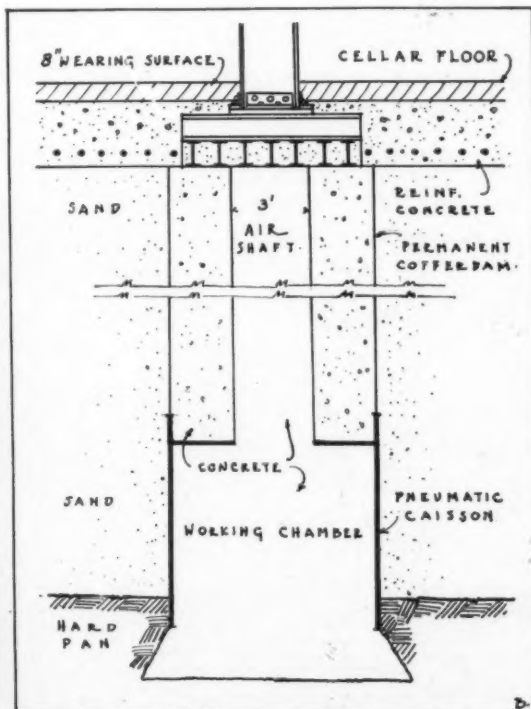
The architect, Horace Trumbauer, and C. E. Landers, consulting engineer, in their design provided separate foundation piers for heavy printing presses independent of those supporting heavily concentrated column loads of the building. The contract plans fixed the location and minimum dimensions of the foundation piers and specified that they should be carried down to a

bearing stratum within a given period of time.

In accordance with the conditions, the Underpinning and Foundation Co., subcontractor for the substructure, selected and employed pneumatic caissons. To minimize the construction time an unusual amount of heavy construction plant and equipment was installed. This included a battery of low pressure air compressors adequate for sinking six caissons simultaneously; a 600 foot capacity simplate valve compressor for high pressure pneumatic tools; four tower derricks.

The power plant, locker room and bath house, sandhogs' change and rest house, hospital, decompression lock, blacksmith shop, pipe shop and heavy storage were installed on a small vacant lot adjacent to the site. Space for the storage of light materials and loading hoppers was provided on working platforms built over the sidewalks.

By means of steam shovels about 2500 yards of material were excavated to a depth of 9 feet below the curb. Before starting caisson work, between 600 and 700 old wooden foundation piles



AT LEFT: CIRCULAR CAISSON, 5 FEET IN DIAMETER, BALLASTED WITH 12 TONS OF CAST IRON BLOCKS. AT RIGHT: SECTION THROUGH A FOUNDATION PIER. THE AIR SHAFT AND WORKING CHAMBER WERE FILLED WITH CEMENT AFTER CUTTING EDGES OF CAISSON HAD ENTERED HARD PAN

THE AMERICAN ARCHITECT

20 to 30 feet long were loosened by hydraulic jets and removed by means of blocks and tackles.

Open pits were dug as deep as ground water permitted, often to a depth of 20 feet. In the pits, shop-completed steel pneumatic caissons 5-1/2 feet in diameter by 11-1/2 to 16-1/2 feet long were set. The use of completely fabricated steel caissons proved a considerable time saver.

The cutting edges of the caissons encountered quantities of heavy crib and bulkhead timbers as large as 20 inches square. These timbers had been continuously saturated and were found in perfect preservation. Rip rap stone and boulders which required drilling and blasting were also found.

As the caissons were sunk their outer walls were extended vertically to serve as cofferdams by means of riveted steel sections for the circular piers and wooden panels for the rectangular piers. The steel sections, connected by bolts through inside flanges were left permanently in place. These answered the double purpose of cofferdams and permanent forms for concrete filling placed on the roof of the working chambers of the caissons and enclosing air shafts 3 feet in diameter.

Seven air locks were provided and shifted from caisson to caisson as required. This permitted five or more to be sunk at the same time.

Air pressure was maintained until the cutting

edges of the caissons entered the hard pan at least one foot. In some cases the bottom of the excavation was belled out below the cutting edge to obtain an increase in bearing surface.

The working chambers of the caissons were filled with concrete under pressure. After the caissons were sealed and air locks, shafts and cores had been removed, the shaft holes were filled solid with concrete to complete the piers.

Work was carried on 24 hours per day. The caissons, cellar walls and 40 inch thick cellar floor required about 8000 yards of concrete. The first caisson was put under air pressure April 18, and the last one was sealed August 10, 1925. Thompson-Starrett Co. is the general contractor.

SPECIFICATIONS FOR PAINTING, DAMPPROOFING AND WATERPROOFING

FOR the convenience of those interested in construction and maintenance work, the Goheen Corporation, Newark, N. J., have prepared a special bulletin (No. 103) of convenient size for filing which gives specifications and standards for painting exterior and interior metal, hot surfaces, exterior and interior wood and concrete buildings, machinery and equipment.



ADVANCED STAGE OF FOUNDATION CONSTRUCTION, JULY 20, 1925. CAISSONS SUNK OR SINKING, COFFERDAMS AND AIR SHAFTS OF OTHERS PROJECTING ABOVE BOTTOM OF CELLAR EXCAVATION. THREE AIR LOCKS IN SERVICE SHOWN IN CENTER FOREGROUND, FOUR OTHERS IN BACKGROUND. WOODEN COFFERDAMS ARE SEEN AT LEFT

EDITORIAL COMMENT

THE ARCHITECTURAL LEAGUE of New York has awarded the President's Medal to Miss Sarah Cooper Hewitt and posthumously to the late Eleanor Gurnee Hewitt, in recognition of their distinguished service to the allied arts.

The Hewitt sisters are granddaughters of the late Peter Cooper, the founder of Cooper Institute in New York. Carrying forward in the most liberal spirit the work begun by their distinguished ancestor, the Misses Hewitt have established and generously maintained art schools, and in other ways supported the interest of American art and artists.

In honoring these two women, The Architectural League has honored itself and is to be congratulated on the discriminating selection of two such valuable citizens to receive the President's Medal. The medal, which was awarded for the first time in fourteen years, was designed by Daniel Chester French, N. A., sculptor. The last presentation, made in 1912, was to General George W. Goethals for his work in building the Panama Canal.

* * *

A BILL WAS RECENTLY introduced in the House of Commons, prohibiting the exportation from England of certain works of art and ancient or historical buildings. This measure is the result of a strongly expressed sentiment that is the direct outcome of the recent transplanting both of Warwick Priory and Agecroft Hall to this country.

Opposition has arisen to this bill in certain quarters in England on the ground that it interferes with the freedom of an individual to dispose of his own property. Those strongly favoring the measure are English art lovers who fear that England will lose further historic buildings as quickly and as secretly as it did those above mentioned, unless there is enacted some law to prevent further removals. A building may be said to have lost its historic significance when it has been removed from its site and the neighborhood—that is a part of the traditions that surround it.

It seems to be further evidence of the bad taste of our rich men to despoil a country of its rare old buildings to re-erect them on a site that has nothing in common with the building. It smacks of snobbishness and is strongly marked evidence of the irresistible force of the American dollar. Probably any successful effort to remove from this country any of our old and famous buildings would call forth a storm of protest. We, therefore, hope that the bill will pass and that the rich

American will confine his selection of antiques in buildings to his own country. He could find a very good use for his spare dollars by supporting efforts that are constantly being made to arrest the demolition of our own historic structures.

* * *

ONE BY ONE, New York's famous hotels are being razed or converted to other purposes. The Astor House, located on lower Broadway between Vesey and Barclay Streets, at one time New York's most popular hotel, has now come to the wreckers and that famous old structure will soon be but a memory. Until superseded by the Fifth Avenue Hotel on Madison Square, now also razed, the Astor House was the political and business headquarters of visitors to the city. Its granite walls and general exterior aspect were not in keeping with the cheerfulness of its interior. In its famous restaurant the *bon vivants* were wont to assemble, and its spacious ballroom was the scene of many social "assemblies" and "routs." A new building, estimated to cost \$6,750,000, is projected on the site, and when completed, will be the fourth highest structure on Manhattan Island.

Of all the buildings that at one time made this section the most dignified in New York, the only remaining is old St. Paul's Church. And that venerable edifice is now undergoing a "restoration" that, it is claimed, will restore it to its original state.

The eyesore of this locality is the old general Post Office, a usurper from the very start. It rears its ugly bulk on land that really should form a part of our park area. From time to time the hope has been indulged that the national government would enter into an arrangement with the City of New York for the removal of this unsightly structure, now outgrown its usefulness. It should be taken down and the land on which it stands made a part of City Hall Park.

* * *

IN THE DISCUSSION of a housing scheme for New York City, proposed by Governor Smith in a recent message to the State legislature, it has become disclosed that it is possible successfully to finance these housing operations.

The housing group, built some four years ago by the Metropolitan Life Insurance Company, has worked out successfully, as has also the group in New Jersey that was financed by Rockefeller interests.

Of New York City's many problems of traffic

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congestion, congestion of population, and housing needs, none is more insistent than housing. It seems impossible to make clear to certain elements of our population that their best interests would be served by the location of large industries in territory contiguous to Manhattan Island, where land is less expensive and where rents would be cheaper and living conditions much better in every way. We now have a largely congested area on the East side of Manhattan Island. The newly formed district where the majority of these people are employed has been located directly West. This makes for acute congestion of traffic on East and West car lines, and creates conditions now becoming intolerable. It is, of course, necessary in planning for housing to take note of these things and erect the new housing at such locations as will overcome bad traffic conditions.

We learn that in order to maintain a maximum

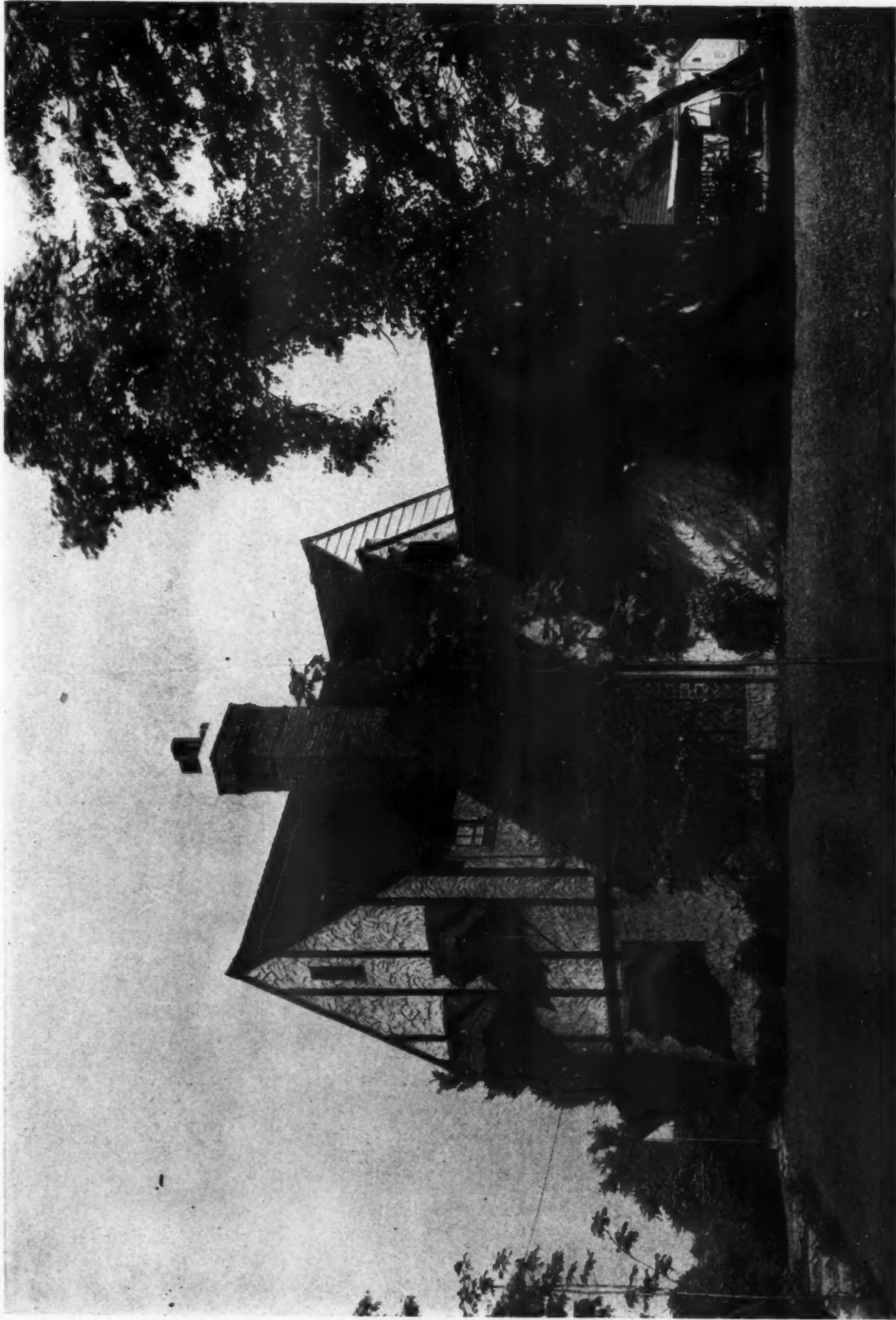
rental of \$12.50 per room, it is necessary to include a comparatively large area, to avail of certain economies of building and equipment. The present tenement house district occupies land that has now reached a valuation that makes it unavailable for these new types of housing. It will, therefore, be necessary to seek other and more desirable locations and the district thus abandoned at once becomes available for buildings that will pay a return in better proportion to valuation.

The successful outcome of the two operations referred to has, we learn, resulted in a more receptive attitude by investing companies to this type of housing and it is predicted that it may not be necessary for the State to engage in housing operations, as proposed by Governor Smith, as sufficient capital will undoubtedly soon be available to begin what may very well become the solution of the housing problem in New York.



THE COURT-FACULTY APARTMENTS, CORNELL UNIVERSITY, ITHACA, N. Y.

FREDERICK L. ACKERMAN, ARCHITECT



HOUSE OF MRS. E. M. PERLEY, BRONXVILLE, N. Y.—CLIFFORD C. WENDEHACK, ARCHITECT

(See plans and description on back)

THE AMERICAN ARCHITECT
March 20, 1926. Plate 54



HOUSE OF MRS. E. M. PERLEY, BRONXVILLE, N. Y.—CLIFFORD C. WENDEHACK, ARCHITECT

THE AMERICAN ARCHITECT
March 20, 1926. Plate 55



HOUSE OF MRS. E. M. PERLEY, BRONXVILLE, N. Y.—CLIFFORD C. WENDEHACK, ARCHITECT

THE AMERICAN ARCHITECT
March 20, 1926. Plate 56



BUILDING FOR BELL TELEPHONE CO., CLEVELAND, OHIO

HUBBELL & BENES, ARCHITECTS

(From the architects' rendering)

THE AMERICAN ARCHITECT
March 20, 1926. Plate 57



HOUSE OF MRS. M. T. MOORE, ANDERSON, S. C.—VAN F. PRUITT, ARCHITECT

(See plans and description on back)

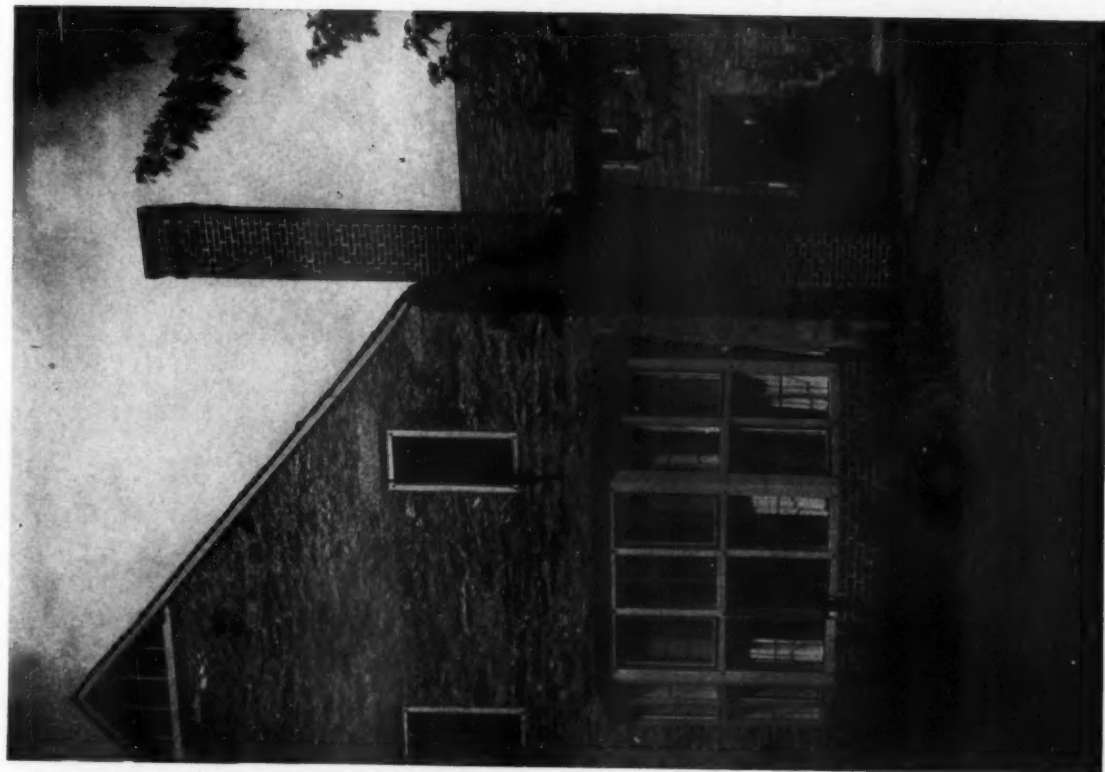
THE AMERICAN ARCHITECT
March 20, 1926. Plate 58



HOUSE AT GERMANTOWN, PA.—EDMUND B. GILCHRIST, ARCHITECT

(See plans on back)

THE AMERICAN ARCHITECT
March 20, 1906. Plate 59



HOUSE AT GERMANTOWN, PA.—EDMUND B. GILCHRIST, ARCHITECT



THE AMERICAN ARCHITECT
March 20, 1926. Plate 60

THE BOSTON SCHOOLHOUSE COMMISSION—II*

BY C. H. BLACKALL, F. A. I. A., Member, Board of Schoolhouse Commissioners, City of Boston

WHEN all these preliminaries have been accomplished, and the money actually appropriated, the Board furnishes the architect with a survey of the site, including grades, borings, etc., and delivers to him the program received from the School Committee, together with such other detailed information as is considered advisable. The architect is also given the required cubical contents of the building which he must not exceed, and is given a unit price within which he is required to keep. Sketches are then prepared by the architect and submitted to the Board for approval. These are subsequently modified as may be necessary until the Board has worked out the problem to its satisfaction. In the meantime the School Committee, through its superintendents, is in more or less intimate touch with the architect, and if necessary, the head masters, or the teachers are often called in consultation. When the sketches are finally approved, blueprints of the same are sent to the School Committee with the request for an opinion regarding the same. The Board is not obligated to make any changes at this time as suggested by the Committee, but as a matter of fact the Committee's recommendations are invariably carried out. The working drawings are then prepared, the Board giving to the architect blueprints of standard details, cupboards, finish, plumbing, electric and heating work, etc. When the drawings are completed, the architect, in collaboration with the Chief Inspector of the Board prepares the specifications, which are printed and the work is then advertised in the usual manner and bids called for. No successful attempt has yet been made to standardize the specifications and though the contents are identical in nearly every school, it is only within the last few months that it has seemed possible to prepare a standard specification which would answer for all schools. This is now in process of preparation.

If the bids exceed the appropriations, the architect is expected to redraw the plans, or make such changes as are necessary to conform to the amount of money available. This he does without charge. In case, however, as frequently happens, the Board decides to make changes in the plans, the architect is then paid for his work in making these changes on the basis of three times the draftsmen's wages.

The work is most invariably let to the lowest bidder. In the last three years there have not been more than three or four instances where the lowest bidder was passed by and in each case it

was for perfectly good and sufficient reasons. The carrying out of the work is under the supervision primarily of the architect, but also with practically equal authority, is under the direction of the chief inspector of the Department. In addition to this the City keeps a clerk of the works on the premises all the time and this clerk is supposed to check all details and requisitions and to report regularly on the progress of the work.

And finally, when the building is ready for occupancy, the Board makes an acceptance for occupancy only, retaining jurisdiction until the work is entirely completed and a maintenance bond given by the contractor which covers a period of two years. There are usually also special bonds for the roofing and for any unusual features which are uncertain. The cost of these bonds is paid by the contractor, and in taking the contract, he is required to give a surety bond of about 25% of the contract price.

The action of the Board inaugurated by Mr. Sturgis in recognizing 6% as the proper payment for architects has had a very decided value to the profession and has fixed legally the status of the architect as perhaps nothing else could have done. There have been mistakes and there are limitations in the work of the Board. Given our municipal and political systems of government, it is not likely that any city would get as good work as is customary in private practice, nor would it be able to get as wise a choice either in builders, sub-contractors or in many cases, architects. But on the whole the system has worked well. The Schoolhouse Department should be thoroughly reorganized every few years so as to avoid getting started into ruts. A certain amount of political influence is inevitable in the selection of the architects, but on the whole this has been generally avoided by the City and the work of the Board has been spread on the whole pretty carefully among the available architects.

There is one feature of the work of the Board which is a constant conundrum, and that is the repairs. These amount to over a million and a half a year. A great deal of the smaller work of the Department is let to contractors who have a proper standing with the Board and is let without competition, but most of the work, even in amounts of less than \$200, is bid on by from three to six or eight different contractors before being let, and the work uniformly goes to the lowest bidder. It is vexatious work, is quite unsatisfactory and has no architectural features. It is entirely under the direction of the employees of the Board, but in some cases it has been found advis-

* Concluded from the preceding issue.

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able to put the alteration for existing buildings into the architectural department of the Board, employing its own draftsmen and carrying out its own work without an architect. On the whole this has worked well, also. The landscape features, planting, drives, etc., are generally carried out under the direction of the Engineering Department of the Board.

Appended is the form of contract for architectural service. So far as the writer is aware, it has never been tested in court, but it is believed to be as nearly perfect, as could be hoped for, and is on the whole a fair recognition of the rights of both parties.

One or two points should be noted. Provision is made in Section 2E for restudying the work and redrawing if the building overruns the appropriation. In Section 3 provision is made for a preliminary payment when studies are completed, and in the same Section No. 4, provision is made for cases which sometimes arise when the architect has entirely completed his services but the building is not accepted by the City. Paragraph 5 of the same Section provides for a termination of the contract and for payment to the architect in such a case, and Section 4 provides for changes in the program, or changes in the work itself involving more work on the part of the architect. This has been a somewhat difficult matter to arrange satisfactorily. In previous contracts it was very easy to insert a clause that the architect would be paid three times the draftsmen's wages, this covering his overhead and profit. In practice, however, it was found that architects frequently did their own drafting and it was a question then whether they should be paid three times what they would allow themselves as a fair salary. In some contracts the architect was allowed to charge his services at \$2.50 an hour, which meant that he would be paid all his expenses and his overhead and his profit, and the City would get no credit for the supervision which an architect is naturally supposed to give to his office, so it has been finally worked out that the architect does not charge for his own services, but only for the draftsmen themselves, and he is supposed to recoup himself for what personal attention he gives to these extra changes out of the three times draftsmen's wages. This form of contract has not been in operation very long, but has seemed to find favor with the architects, and on the whole, so far as the writer is aware, the architects have been more favorable to having entire charge of the work, including the domestic engineering, than with the former scheme, under which the domestic engineering was carried out by the Board itself.

Editors' Note: Since the foregoing was written, due to what may be considered as political influence, there has been an entire reorganization of the Boston Schoolhouse Commission from which Mr. Blackall and other architects have resigned.

FORM OF CONTRACT FOR ARCHITECT'S SERVICES FOR PROPOSED PUBLIC SCHOOL BUILDING

THIS AGREEMENT, made this _____ day of _____ in the year one thousand nine hundred and twenty-five, by the City of Boston, acting through the Board of Schoolhouse Commissioners, party of the first part, and _____ party of the second part, hereinafter designated the Architect,

WITNESSETH, that the Architect, in consideration of the agreements herein made by the City, agrees with the said City as follows:

Section 1.—The Board.—(a). Is to furnish the Architect with the requirements and information for the design and construction of the building for which he is the Architect, and give the approximate cubical contents and cost per cubic foot thereof;

(b). Is to furnish the Architect with specific instructions in regard to the systems to be followed in working out the domestic engineering and is, through its representatives, to advise with the Architect on details of heating, plumbing and electric work for the building;

(c). Is to give the grades and lines of streets and adjoining lots, and such information, borings, etc., as may be necessary to determine the bearing value of the soil;

(d). Is to give all information regarding the lot, and on request of the Architect furnish him full information relating to the above, and also information relating to the sewer, water, gas and electric service, and to the rights, restrictions and boundaries of the lot on which the building is to be constructed;

(e). Is to make all necessary blueprints or reproductions of the contract drawings for purposes of obtaining estimates from contractors, and is to print the specifications.

Section 2.—The Architect.—(a). Is to consult and advise with the Board and make such preliminary studies as the Board shall require, showing the proposed design, construction and cubical contents of the building. He shall submit the preliminary studies to the Board not later than fifteen days after the receipt by him of full instructions regarding the building to be erected;

(b). Is to make upon the basis of said preliminary studies one complete set of working drawings in ink on tracing cloth, floor and framing plans, sections and elevations, plumbing drawings and such detail drawings as are necessary to explain the specifications. He shall submit the complete finished drawings and specifications not later than ninety days after the acceptance by the Board of the preliminary studies;

(c). Is to provide all full size and scale detail drawings required for the proper interpretation of the contract drawings. All of the said drawings are to be made to the satisfaction of the Board;

(d). Is to furnish one complete typewritten set of specifications of work to be done, including the domestic engineering, and is to revise and correct the printer's proofs of same, the specifications to be prepared following forms to be indicated by the Board;

(e). Is to restudy, and if necessary redraw, without charge, any or all of said drawings and specifications, if the lowest bid for doing the work in accordance therewith overruns the limit of cost designated by the Board, or if changes are desired in same by the Board before the final draft of said drawings and specifications is made;

(f). Is, upon the signing of the construction contract, to deliver to the Board, to remain their property, one complete set of cloth tracings of working drawings, a perspective drawing of the exterior of the building and such floor plans as the Board may request suitable for reproduction, and at the conclusion of the work a complete set of working drawings on tracing cloth, either the set previously referred to or a copy therefrom, which shall be corrected to agree with and embody all changes made during construction;

THE AMERICAN ARCHITECT

(g). Is to have, subject to the approval of the Board, general supervision of the building and all its functions, and is to be the Architect on all work to be done under any contract for the construction of the building, and render the full usual architectural services and supervision for such work;

(h). Is, in the form prescribed by the Board, to make all estimates and issue orders for payments of same under any contract in which he is the Architect for the work;

(i). Is to advise with the Board on any changes in the building contemplated by the Board, and is to order changes when required by the Board so to do.

Section 3.—(a). The City, as full compensation for the services aforesaid, is, for all work involving a new building, to pay the Architect 6% upon the cost of the whole. When the work involves the alteration of an existing building, the Architect shall be paid a total fee for such work estimated at 10% on the cost thereof. In case, however, of an addition to an existing building involving changes necessary to connect the new and the old portions, the fee is to be paid on the whole job, new and old, estimated at 6%.

(b). Payments are to be made as follows:

1. When preliminary studies are completed, an amount not to exceed 1/6 of the estimated total commission;
2. When contracts are signed for the erection or alteration of the building, a payment which, together with the previous payments—if any, will amount to 3 3/5% of the contract price;
3. Thereafter payments estimated at 2 2/5% of the amounts approved for payment to the contractor or contractors, all of these payments to the Architect being on account of the total commission as aforesaid;
4. Final payment may be made at the option of the Board before final acceptance of the building, but the Board reserves the right to defer such final payment until the entire work is completed, the building finally accepted, and final release given to the City for all claims of any nature under the contract by the contractor or his subcontractors or their employees;
5. The Board may at any time terminate the employment of the Architect, in which case he shall receive a final payment proportionate to the work completed by him, under this contract, as set forth in Articles (b) 1 and 2.

Section 4.—When for any reason other than those stated in Section 2, paragraph (e) above, the Board shall set aside the whole or any part of an Architect's studies, drawings or specifications, or shall make such changes in the requirements as shall necessitate redrawing, the City shall pay the Architect for the cost of such redrawing a sum not exceeding three times the net amounts paid by him for draftsmen's services in connection therewith, not including any allowance for the personal time of the Architect in connection with this redrawing; but no payment shall be allowed for minor changes or corrections on original drawings. The time sheets of draftsmen, signed by the Architect, shall be submitted to the Board with the claim for compensation.

Section 5.—In the above agreement the term "building" is used to define not only the structure itself but all work in connection with it committed to the Architect by the order of the Board, as fencing, grading, roads, walks, planting, decorative painting and sculptural decoration.

The Architect shall further render all services of any kind mentioned in the contract executed for the construction of said school building and incidental to or necessary for the performance thereof, until the builder shall be released from all responsibility in respect thereof.

The Architect shall not order any variations or extras without the approval of the Board in writing, and shall not exceed his authority as indicated in the building contract.

No rule of any society or any custom of engineers, architects or surveyors shall be binding on the party of the first part.

IN WITNESS WHEREOF, the said
hereunto set their hand and seal, and the City of Boston
has caused these presents to be signed by the chairman of

the Board of Schoolhouse Commissioners, hereunto duly authorized, the day and year as above written.

CITY OF BOSTON

By
BOARD OF SCHOOLHOUSE COMMISSIONERS

.....
Chairman.

.....
Architect.

Approved:

.....
Mayor.

Form of Contract Approved:

.....
Corporation Counsel.

BUILDING AT MILAN

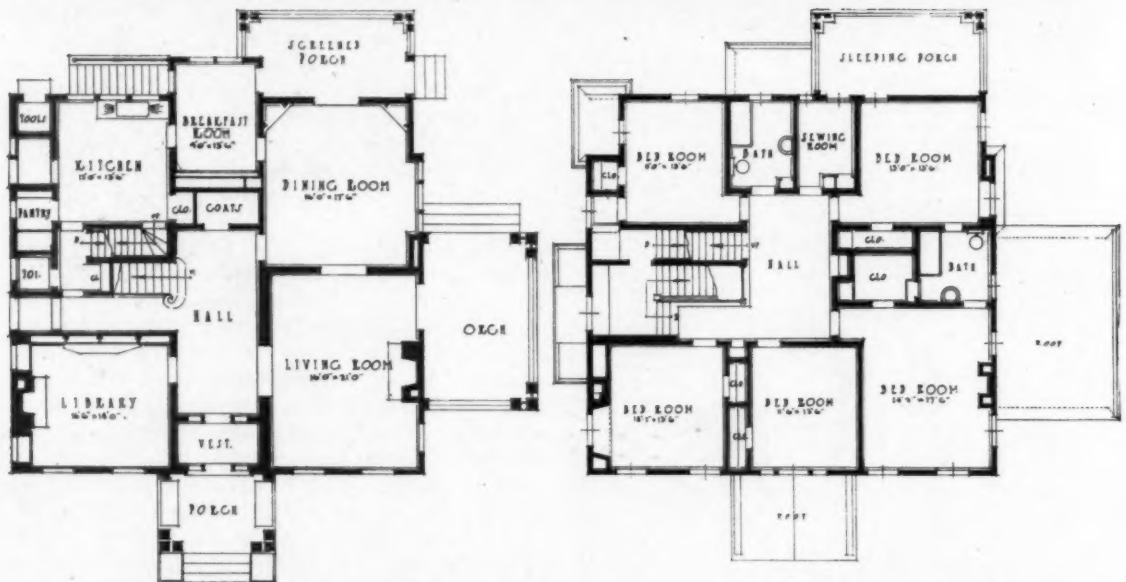
THERE was rather remarkable building activity displayed in 1924 in Milan, states a recent issue of *Housing Betterment*. The number of new apartments built in 1912 was 3897, which seems to have been the high water mark before the war. Dropping to zero during the war period, the number gradually increased to 1645 in 1922, jumped to 3001 in 1923, then to 8209 in 1924.

An analysis of the 1924 output shows that 2943 of these apartments contained only one or two rooms; 2451 had three or four; 1950 had five or six, and 865 had seven or more. But the cost of building is so great and rents in the new apartments so high that the condition existing for working people has been little, if at all, relieved.

Such building as had been done for wage-earners, has been undertaken either by philanthropic foundations or by semi-public organizations, operating not only without profit, but with government loans and subsidies. The most important of these agencies are the Autonomous Housing Institutes, which resemble the Belgian approved Housing Societies in being intended to combine the advantages of public and private initiative. They are corporations whose directors are partly public officials serving *ex officio*, and partly private persons interested in social betterment. It is said, in Italy at least, that they are more flexible and expeditious than municipal Housing Bureaus, and that a higher type of citizen serves on their unpaid Boards than could be secured as salaried functionaries.

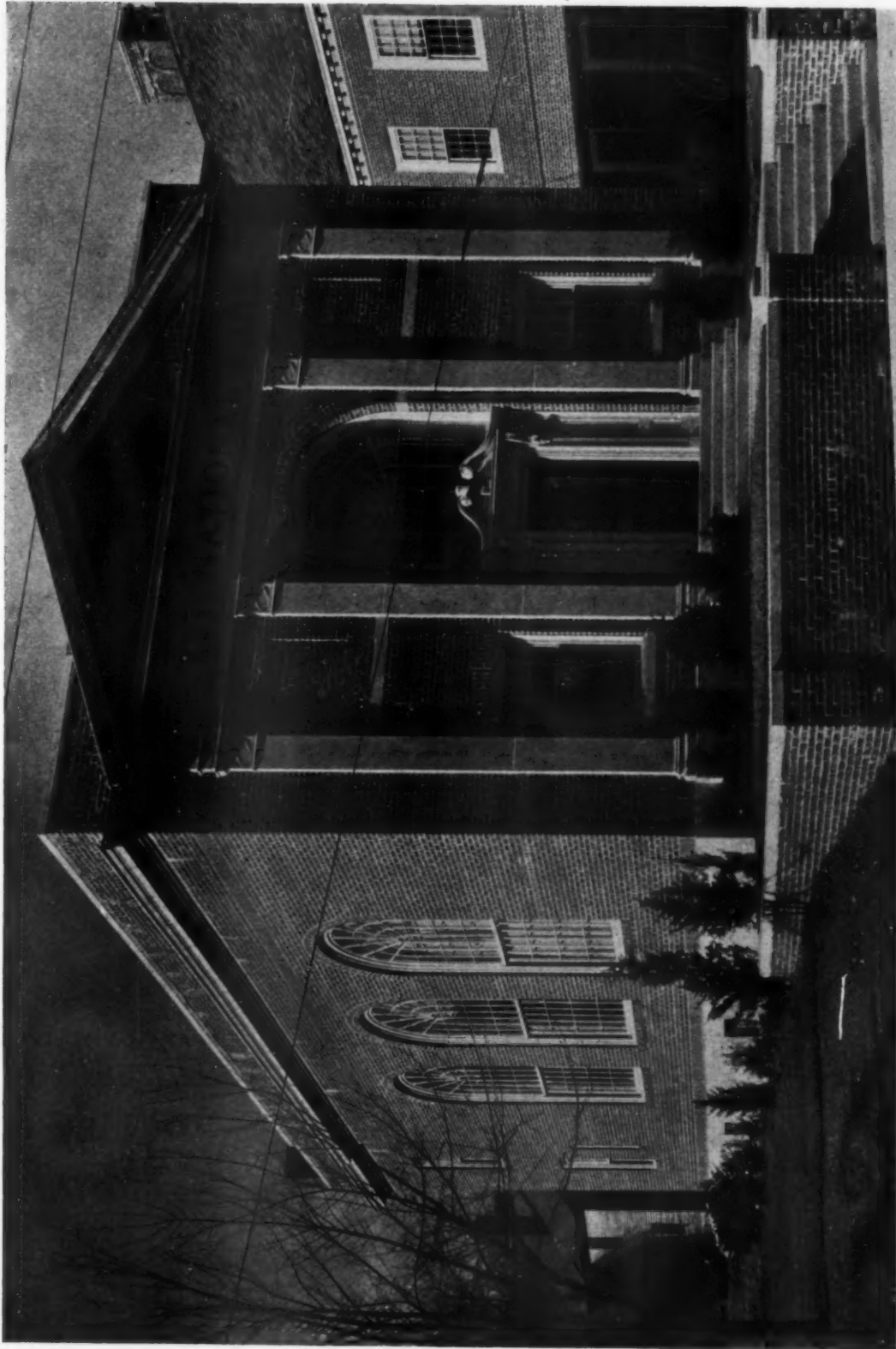
Workingmen's quarters of Tiepolo and Pascoli recently erected by the Housing Institute of Milan, consist of two adjacent triangular tracts edged with four story apartment houses with parking in the center of each triangle. The houses are not built in solid row, but are separate from each other. They contain altogether 265 apartments with 807 rooms. Each apartment has access to a balcony and a terrace. Baths and laundry for the use of all are in the basements. The cost per room was 8600 lire. It would have been 1800 to 2200 before the war. Even so, it indicates a substantial decrease from the Italian peak of housing costs, which reached six times the pre-war figure of 1921.

THE AMERICAN ARCHITECT



This house is of frame construction. Exterior walls, sheathing. Roof is of wood shingles. Sheet metal, galvanized iron. Sheet glass. Doors and windows, wood. Partitions, wood studs. Walls, plastered and papered. Floors and trim, wood. Warm air heat. Sewer connection. Public water supply. Vitreous fixtures. Wrought iron piping. Special refrigeration equipment

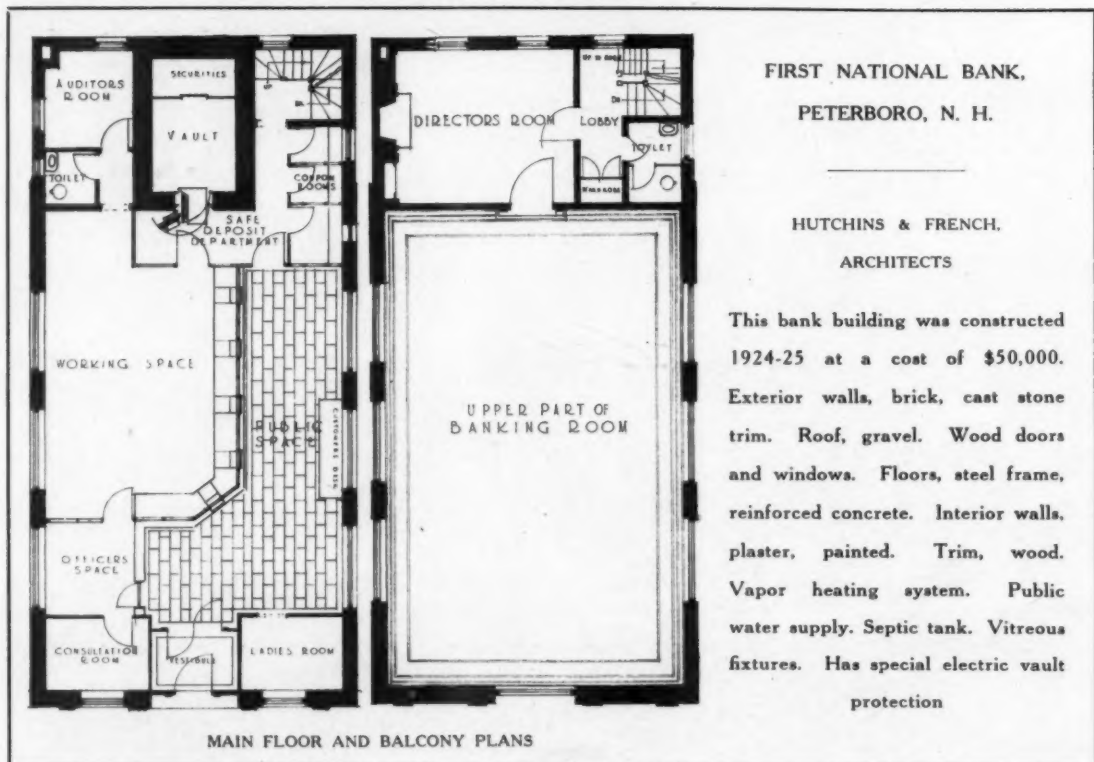
HOUSE OF LEE BURNS, INDIANAPOLIS, IND.—WILLARD OSLER & LEE BURNS, ARCHITECTS



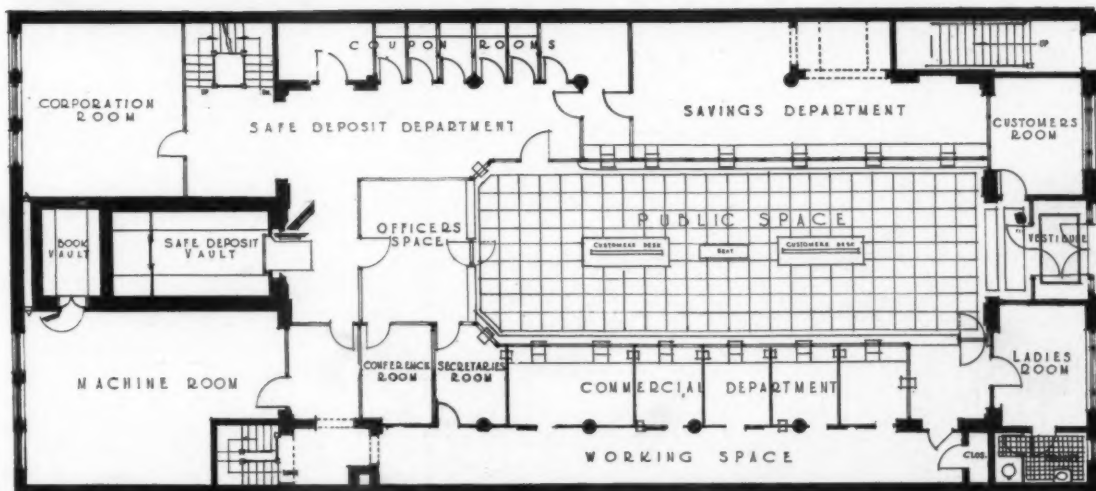
FIRST NATIONAL BANK, PETERBORO, N. H.—HUTCHINS & FRENCH, ARCHITECTS



BANKING ROOM, LOOKING IN



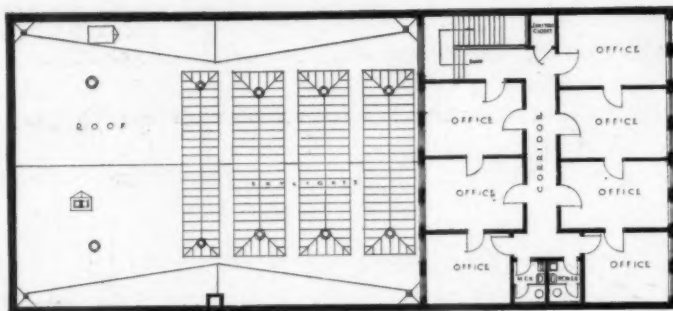
THE AMERICAN ARCHITECT



FIRST NATIONAL BANK, GARDNER, MASS.—HUTCHINS & FRENCH, ARCHITECTS

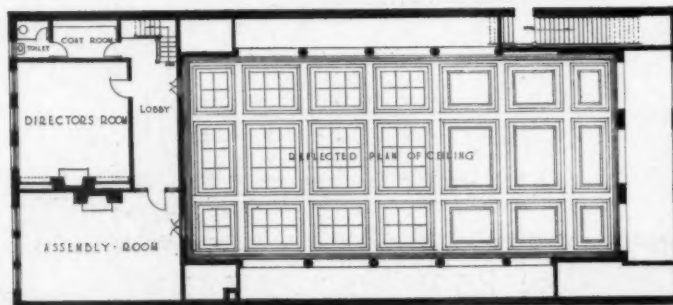


BANKING ROOM, LOOKING IN



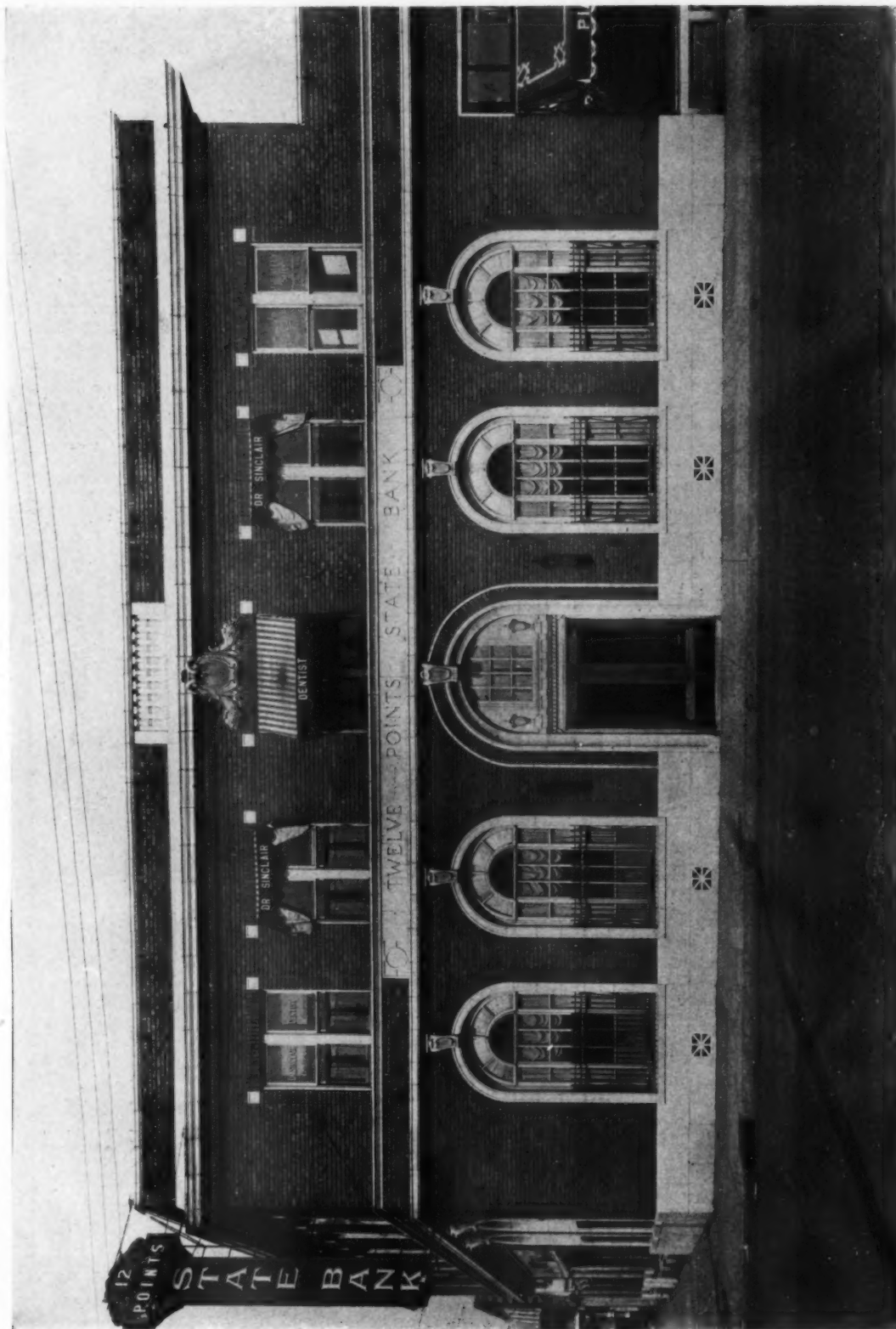
FIRST NATIONAL BANK,
GARDNER, MASS.

HUTCHINS & FRENCH,
ARCHITECTS

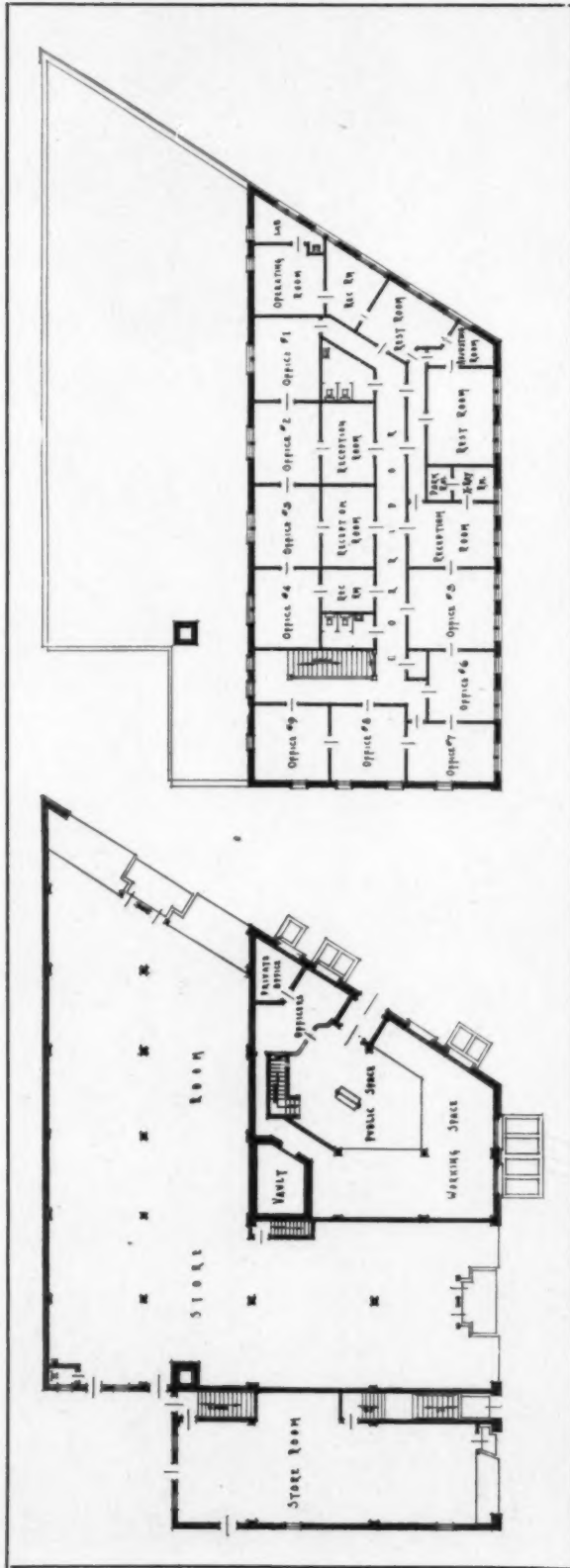


(For Main Floor Plan See Preceding Page)

Built 1924-25. Cost \$125,000.
Exterior walls, brick; covering is
cut marble. Roof, gravel. Sheet
metal, copper. Ornamental metal,
iron and brass. Floors, reinforced
concrete. Partitions, hollow tile.
Wall surfaces, marble in banking
room; other rooms plaster, painted.
Floor covering, rubber tile and
marble. Trim, wood. Vapor heat.
Vault in basement



TWELVE POINTS STATE BANK, TERRE HAUTE, IND.—SHOURDS-STONER CO., ARCHITECTS & ENGINEERS



THIS bank building was erected in 1923 at a cost of \$95,000, or 31¼¢ per cubic foot. The exterior walls are of brick and hollow tile, covered with a brick veneer and terra cotta. It has a gravel roof.

Sheet metal, galvanized iron and copper. Ornamental metal, iron.

Glass, sheet and plate.

Doors, wood. Windows, solid metal and wood.

Floors, wood construction and reinforced concrete.

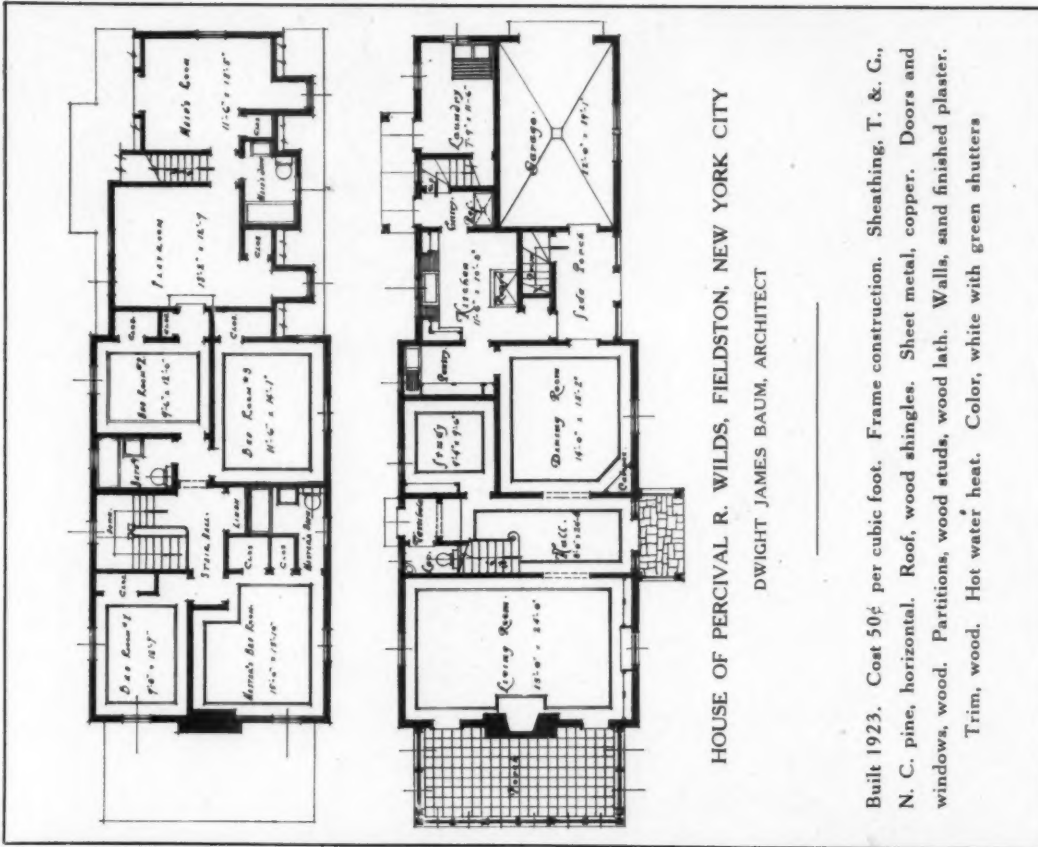
Partitions, hollow tile.

Interior wall surfaces, tile and plaster, finished in hard white and sand finish.

Floor coverings, concrete, wood, rubber and linoleum. Trim, wood.

Heating, steam. Drainage, sewer. Public water supply. Enamelled iron fixtures. Piping, cast and wrought iron. Electric conduits. Vault.

TWELVE POINTS STATE BANK, TERRE HAUTE, IND.—SHOURDS-STONER CO., ARCHITECTS & ENGINEERS



HOUSE OF PERCIVAL R. WILDS, FIELDSTON, NEW YORK CITY
DWIGHT JAMES BAUM, ARCHITECT

Built 1923. Cost 50¢ per cubic foot. Frame construction. Sheathing, T. & G., N. C. pine, horizontal. Roof, wood shingles. Sheet metal, copper. Doors and windows, wood. Partitions, wood studs, wood lath. Walls, sand finished plaster. Trim, wood. Hot water heat. Color, white with green shutters



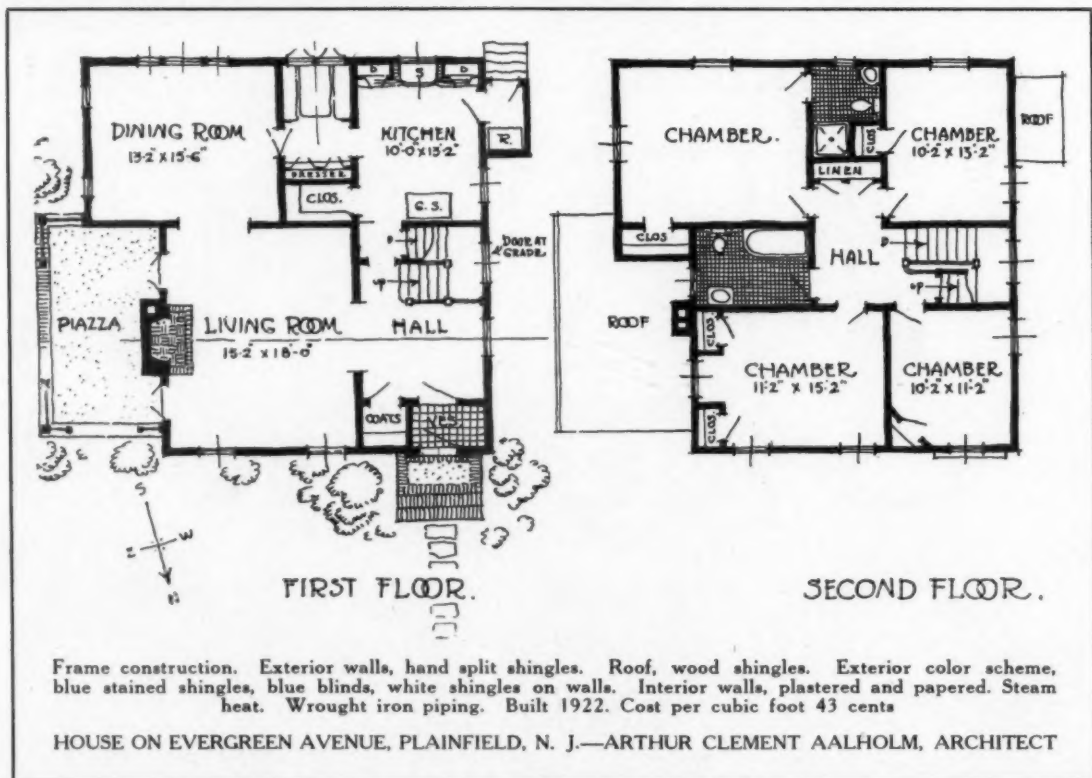
HOUSE OF PERCIVAL R. WILDS, FIELDSTON, NEW YORK CITY—DWIGHT JAMES BAUM, ARCHITECT

THE AMERICAN ARCHITECT

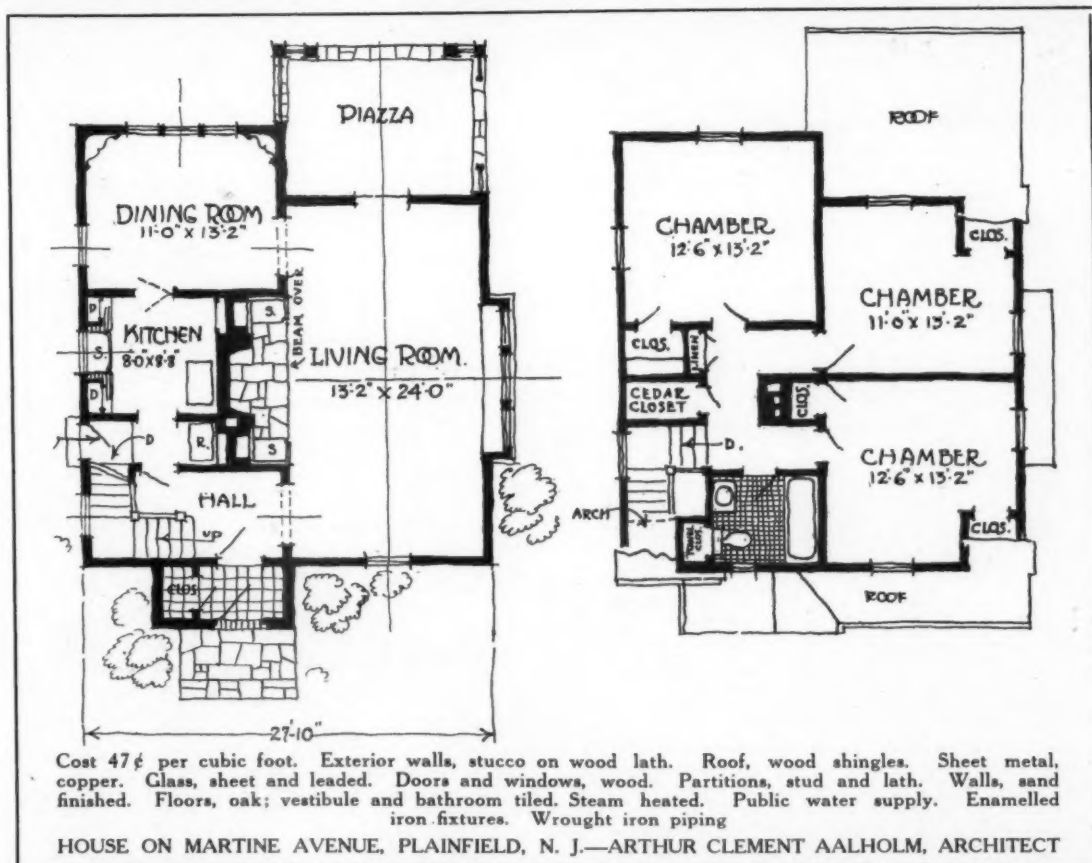


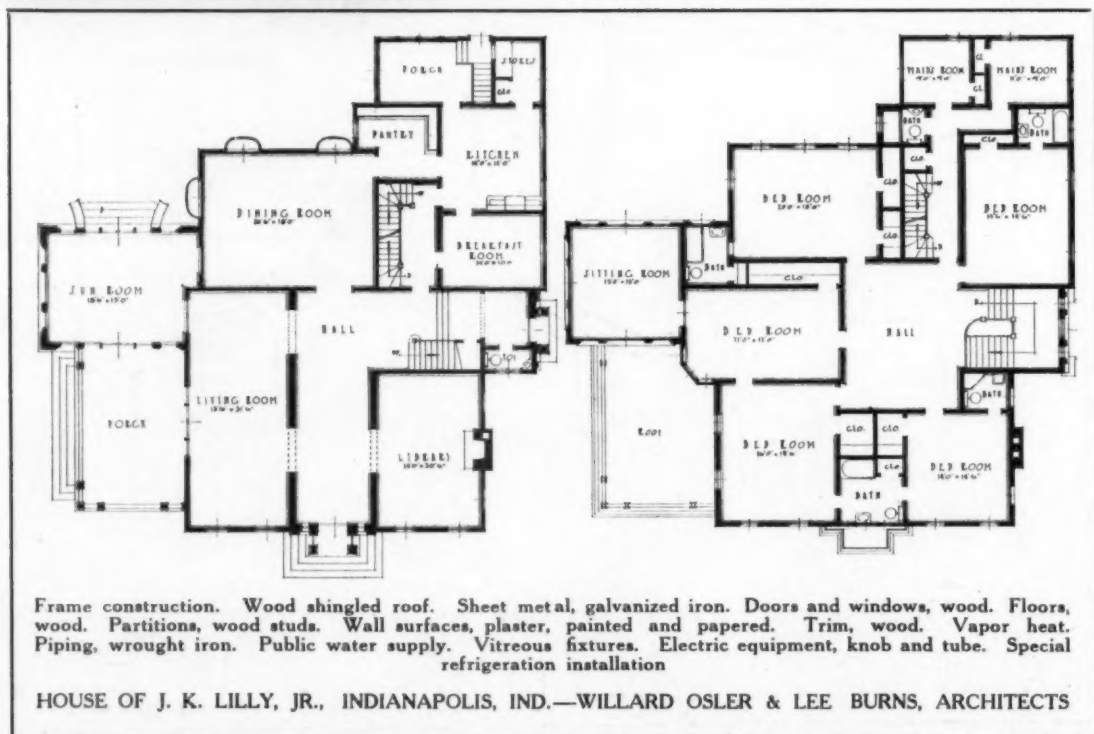
A good plan for a small house. Ample closet room is provided. Note large storage closet in kitchen. Cost \$12,000. Exterior walls, frame, sheathed. Roof, wood shingles. Sheet metal, galvanized iron. Doors, wood. Floors, wood. Partitions, wood studs. Walls, plastered and papered. Trim, wood. Heating, warm air. Drainage, sewer. Public water supply. Piping, wrought iron

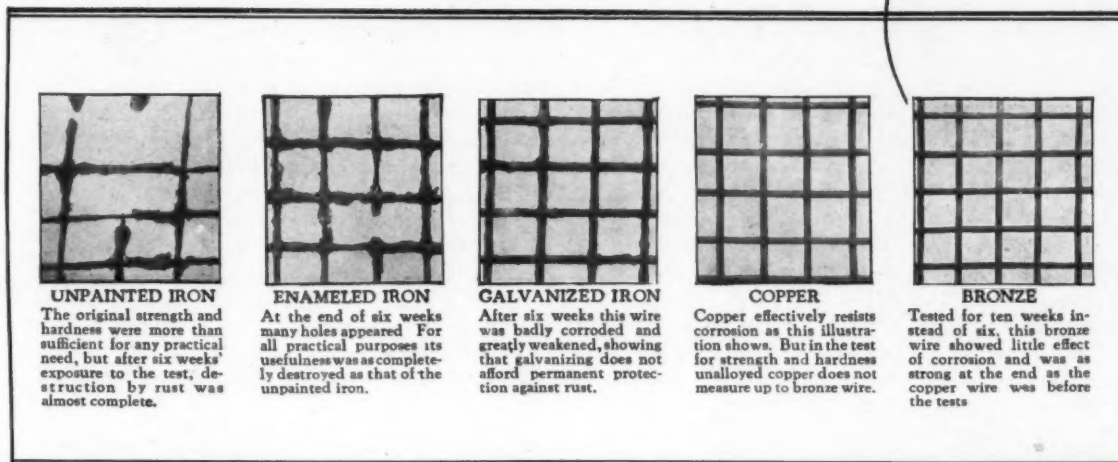
HOUSE OF C. M. WARNER, INDIANAPOLIS, IND.—WILLARD OSLER & LEE BURNS, ARCHITECTS



THE AMERICAN ARCHITECT







Tests prove the superiority of Bronze Wire for Screens

FIVE different kinds of screen wire were subjected to a continuous salt spray which concentrated into six weeks the weathering effects ordinarily distributed over a period of years. The samples were tested for strength both before and after the corrosion test.

The photographs above, enlarged four times, show conclusively that of the metals tested, only bronze and copper screen wire offer satisfactory resistance to corrosion. The tests also prove that bronze wire is 50% stronger than copper.

Screens made of Anaconda Bronze Wire are so strong that they do not bulge or sag in service. They last for years, and are always attractive. They never require painting, and therefore do not obstruct vision. They represent the most satisfactory and economical investment in screen protection.

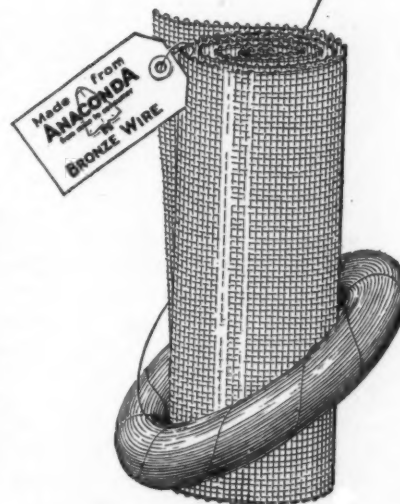
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New Toronto, Ontario



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THE AMERICAN ARCHITECT

BUILDING TRADES HONOR MEMORY OF BURT LESLIE FENNER

A MEETING in memorial to the late Burt Leslie Fenner of the firm of McKim, Mead & White, conducted under the auspices of the New York Building Congress, was held at Hotel Commodore in New York on February 23.

The principal speakers at this meeting were D. Everett Waid, President of The American Institute of Architects, and Stephen F. Voorhees, President of the Building Congress. Representatives of the New York Building Trades Council, and the Building Trades Employers' Association were present and also a large gathering of architects and builders whose attendance at this meeting was intended to express their appreciation of Mr. Fenner's fine services. The speakers referred to Mr. Fenner's outstanding characteristics as a gentleman, a sportsman, a highly gifted man in his profession, one endowed in mind and heart beyond the average man. The entire effort of the meeting was to demonstrate publicly that while Mr. Fenner's service to his own profession was great and had been recognized, it was no less complete as regarding the building profession and those civic activities in which he was engaged and to which he rendered the most valuable performance.

SCHOLARSHIPS AT MASSACHUSETTS INSTITUTE OF TECHNOLOGY

ATTENTION is directed to an advertisement in this issue, setting forth the conditions under which two scholarships are offered at the Massachusetts Institute of Technology. These scholarships will be awarded to special students in the third or fourth year of the course in architecture.

ROTCH TRAVELLING SCHOLARSHIP COMPETITION

EXAMINATIONS for the Rotch Travelling Scholarship will be held this year during the week beginning April 12. Candidates must be citizens of the United States and under thirty years of age on May 1 of the year when they present themselves, and may be admitted when so qualified under one of two categories.

A. With no architectural schooling, but experience in professional work during two years in Massachusetts in the employ of a practicing architect resident in Massachusetts.

B. With one year in an office as above, and three years in a Massachusetts architectural school approved by the Scholarship Committee.

Examinations will be of two kinds, preliminary and final. Applicants of Class A shall take both. Applicants of Class B shall take only the finals.

For further information apply to C. H. Blackall, Secretary, 31 West Street, Boston, Mass.

TO SAVE ODD STATUE ON VANDERBILT HOUSE

A SMALL statue of a stonemason, which was recently discovered on the roof of the William K. Vanderbilt house, at the northwest corner of Fifth Avenue and Fifty-second Street, New York City, may soon find its way to an art museum. There is a possibility it will be offered to the Metropolitan Museum of Art.

The statue is of Richard Morris Hunt, the architect who designed the mansion, although it appears to be a stonemason in his working garb. It was done by the late Karl Bitter, sculptor.

The statue was placed originally on the apex of the house to hide a chimney which the architect considered out of harmony. The contractor also wanted it placed there, it was said, as a signature to Mr. Hunt's masterpiece of architecture.

The figure is about four feet high. The original stipulation was that it should be returned to the Vanderbilts.

ARCHITECTURAL PRIZES, SCHOOL OF ARCHITECTURE, PRINCETON UNIVERSITY

TWO competitive prizes of eight hundred dollars each, in the School of Architecture, Princeton University, are announced for the year 1926-1927. The winners are exempt from tuition fees.

The purpose of these prizes is to place at the disposal of experienced draftsmen of unusual ability, who desire to complete their professional training by contact with the academic side of architecture, the advantages found in the School of Architecture, the Department of Art and Archaeology, and the Graduate School, of Princeton University.

The candidates shall be unmarried male citizens, not less than twenty-two nor more than thirty years of age on September 1, 1926, and shall have been employed as draftsmen in architects' offices for not less than three years.

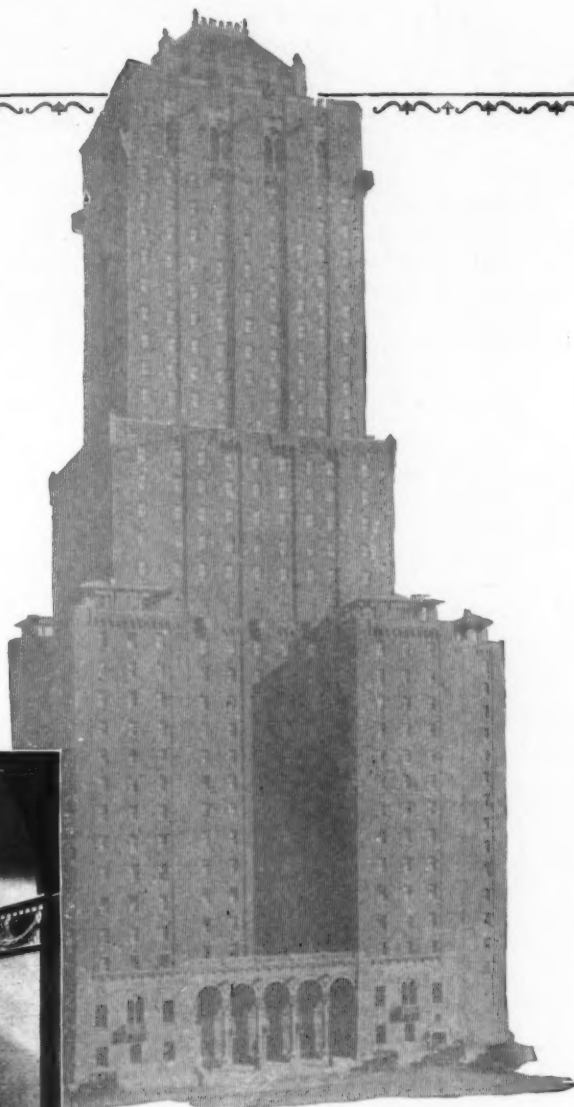
Applications to compete for the prizes must be filed on or before April 24, 1926. For application blanks, and regulations governing the competition and award, address The Secretary, The School of Architecture, Princeton University, Princeton, N. J.

TREE 3,000 YEARS OLD

A JUNIPER tree 3,000 years old has been discovered in Utah. From a study of its rings it is found that the first two inches of its growth took about 200 years, and that later it grew at the rate of two inches every sixty years. It has stood erect longer, perhaps, than any structure raised by man except the Pyramids.

IT IS wholly logical that The Shelton should have been awarded the American Institute of Architects Exhibition Gold Medal and the Architectural League of New York Gold Medal for 1925. Distinguished in architectural design, well planned and well built, The Shelton rears itself against New York's mid-town skyline, exemplifying the exceptional class of structures always found among the financing projects underwritten by S. W. STRAUS & CO.

We are always interested in loans of \$250,000 upward, either on completed buildings or structures to be built. Our booklet—The Straus Plan of Finance—may be had on request. Address our Loan Department



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THE CONSUMER'S DOLLAR

IF the purchasing power of the consumer's dollar has declined to about 60 per cent of its pre-war value, the employer's dollar in paying wages has shrunk still more, because of the higher wages paid. A dollar in October, 1925, would buy on the average only 43.7 per cent the amount of labor of what it would have commanded in 1914, according to a study by the National Industrial Conference Board, New York. In other words, the Board points out, while the employee's dollar, spent for general living expenses, has decreased only about 40 per cent since 1914, the employer's dollar spent for wages has declined 56.3 per cent and is worth considerably less than half of what it was in pre-war days.

Average hourly earnings in industry last October were 129 per cent greater than in 1914, and have shown greater stability for the past two years than at any time since the beginning of the war, according to the Board's analysis. The purchasing value of the employer's dollar in the labor market reached its lowest point in 1920, during the inflation period, when it dropped to 40.7 per cent of its 1914 value; it rallied to 51.5 per cent or a little more than half of its pre-war value in 1922, but has hovered at 44 per cent or less of its 1914 value ever since 1923.

These percentages, however, the study emphasizes, cover average amount of labor in terms of man-hours, and do not take into account kind and quality of work or changes in labor efficiency.

UNITED STATES CIVIL SERVICE EXAMINATION

THE United States Civil Service Commission announces the following open competitive examination:

Receipt of applications for junior engineer will close April 17. The date for assembling of competitors will be stated on the admission cards sent applicants after the close of receipt of applications.

The examination is to fill vacancies in various branches of the Government service throughout the United States.

The entrance salary in the District of Columbia is \$1,860 a year. After the probationary period required by the civil service act and rules, advancement in pay may be made without change in assignment up to \$2,400 a year. For appointment outside of Washington, D. C., the rates will be approximately the same. Promotion to higher grades may be made in accordance with the civil service rules as vacancies occur.

A separate register of eligibles will be established for each of the following optional subjects:

naval architecture and marine engineering, structural engineering (architectural), and structural engineering (bridge).

The duties of these positions are to perform such work as routine testing, drawing up plans for minor projects, performing field work, making computations, preparing maps, assisting in conduct of experimental research tests, compiling reports, and handling technical correspondence.

Competitors will be rated on general physics; pure mathematics; and practical questions on the optional subject chosen, including applied mechanics.

Full information and application blanks may be obtained from the United States Civil Service Commission, Washington, D. C., or the secretary of the board of U. S. civil-service examiners at the post office or custom house in any city.

HARVARD STARTS WORK ON STRAUS MEMORIAL DORMITORY

WORK was begun recently on the Straus Memorial Dormitory in the Harvard College yard. The new dormitory will be built a few feet back from the yard fence, between Massachusetts Hall and the new Lehman Building, and parallel to Matthews Hall. It will form with these three buildings an enclosed quadrangle, 90 feet by 200 feet, similar to those formed either side of Holden Chapel by the two small dormitories (Lionel and Mower) already completed.

Straus Hall is a gift from Jesse Isidor Straus, '93; Percy S. Straus, '97, and Herbert N. Straus, '03, of New York City, in memory of their father and mother, who lost their lives in the sinking of the Titanic.

On the first floor, entered from the court by the center door, will be the memorial common room, 30 feet by 34 feet.

The building is to be the same height as Massachusetts Hall, second oldest college hall in North America, four stories, with the fourth under the roof. Fifty-eight students will be accommodated, in suites consisting of two bedrooms, a study and private bath, except in two cases, where the suites will be for a single student. The plan of the suites and the interior finish will resemble that in the Lionel and Mower dormitories.

The treatment of the exterior will resemble that of Hollis Hall. The new dormitory will, however, be more than twice as long and considerably narrower, the dimensions being 30 feet by 175 feet.

The dormitory was designed by Coolidge, Shepley, Bulfinch & Abbott, architects. It is expected that it will be completed August 15, 1926, and be ready for occupancy in the Fall.

FOR MEN WHO BUILD WELL



IF you could look through a microscope, at a cross-section of a joint between the bricks of a Carney laid wall, you would find an interesting story. You would see a net work of tiny tendons reaching into every pore and crevice of the brick. You would find a mortar deep-rooted, and firm as an oak.

There is a reason for this dogged tenacity of Carney mortar. Carney sets slower than most others. This attribute enables Carney mortar to literally knit itself into the brick and tile, forming a bond, never to be separated.

What wonderful security such knowledge offers for the man whose aim is to build well.

"Carney cement was used throughout the new Metropolitan Building in this city designed by us and we are very well pleased with the results obtained. Most of this masonry work on this building was constructed during winter months and we are confident in our past experience from the use of Carney cement that our mortar joints are in very satisfactory condition."

Carney cement is regularly specified by our office on all jobs, and we are always pleased to see the contractors use it."

WESTON AND ELLINGTON,
H. S. ELLINGTON,
Detroit, Michigan.

*Architects—WESTON & ELLINGTON,
Detroit, Mich.
*Contractors—WALBRIDGE, ALDINGER CO.,
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PARIS PLANS UNDERGROUND GARAGES

PLANs for the construction of underground garages to reduce the street congestion in Paris are now being considered by the Municipal Council according to advices to the Department of Commerce.

VANDERBILT MANTEL GIFT TO METROPOLITAN

THE Saint-Gaudens mantelpiece and mosaic, one of the most famous art objects in the Vanderbilt mansion at West 57th Street and Fifth Avenue, New York City, has recently been given by Mrs. Vanderbilt to the Metropolitan Museum of Art.

The mantelpiece and mosaic were designed by the late August Saint-Gaudens in 1881 and built in collaboration with John Lafarge.

TO SHOW LONGFELLOW'S HOME AT PHILADELPHIA EXPOSITION

THE birthplace of Henry W. Longfellow will be an attraction of the Sesqui-Centennial Exposition, marking the 150th anniversary of American Independence in Philadelphia in 1926. The home in which the New England poet was born will be moved from its site in Portland, Me., to Philadelphia.

FIRE IN FAMOUS CHURCH IN ROME

FIRE recently threatened to destroy the thirteenth century church of Santa Maria in Portico, noted particularly for containing an image of the Madonna to which miraculous powers have been attributed. The roof of the edifice was destroyed, but the firemen managed to protect the precious treasure inside. The church, of ancient origin, was rebuilt in the year 1200 during the reign of Pope Alexander VI.

\$8,000,000 FOR BETTER HOMES

A GROUP of associations and manufacturers of building materials, acting co-operatively, will, it is reported, spend \$3,000,000 in 1926 in national newspaper and magazine advertising to forward the national movement for better building. In addition \$5,000,000 more will be spent to construct 360 demonstration model houses in twenty-eight cities for the inspection of the home-seeker. The announcement was made by delegates attending the recent convention of the American Construction Council. The model houses are to be completely furnished, landscaped and decorated.

NATIONAL CONFERENCE ON CITY PLANNING

THE eighteenth National Conference on City Planning, we learn from a preliminary program recently received, will be held at St. Petersburg, Florida, March 29 to 31 inclusive, and will conclude at West Palm Beach April 1. The program, as outlined for this conference, is an interesting one and includes papers by men prominently identified with this movement, and discussions on topics that are of the first importance in city planning in the United States.

FORESTRY CONGRESS

WE are informed that the World's Forestry Congress Committee is now making plans for a Congress to be held in Rome in May, 1926, under the auspices of the International Institute of Agriculture and the Italian Government. It is claimed that the Congress will furnish an opportunity for an exchange of views between experts in forestry questions and independent and allied industries in all parts of the world.

ROAD WINS SAFETY MEDAL

THE Harriman Memorial Medal for Safety, awarded by the American Museum of Safety to the division of a steam railroad which has been "most successful in protecting the lives and health of its employees and the public," has recently been awarded to the Western Division of the Chicago Great Western Railroad for the year 1924. There were no fatalities on the division during 1924, and only nineteen minor injuries.

CELEBRATE BIRTHDAY OF THE ELECTRIC LAMP

THE forty-sixth anniversary of the birth of the electric lamp was recently celebrated by the Radio Corporation of America and the General Electric Company.

The developments in electrical power since the invention of the electric light were sketched in a speech by Herbert Hoover, Secretary of Commerce. Mr. Hoover dwelt upon the labor and money saving machines which are now driven by electricity, the growth of central station apparatus, with its remarkable output of horse power and the low cost of electricity due to modern research.

The possibilities of electric power applied to agriculture were stressed by W. M. Jardine, Secretary of Agriculture. Mr. Jardine said that when the problems of cheap distribution and greater use of electricity on the farm were solved, agriculture would also benefit by the development of electrical energy. When that day came the farmer, he said, would be in a much more enviable position than at present and all farm activities would be transformed.

Every School Board is a BOARD of HEALTH and Its Architect a DOCTOR



"The HEALTH COUNCIL"

Because—in the building of every modern school—health, as well as mental efficiency, of many generations of school children, depend on the decisions of this small group of public spirited citizens (School Board members, Superintendent, Architect)—we refer to them here as "THE HEALTH COUNCIL."

WHEN school board, superintendent and architect first get together to discuss a new school building, the mental development and health of many generations are in their hands. Class by class, year by year, students must spend a third of their waking hours, three fourths of every year, in the rooms being planned. Will their comfort, health and mental progress be *your* source of pride in years to come?

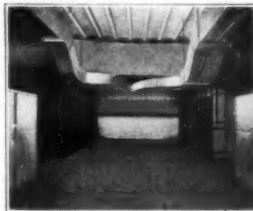
No small responsibility, this! For builders of schools are moulders of citizens. Boys and girls today must have advantages which *you* did not enjoy—to meet tomorrow's more complex problems.

Light, heat and fresh air are vastly more important than bricks and mortar, fixtures—or even teaching staff. Most important is fresh air—because fresh air reduces illness; induces alertness. In properly ventilated classrooms, students thrive, mentally and physically. Attendance records, by actual test, are better—an important point, for absentees mean financial loss to your community.

You can give *every child in every room* an uninterrupted supply of warmed fresh air,



Thanks to the far-seeing judgment of school board, superintendent and architect in installing "THE AMERICAN SYSTEM" of Heat-with-Ventilation in THE ROANOKE SENIOR HIGH SCHOOL (above) and THE ROANOKE



JUNIOR HIGH SCHOOL (below), many generations of future citizens of Roanoke, Virginia, will study in classrooms where conditions are 96% as perfect as a June day! (Central photograph shows typical firing room.



properly humidified. You can insure that to every future pupil at low first cost, at limited operating cost. THE AMERICAN SYSTEM is the answer because it heats and ventilates at the same time.

Classroom air is completely replaced every eight minutes with fresh out-door air, warmed and humidified. Repeated tests show that classrooms, "AMERICAN equipped," enjoy conditions 96% as perfect as a perfect June day.

Operation is simple. Any fuel may be burned in THE AMERICAN SYSTEM's Direct Transmission Heaters, which are made of cast iron that does not rust and is many times as durable as steel under fire.

One company of forty years' standing, through the engineers of its authorized agents, installs and guarantees THE AMERICAN SYSTEM.

When you and your associates with the health of children in *your* hands, consider *your* plans, have the facts about THE AMERICAN SYSTEM before you. Get them from the nearest representative or write us direct.

Memo to ALL Architects!

While this advertisement features schools, THE AMERICAN SYSTEM is also ideal for any building where fresh, warmed, humidified air is needed in ample quantities at reasonable costs (Schools, Theatres, Churches, Factories, Auditoriums, Public Garages, etc.) Write us for specific facts and call on our engineering department for technical data or actual help in solving your heating and ventilating problems.

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Elmira, N. Y. Atlanta, Ga.
John H. Kitchen & Co., Kansas City, Mo.
Michigan Warming & Ventilating Co.
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Los Angeles, Cal.
Lige Heating & Ventilating Co.
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Supreme Heater & Ventilating Co.
St. Louis, Mo.
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Chicago, Ill.

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COMPETITION FOR AN HISTORICAL DEVICE FOR OCTAGON HOUSE, WASHINGTON

WE are advised by the President of The American Institute of Architects that the competition for an historical device for the Octagon Building at Washington, D. C., the headquarters of The American Institute of Architects, has been decided and the prizes awarded as follows:

First prize—\$150, August Reuling, New York, N. Y.; Second prize—\$100, Harold A. Rich, Auburndale 66, Mass.; Third prize—\$50, J. T. Jacobsen, Philadelphia, Pa.; First mention, Ernst C. Bachschmid, Washington, D. C.; Second mention, W. Strudwick Arrasmith, Louisville, Ky.

PERSONAL

MRS. DONN BARBER announces that the architectural practice of her late husband, Donn Barber, has been taken over and will be continued by McKenzie, Voorhees & Gmelin, architects, 342 Madison Avenue. The work will be executed from the present office at 101 Park Avenue, New York.

RESTORATION OF OLD ST. PAUL'S IN NEW YORK

OLD St. Paul's Chapel, located on Lower Broadway, New York, and a subsidiary chapel of Trinity parish, is to be remodelled to correspond with the type of architecture prevalent at the time it was built, and so that it may reproduce as far as possible the exact appearance which it presented during the period when George Washington worshipped there. St. Paul's is the oldest church in the City of New York, and rich in tradition and historic interest. It was originally in Colonial Georgian style. The chapel was renovated in 1838, and at that time all of the beautiful glass chandeliers were removed and sent to various churches throughout the country, with the exception of the large central chandelier, which was discovered in the attic.

\$60,000,000 FROM GASOLINE TAXES IN SIX MONTHS

GASOLINE taxes collected by the various states yielded a revenue of \$60,108,734 in the first half of 1925 of which \$53,814,240 is applicable to road work, according to a report by the Bureau of Public Roads. At the beginning of the year there were 13 states which did not tax gasoline. At the present time a tax is imposed in all states except Illinois, Massachusetts, New Jersey and New York. On July 1 the tax per gallon was 5 cents in one state, 4 cents in two states, 3½ cents in one state, 3 cents in twelve states, 2½ cents in one state, 2 cents in 23 states and 1 cent in five states.

FOREST GIFT TO YALE

THE gift to Yale University, New Haven, of several hundred acres of forest land near Keene, N. H., to be used for public education in forestry was announced recently by Dean Henry S. Graves of the Yale School of Forestry. The donor is Charles Lathrop Pack of Lakewood, N. J., former President of the National Conservation Congress and now head of the American Tree Association.

The tract adjoins forest land already owned by Yale, where experiments and research in the growth and production of white pine have been carried on for years.

HOUSING PROGRESS IN SCOTLAND

THE following figures show the progress that has been made in State-aided housing schemes in Scotland to September 30, 1925:

	Completed	Under Construction
1919 Act	25,043	495
Private Subsidy Schemes	2,324	—
Slum Clearance Schemes	1,747	3,226
1923 Act	4,435	5,945
1924 Act (Local Authority Scheme)	273	2,910
	33,822	12,576

Of the total number of houses completed and under construction under the 1923 Act, 3,148 are by the local authorities, and 7,232 by private enterprise.—*The Architects' Journal*, London.

ENDOWS FELLOWSHIPS FOR TRAFFIC STUDY

A BUREAU of Street Traffic Research endowed with funds to provide two graduate fellowships has recently been created in the University of California. The funds have been given by the Studebaker Corporation of America and the course will be known as the Albert Ruskin Erskine Bureau for Street Traffic Research.

The creation of such a bureau illustrates the importance with which motor car manufacturers regard the efforts to solve the many troublesome phases of our national traffic problem.

The two fellowships will pay \$1,000 a year each to graduate engineering students of the university, to encourage traffic control as an engineering profession and to develop intensive research.

The headquarters of the bureau will be in the southern branch of the University of California at Los Angeles. It will limit its study to urban traffic difficulties and their correction. Pedestrian control, conflicts between street cars and motor cars, parking methods, speed, street design, grade separation, signaling devices, uniform regulations and allied subjects will be studied. Its reports will be available for all American cities.

The bureau will be in charge of Dr. Miller McClintock, who formerly was connected with the Government research bureau in Harvard University.

The PUBLISHERS' PAGE

IN MANY CITIES in this country, and not so long ago (three or four decades), it was the custom for those who would be abreast of fashion, to don their newest clothes and go forth to the "Easter Parade." If the day was fair, this gathering became in a sense a pageant and those who claimed to be either the best society or who were eager to be included in that exclusive group, strolled home from church, clad in the latest fashion, the cynosure of all eyes.

In this issue and at this Easter tide, we have put on a new typographical dress. We are heralding the ides of Spring with a readjustment of our usual garb and we believe (and hope our many readers will share that belief) that we are much better dressed. This is but one of the many improvements that will be effected during 1926.

The Renaissance chateau, the city house of W. K. Vanderbilt on Fifth Avenue at Fifty-second Street, New York, is a masterpiece of architecture by the late Richard Morris Hunt, and probably ranks among the best buildings of its type in this city. Little by little the Northward trend of business on Fifth Avenue has encircled this and other important city dwellings by a cordon of commercial structures. And now this stately house is being demolished, its fine interior decorations, the work of master craftsmen in this country and in Europe, are being taken away to be resold to furnish some other dwelling or to give a mistaken sense of exclusiveness to any of the many night clubs and resorts that are springing up on Manhattan Island.

The Department of Interior Architecture of April 20 will illustrate and describe much of the interior decoration of this fine house.

Following the earthquake at Santa Barbara, an article was contributed to this journal by Winsor Soule, architect, which exhaustively described the lessons taught as to the use of materials in sections subject to seismic disturbances. Santa Barbara has lost no time in setting forth on a comprehensive and well-considered plan of rebuilding. Much has already been accomplished. Just what that is will be set forth in a second article by Mr. Soule to appear in an early issue.

Following a custom extending over many years, this journal will fully report the proceedings of the convention of The American Institute of Architects to be held in Washington, D. C., May 5 to 7. A very full account of these proceedings will appear

in issue of May 20. The program tentatively outlined gives promise of interesting proceedings. Many problems of importance to the profession will be discussed.

The fire-resisting house, of such slow burning construction as practically to eliminate the fire hazard, seems near to accomplishment. An article now being prepared for presentation in an early issue, has to do with a dwelling designed by J. C. Broderick and recently erected at Tarrytown, N. Y. Constructed of steel framed interchangeable units that may be utilized in constructing houses of any design, plan or style of architecture, the outer walls are covered with a brick veneer. The article will thoroughly describe all the various phases of construction and will have a large interest as pointing to one solution of the long-studied problem of the non-burnable house.

The work of the landscape architect is becoming with each year better organized as referring to co-operation with architects. By a well-conducted propaganda, carried forward by the American Society of Landscape Architects, through its several chapters, the general public is today better informed as to just what landscape architecture really means in the development not alone of large estates but also much smaller areas. This propaganda takes interesting form in exhibitions held by the Society in different cities. Work in landscape architecture was very prominently shown at the recent exhibition of the Architectural League of New York, and as this is written there is open in this city a dignified showing of completed work by the New York Chapter of the Society. Certain notable examples from that exhibition will be illustrated in our issue of April 20.

The subject of competitions, their conduct and importance in our architectural development, is always one of interest to the profession, and will undoubtedly form one of the leading matters that will be discussed at the forthcoming convention. Charles Butler, F. A. I. A., chairman of the Committee on Competitions of the Institute, has contributed a valuable article, to be out in our issue of April 20. Mr. Butler offers many suggestions as to the conduct of competitions and the provisions which, in his judgment, should receive serious consideration in any discussion of this important and always interesting subject.



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