

ARCHITECTURE

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ARCHITECTURAL CRITICISM.

IT is a very far cry from the Clark House to the White Plains Court House (plates lxii and lxiii) and the Brooklyn Masonic Temple (plate lxi), and one which "gladdens the eye of the beholder." I never understood just how the Clark House came to be built. I think that none of the architects associated upon it believe it was his fault. Certainly, judging from the other work of both Lord & Hewlett and Kenneth Murchison, one can hardly believe them to have been the work of the same hands. The White Plains Court House and the Masonic Temple are of the same general character, adapted each to its purpose. The Court House is entirely charming, beautifully proportioned, exquisitely detailed and of exactly the proper character for a country town in Westchester County. Simple, dignified and refined it expresses everywhere the calm and quiet with which one thinks judgments should be given.

The Masonic Temple is quite the most dignified and impressive piece of architecture which has been done during the past two years, and it seems almost safe to assume that should this be shown at the Architectural League next winter it will win, and worthily win, for its designers, the gold medal of the Architectural League. I do not recall any other building which expresses so completely the high purpose and aims of a great secret society like the Masons, and it is as beautifully thought out in every particular as it is perfect in general conception. The color of the brick work is delightful, the method of using colored terra cotta in the columns, the capital, the belt courses and in the cornice is the best of modern times; one is tempted to say the best of all time. The building is, I suppose, Greek. I say this grudgingly, for it is so thoroughly modern in its handling that it seems to me really American of the highest type rather than a derivative from some ancient architecture. The treatment of the windows is remarkable to the highest degree. They interrupt not at all the simplicity and solemnity requisite to a building for this purpose and seem necessary adjuncts to the decoration of the building, instead of interruptions to the wall surface. The treatment of the pylons on the corners with the plaques between the windows is remarkable and there is no point on the entire exterior to which adverse criticism can be made. It is a wonderful piece of design and unquestionably one which will endure.

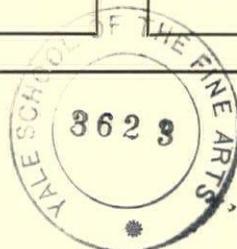
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COMPETITION

The Robert Fulton Monument Association of No. 3 Park Row, New York City, announces a competition among the Architects of the United States for the purpose of securing designs for the memorial of Robert Fulton, costing \$2,500,000,00 and to be erected in Riverside Park in the City of New York.

Architects of experience and good standing are requested to apply to the Association for forms on which to make application for the competition program and permission to have their names entered as competitors.



THE Knickerbocker Trust Company (plates lx and lix) had, at the time of the recent panic, started to erect a tall building on the corner of Broadway and Exchange Place. The treatment of the lower portion of the building conforms with the uptown building for the same concern; above that runs a very simple shaft with terra cotta piers and an interesting treatment of terra cotta above the windows on each story. The details are of the same high order of excellence with most of McKim, Mead & White's work and leave little to be desired. Personally, I do not care for the be-whiskered gentleman seated in such a careless manner upon bunches of leaves in the column capitals. I have no doubt that the Italians used figures in this way, but the Italians were not infallible, and even McKim, Mead & White sometimes slip up. The piercing of windows through the frieze is excellently done. It is by no means easy to use windows so large as these and still retain any continuous treatment. Here it has been accomplished by the interesting decoration of the panels between the windows and the framing of the windows in a similar manner with the panels. The main shaft of the building does not seem to have sufficient connection with the base. There is a strong need for some intermediate step between it and the cornice. Aside from that feature the body of the design is excellent. The use of metal to fill in between columns and pilasters is an excellent one and is sound in construction and of good effect. It is now very extensively used and is here as well handled as anywhere else. The problem before McKim, Mead & White was unquestionably difficult. To superpose a tall building on a base like that of the old Knickerbocker Trust Company building at 34th Street was nearly impossible of success and the result is probably as good as could be obtained. Yet it does seem that a sentimental attachment to uniformity between the two buildings should have given place to a view of the problem as one distinct from the old one and be treated separately.

THE modern method of housing children's institutions has done away with dormitories as far as possible and has placed the inmates in individual cottages where twelve or fifteen of them may be looked after and taken care of by a single matron or a single teacher. The boys who have been turned out in the past by orphan asylums and protectories have added little to the benefit and usefulness of the community, but under the new system, which is practically that of the large private schools, it is hoped that the morale of the institutions will be greatly increased. The Jews have been always foremost in the care of those of their race whose maintenance has devolved upon the community, and this Jewish Protectory (plates lvii and lviii) is an excellent illustration, not only of their enterprise in leading rather than following new methods, but also in the munificence of their gifts. The same cleverness which they display in business transactions they show in the selection of their architects, and in choosing these two young men for a work of this magnitude their foresight was well displayed. The buildings are simple, quiet, and excellent in character, and there is no question as to the purpose of each. The cottages are thoroughly domestic, lacking all the coldness and hardness which we have come to associate with institutions. The administration building and the dining hall are such as an American college could be proud of, the dining hall especially being a delightful example of the characteristic English collegiate Gothic of the present time. The admin-

istration building is probably not as good as the dining hall; the motive is much more ordinary and the details not as well thought out; but, in spite of these objections, it is upon the whole excellent in mass and good both in color and in fenestration. To return to the dining hall—the combination of materials with brick and limestone for the one story portion and cement for the higher part, is a very delightful one, while the semi-classic limestone entrance of thoroughly English character serves as an excellent connecting link between the two materials. The whole scheme is one to which, as is not often the case, the heartiest praise can be given, not only to the architects, but also to the man, or group of men, whose broad-minded and clear-sighted policy has made it possible.

OF much the same character as the administration building of the Jewish Protectory is this little office building (plate lvi) to house the offices of a factory. While the building itself will not rank among the great achievements of American architecture, its author cannot be too highly commended for giving so much care to the design of a structure for purely commercial purposes. Like the trustees of the Jewish Protectory these owners deserve the thanks of the public for erecting a building which is not alone a shelter, but an ornament. It is one of the most encouraging features of the present art movement in the United States that in all classes of work owners are thinking more and more of beauty and appearance without too much stress upon the investment side. As a matter of fact, most corporations and commercial establishments, which have had the courage to spend money along purely artistic lines, have found themselves amply repaid in advertising for what the architecture has cost them by the greater attention paid to their enterprise. Instances of this sort are common. Often when the building does not act in any sense as an advertisement, as is the case in the big warehouse in Jersey City, of which Jarvis Hunt was the architect, better appearing buildings produce greater efficiency in the working staff, greater contentment with their positions and so indirectly pay for themselves. I have no doubt that the owners of this building will find themselves well repaid for their investment in an exterior which is attractive and delightful. To criticize the building a little in detail: the combination of the white and red is somewhat spotty, and both the use of a cornice upon such a small portion of the building and its treatment seem inadvisable, for it neither harmonizes with the style nor does it seem necessary in its present position. The treatment of the window openings is not of the happiest, nor is the method of coigning their jambs exactly what is needed. In spite of these minor defects the building, as a whole, is excellent, of the proper character for an office building and, in the main, very well handled.

AS soon as Mr. Snyder took charge of the school buildings of New York City and was so successful in his adaptation of English Gothic to the tremendous window space requisite, architects all over the United States have been using a similar style for their school buildings. Sometimes the results are of a very high quality and at others they are by no means so successful, but even then they are interesting as attempts toward a final solution of this most difficult problem. The White Plains High School (plates lxiv and lxv) will hardly rank among the best of the public schools on the merits of its exterior. It is evidently the work of a man unfamiliar with the Gothic

style and of a temperament little in harmony with its requirements. Some of the features are excellent and others downright bad. The main trouble is in the scale. An architect accustomed to working in Classic work finds it almost impossible to adjust himself to the littleness of the scale in the Gothic style. Such has been here the case, and the whole building shows its ill effect. The tremendous size of the string course at the base of the parapet is evidently due to recollection of the Classic cornice, and is not only far and away too big for the rest of the building, but the ornament is ill-chosen and badly placed. The use of gargoyles, alternating with bosses, breaks up the clean, slim lines necessary to good Gothic work, in the most unpleasant manner. The coping, while itself well detailed, is entirely too much broken up and thereby renders the general silhouette of the building awkward and ineffective. The ornament is improperly placed and unsuited to its position. The hood mold is brought down too far over the windows and the windows themselves are badly spaced and ill-shaped. The entrance door, which probably looked very well on the elevation, because on the elevation the base of the arch showed at its proper point, here is dwarfed, because the back of the entrance way starts from the top of the steps and makes one feel as if one would have to duck to get underneath it. The whole effect of the building is restless and disturbing in the extreme. Nevertheless, there are certain details of merit and which exhibit the hand of the artist that Mr. Pelton really is, in spite of the most unhappy result of his effort in a building, the character of which is utterly foreign to his methods.

THE JEWISH PROTECTORY AND AID SOCIETY BUILDINGS, HAWTHORNE, N. Y.

THE Jewish Protectors and Aid Society were fortunate in procuring so suitable a site for their buildings as the one at Hawthorne, N. Y. The land consists of a level plateau five hundred feet above the sea, with meadows, orchards and woodland sloping toward a beautiful valley at the east. The contour of the land makes it peculiarly suitable for an institution of many separate buildings such as the Protectors is. The associated architects are Harry Allan Jacobs and Max G. Heidelberg.

The Institution is a home for delinquent boys. It is stated in a report of the Institution: "The boys who are sent to the Protectors are not as a rule criminals, but have fallen into delinquency, because of the depravity of crowded and neglected homes where decency of life and thought is an impossibility, because of the evils of the street where most of their waking hours are spent, and because of neglect of proper religious training." The Institution is essentially a home for the boys, where they lead the healthy, normal life of a boy in a country village. They live in family groups in separate cottages, under the care of a house father and mother, attend school, work on the farm, receive training in technical work and have their share in the usual athletic sports of boys.

The group of buildings follows the scheme of a small model village, with its public buildings as a central group, and its dwelling houses conveniently located in relationship to this group. The contour of the land, with its long, level plateau, lead to the obvious major axis with houses on either side, and minor axis terminated by the schoolhouse. The group is approached on the minor axis by a double road which leads directly to the village square surrounded by the

schoolhouse, dining hall building and at a future time the technical shops.

A modified English domestic style has been adopted in the design of the buildings, because it was felt that it was peculiarly adaptable to the domestic "intimate" character which it was felt the buildings should have. The so-called "cottage



TYPICAL COTTAGE, JEWISH PROTECTORY.

system" was used, because a broad-minded Board of Directors appreciated that it was only by approximating as nearly as possible the conditions of home and family life, could they achieve the object for which the Institution was founded. The cottages are identical in plan, but some variety has been achieved by the use of different materials for the exteriors, some being all of stucco, some of brick, some having half-timber work, and in others the first story is of rubble stone.

Each cottage houses thirty boys, divided into two dormitories. Adjoining each dormitory is a locker room and toilet. The first floor contains a large living room, two bedrooms and bath for the house father and mother, and a sewing room. In the basement is a large washroom, a feature of which is a shower bath in which fifteen boys can be bathed at once. The remainder of the basement is taken up by the playroom and boiler room, each cottage being heated by an independent hot water heating plant.

The boys do not dine in the cottages, but in the main dining hall building. The dining hall is divided into alcoves,

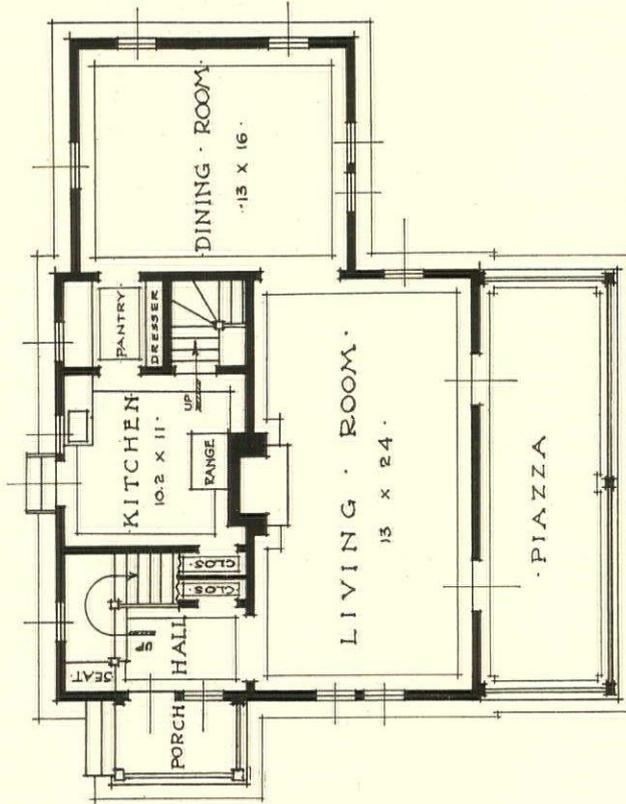
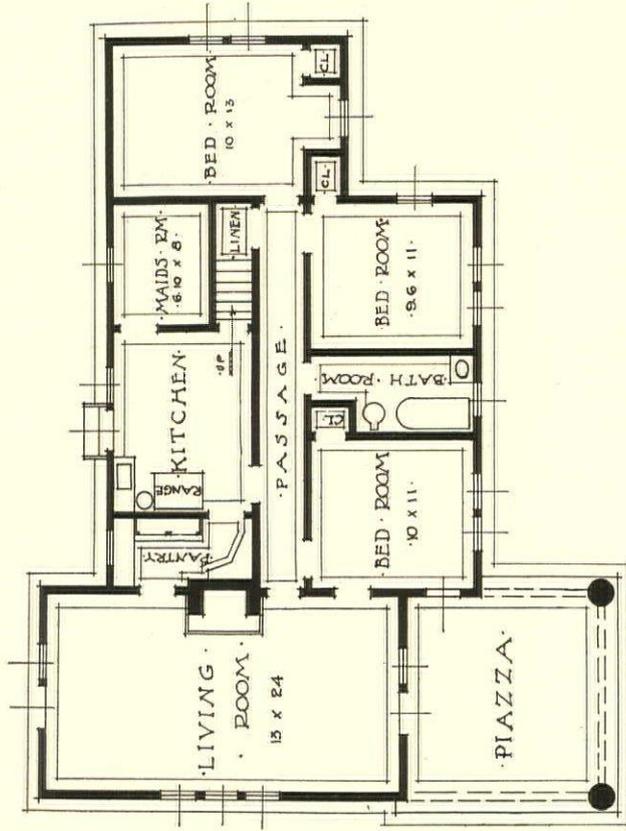
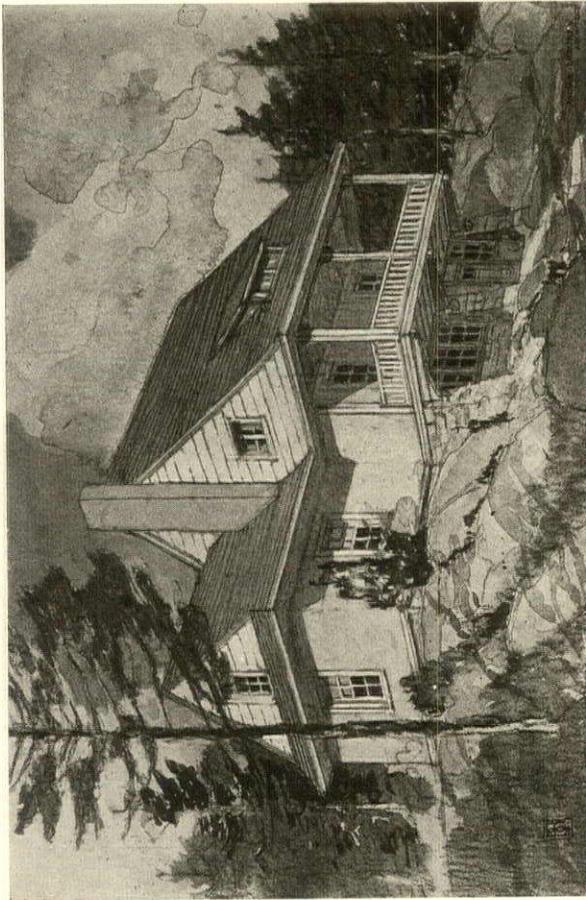
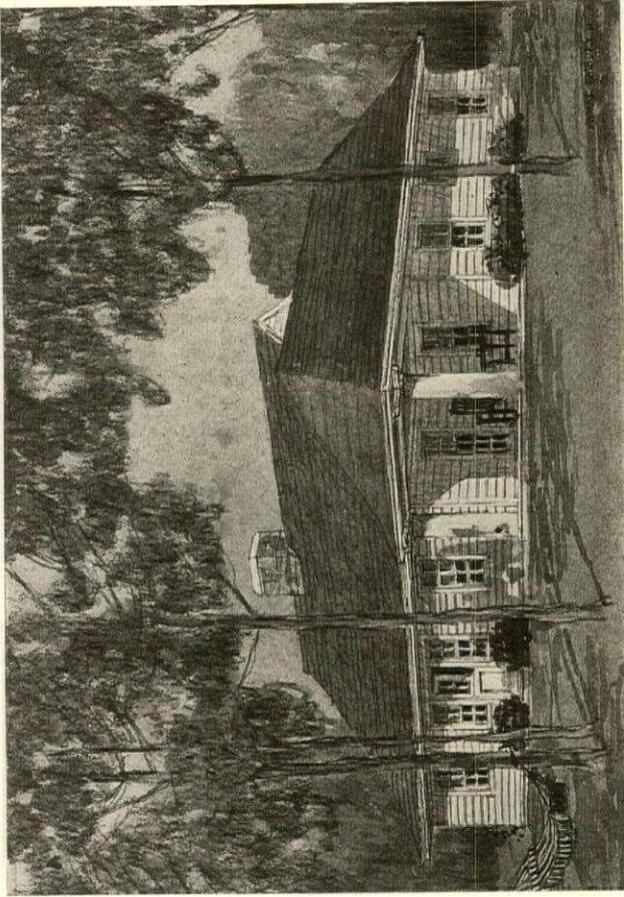


SUPERINTENDENT'S RESIDENCE, JEWISH PROTECTORY.

each house having its own alcove, the idea of each family dining separately being carried out in this way. The kitchen, laundry, bakery, storage and refrigerator rooms are in this building.

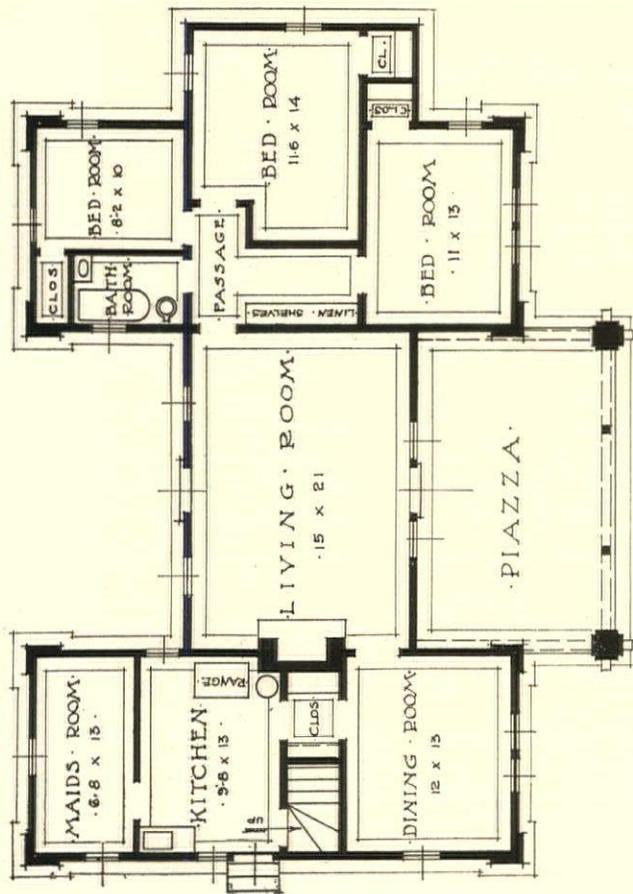
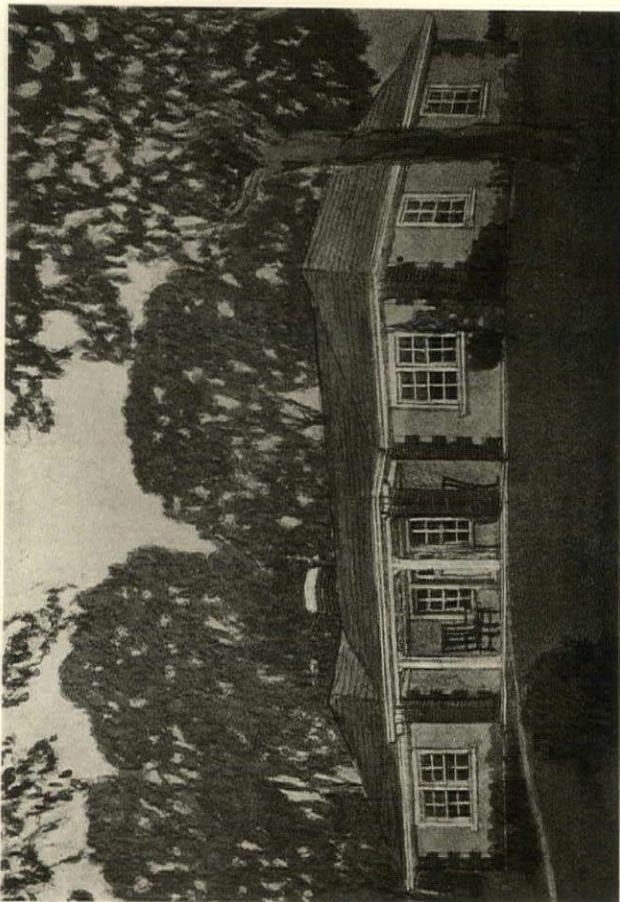
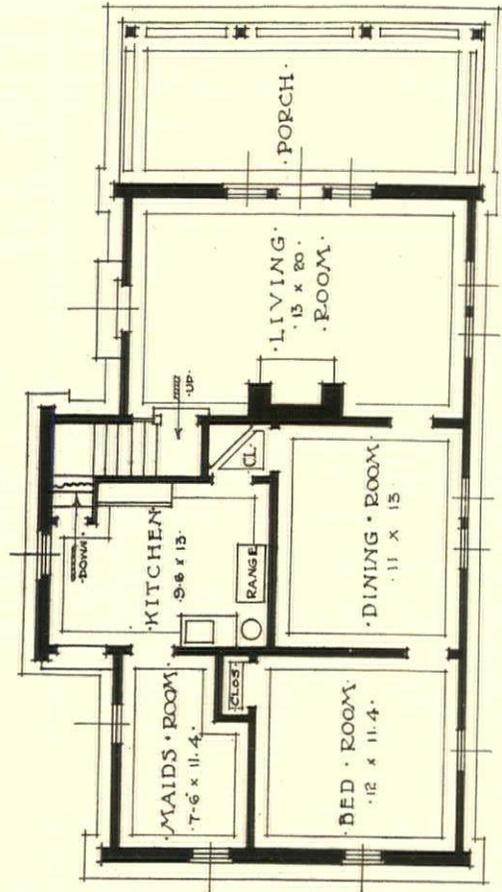
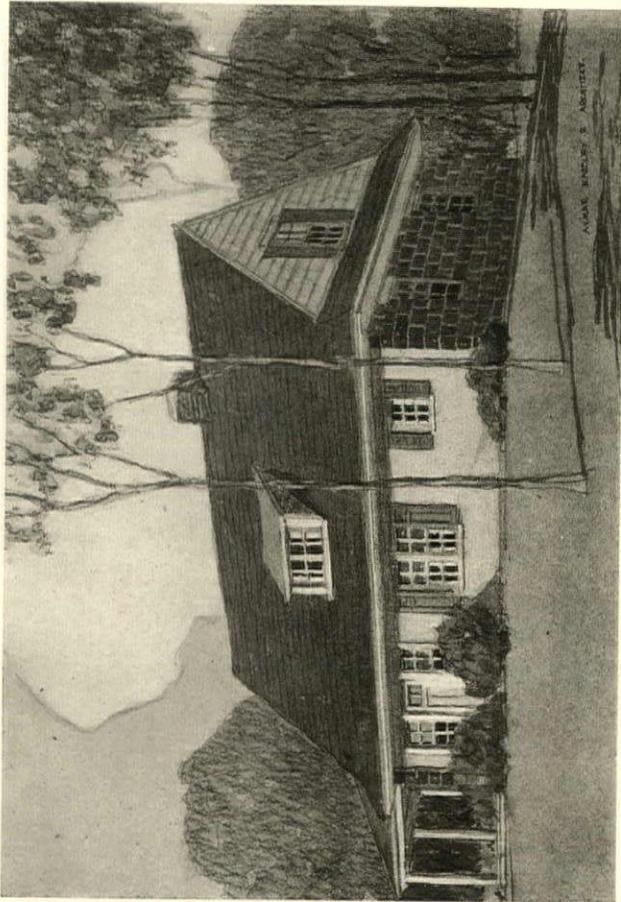
The schoolhouse and administration building contain, in addition to the schoolrooms and executive offices, a large

(Continued page 107)



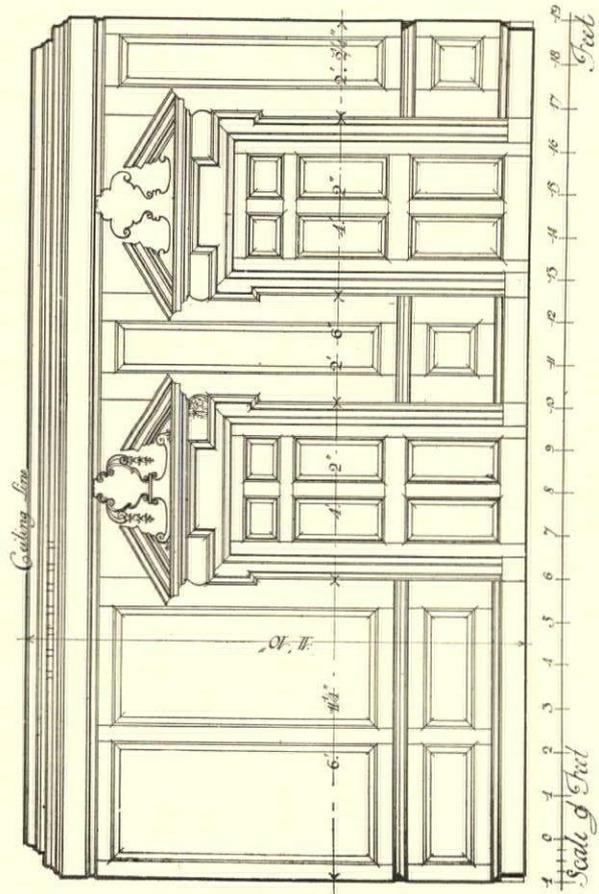
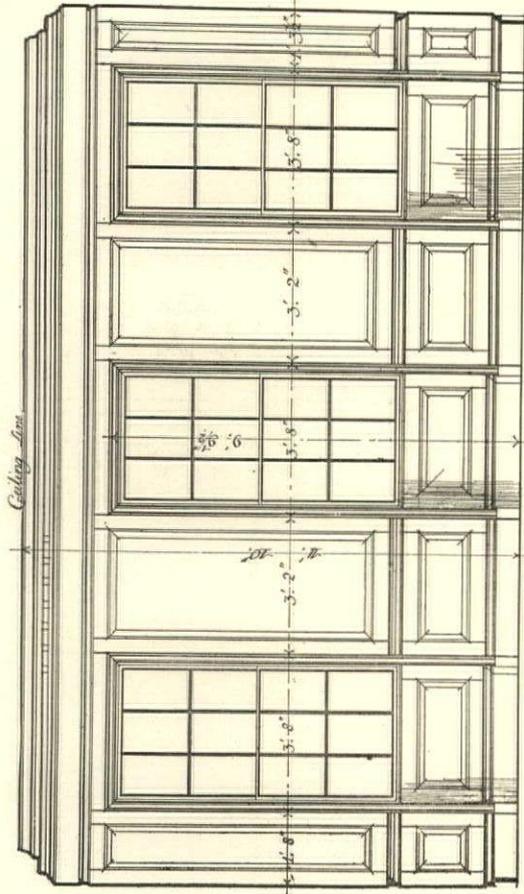
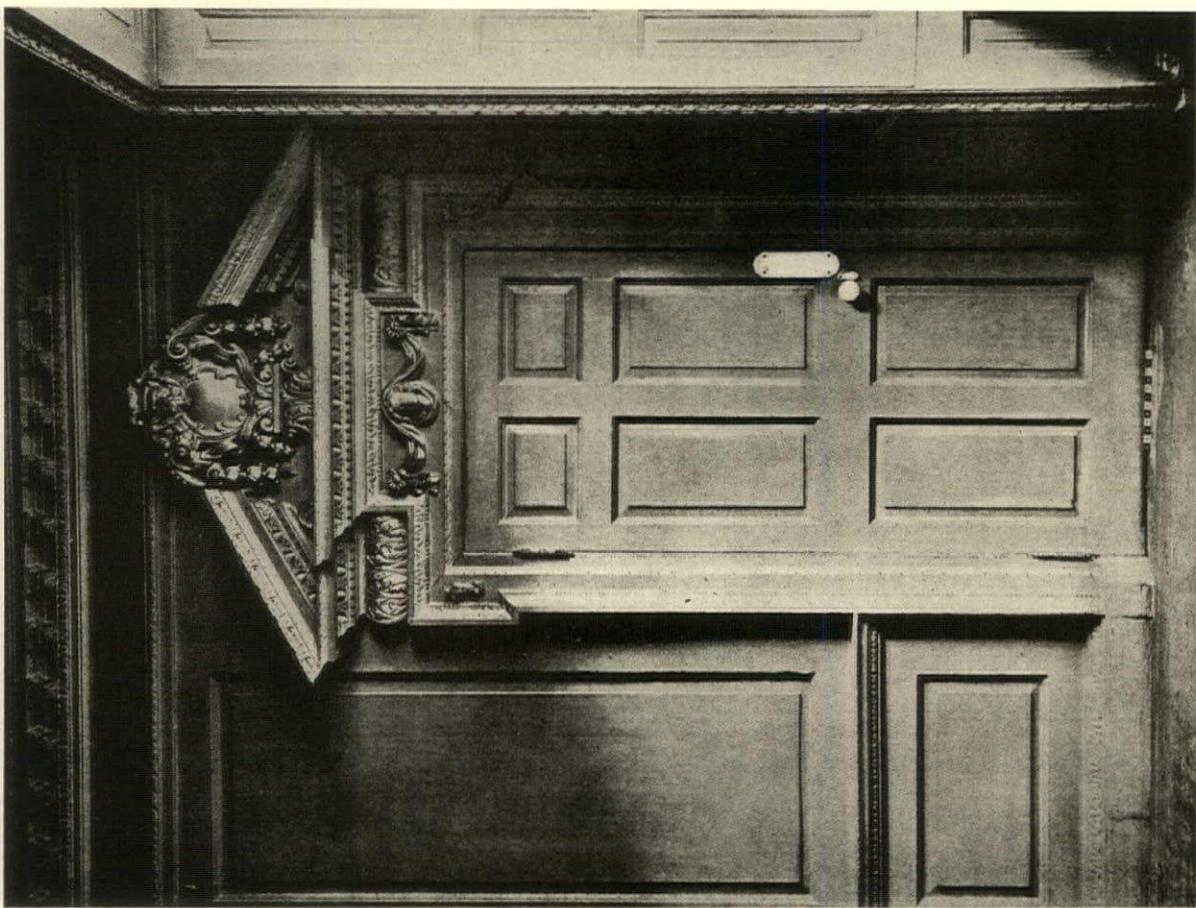
Aymar Embury II, Architect.

BUNGALOWS AND PLANS, BELLE TERRE, LONG ISLAND.



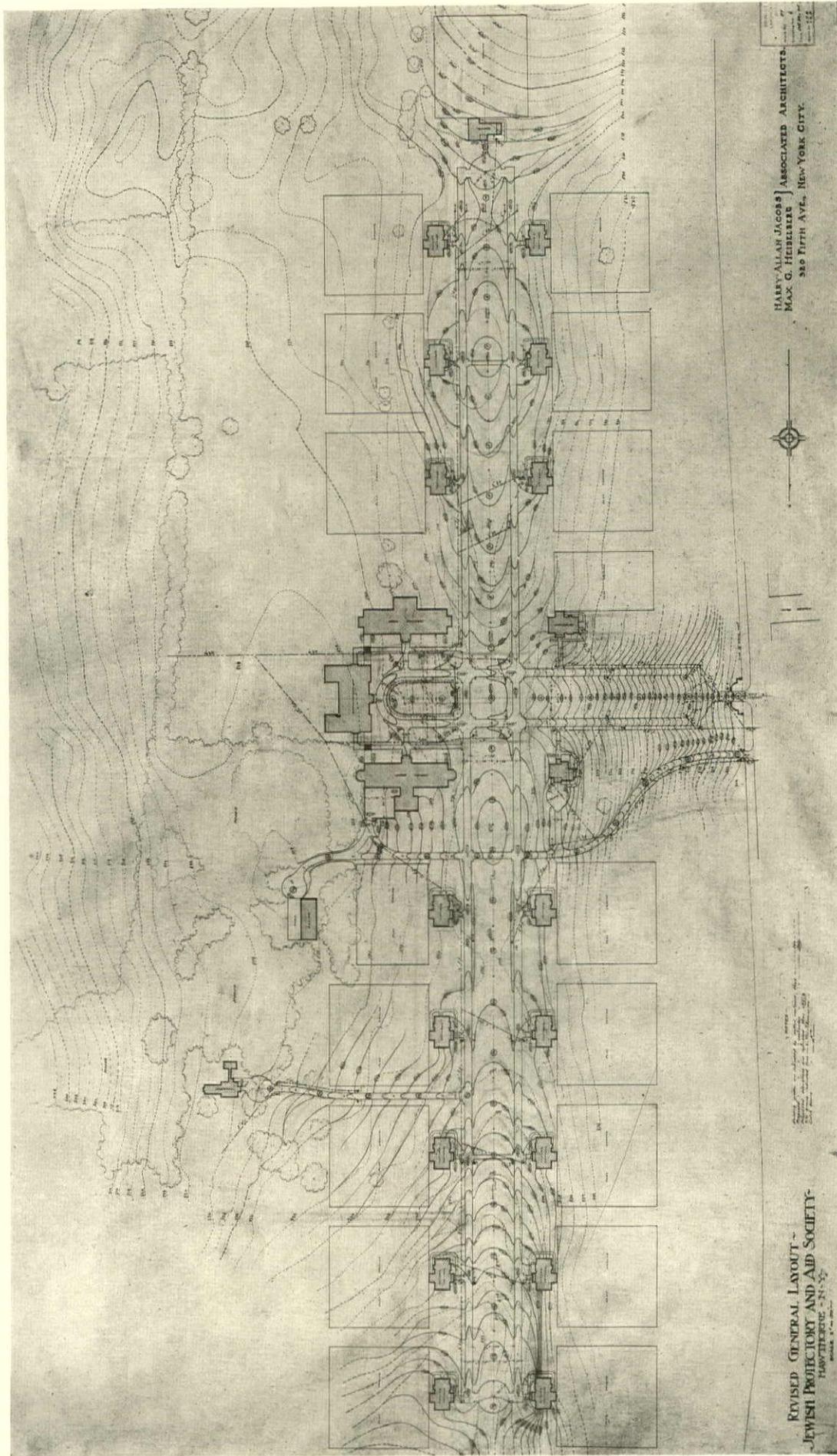
Aymar Embury II, Architect.

BUNGALOWS AND PLANS, BELLE TERRE, LONG ISLAND.



Measured and drawn by J. M. W. Halley and H. A. McQueen.

DOORWAY AND DETAIL OF DINING ROOM, 26 HATTON GARDEN, LONDON.



GROUND PLAN, JEWISH PROTECTORY AND AID SOCIETY, HAWTHORNE, N. Y.

Harry Allan Jacobs and Max G. Heidelberg, Asso. Architects.



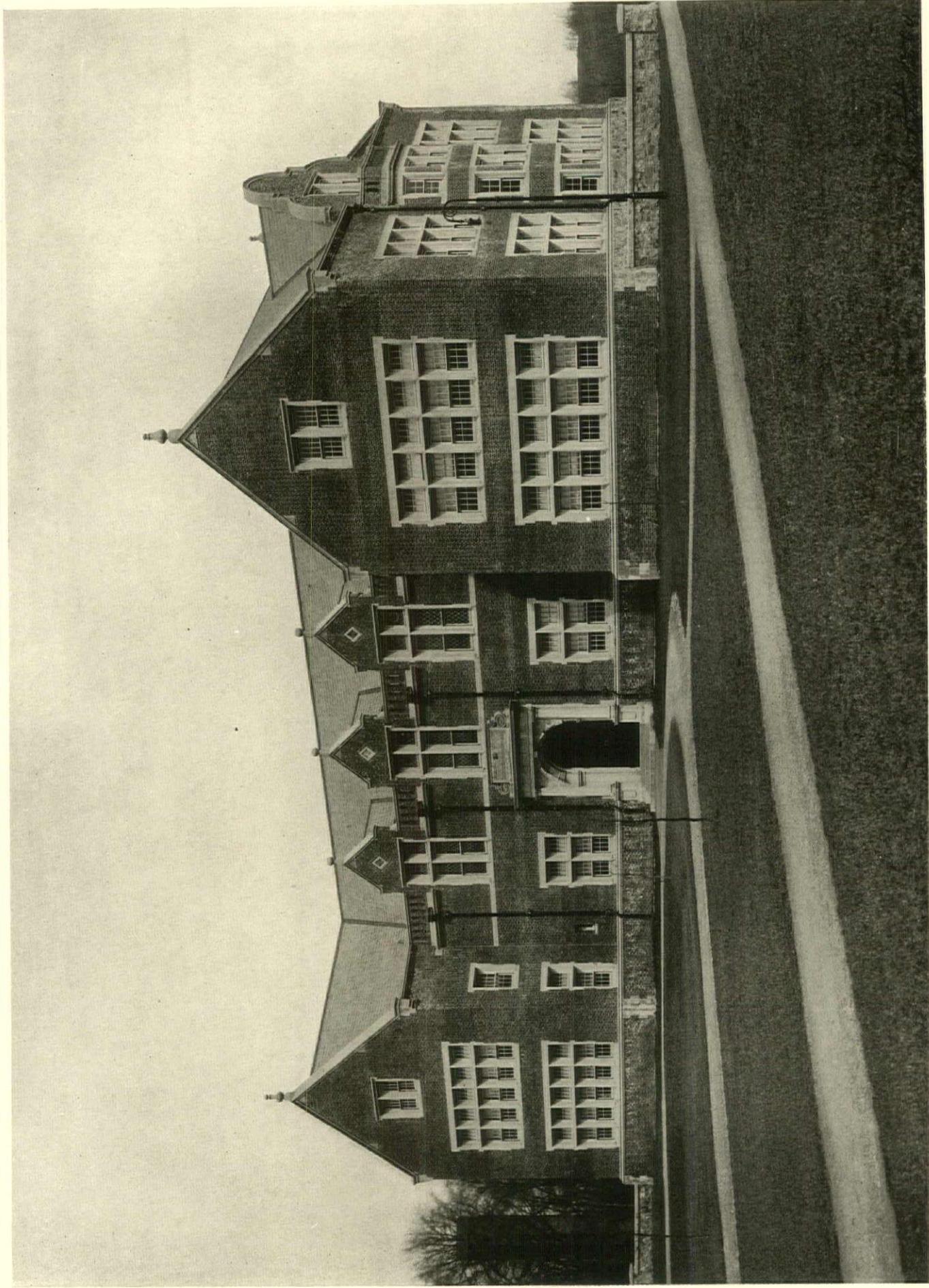


OFFICES, WILL & BAUMER CO., SYRACUSE, N. Y

Asbestos "Century" Shingles

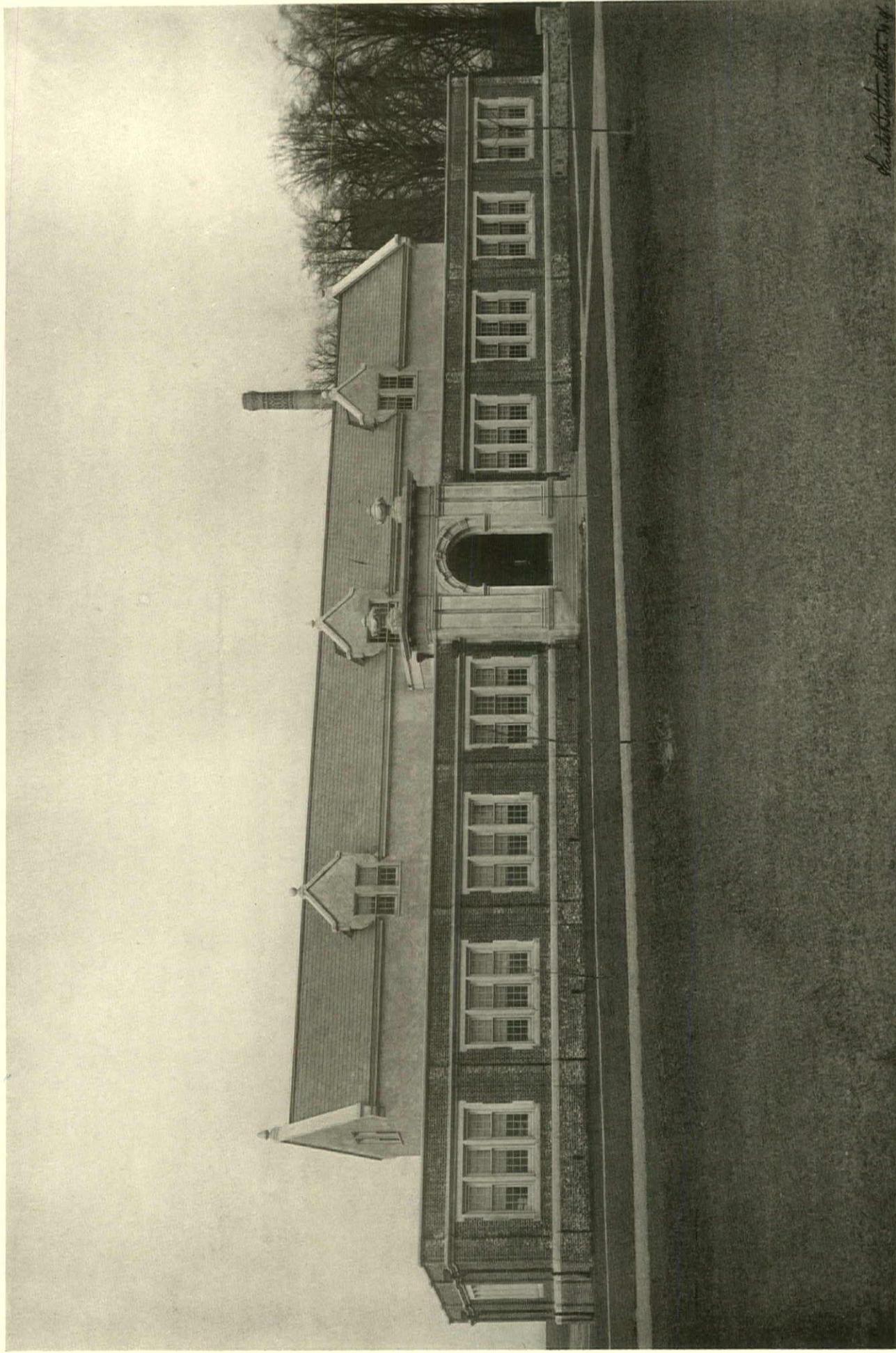
MERRITT C. CONWAY, ARCHITECT





ADMINISTRATION BUILDING AND SCHOOL, JEWISH PROTECTORY AND AID SOCIETY, HAWTHORNE, N. Y.
HARRY ALLAN JACOBS AND MAX G. HEIDELBERG, ASSO. ARCHITECTS.
American Radiators. Yale & Towne Hardware. Wurts Bros. Photo.





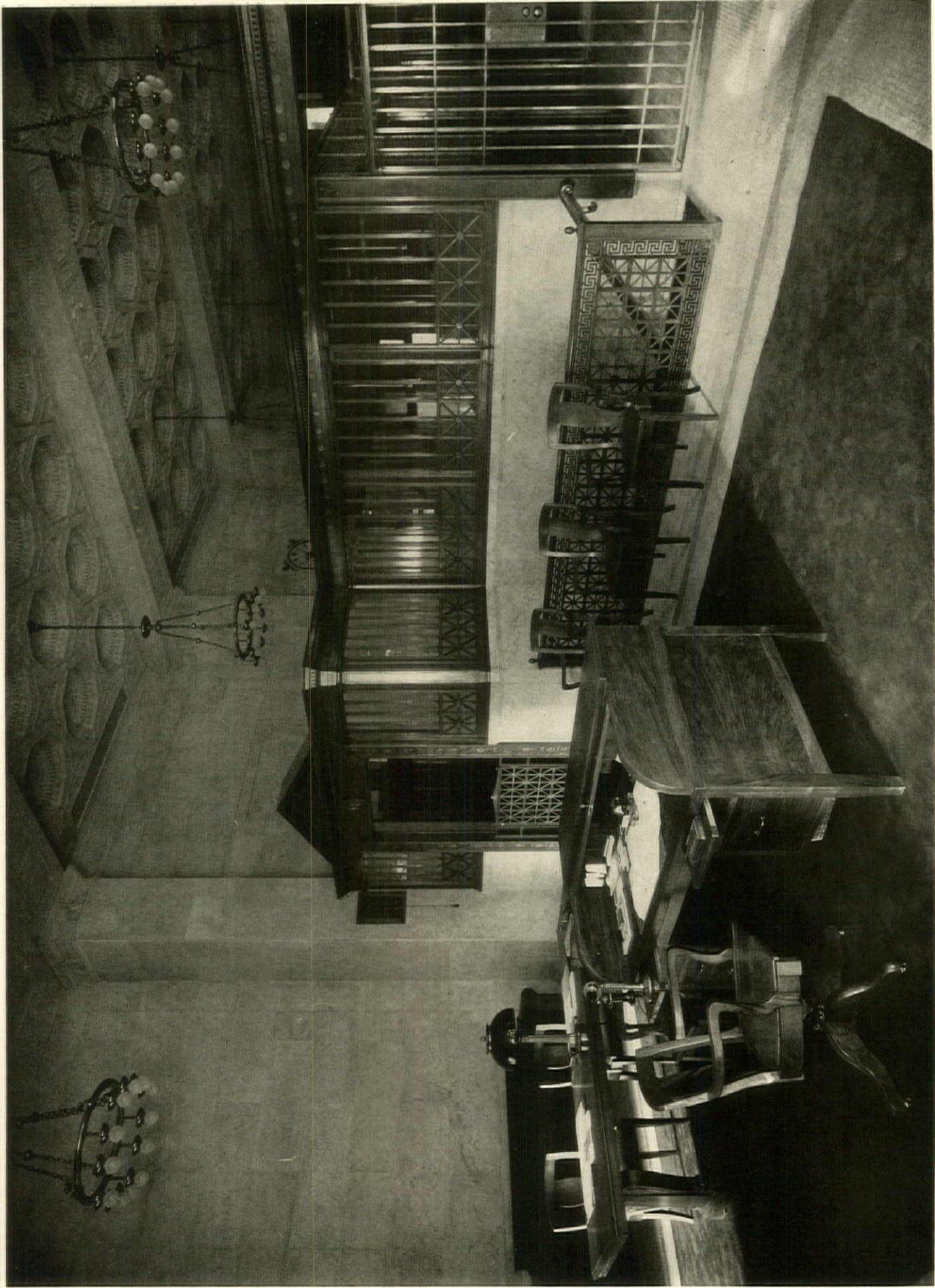
DINING HALL, JEWISH PROTECTORY AND AID SOCIETY, HAWTHORNE, N. Y.
American Radiators.

Yale & Towne Hardware.

HARRY ALLAN JACOBS AND MAX G. HEIDELBERG, ASSO. ARCHITECTS.
Wurts Bros. Photo.

Wurts Bros. Photo





OFFICERS' ROOM, KNICKERBOCKER TRUST CO., 60 BROADWAY, NEW YORK.

MCKIM, MEAD & WHITE, ARCHITECTS. Wurts Bros. Photo.



KNICKERBOCKER TRUST CO., 60 BROADWAY, NEW YORK
American Radiators,

Atlantic Terra Cotta.

MCKIM, MEAD & WHITE, ARCHITECTS.

Wurts Bros. Photo.
Otis Elevators.



MASONIC TEMPLE, BROOKLYN. LORD & HEWLETT, ARCHITECTS. Whitney-Steen Co., Builders, 135 Broadway, New York. Wurts Bros., Photo.
American Radiators. Atlantic Terra Cottá. Otis Elevators.

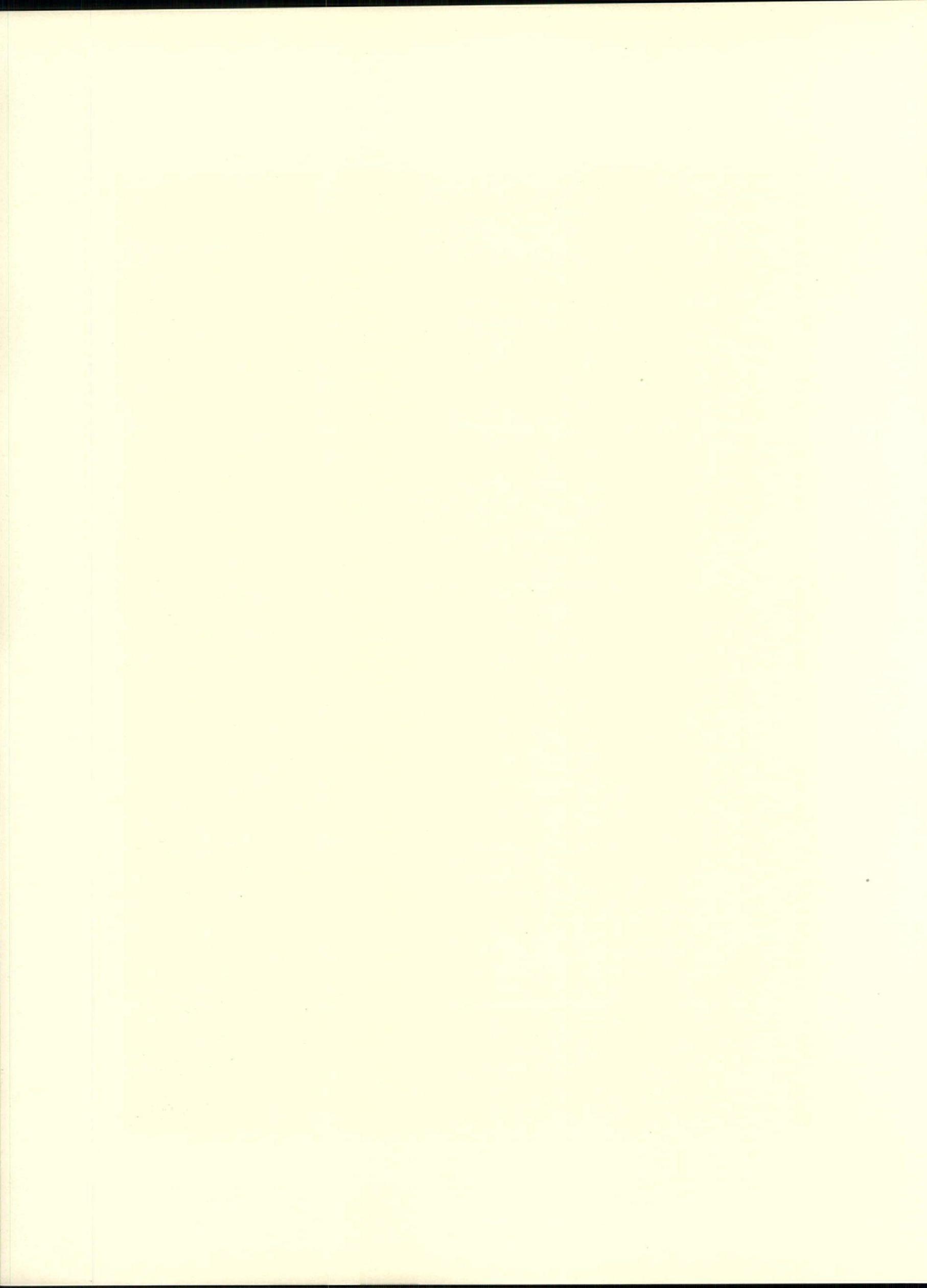




WESTCHESTER COUNTY COURT HOUSE, WHITE PLAINS, N. Y.

Yale & Towne Hardware.

LORD & HEWLETT, ARCHITECTS. John V. Schaefer, Jr., & Co., Builders. Wurts Bros. Photo.





SUPERVISOR'S ROOM, WESTCHESTER COUNTY COURT HOUSE, WHITE PLAINS, N. Y.

LORD & HEWLETT, ARCHITECTS. Wurts Bros. Photo.





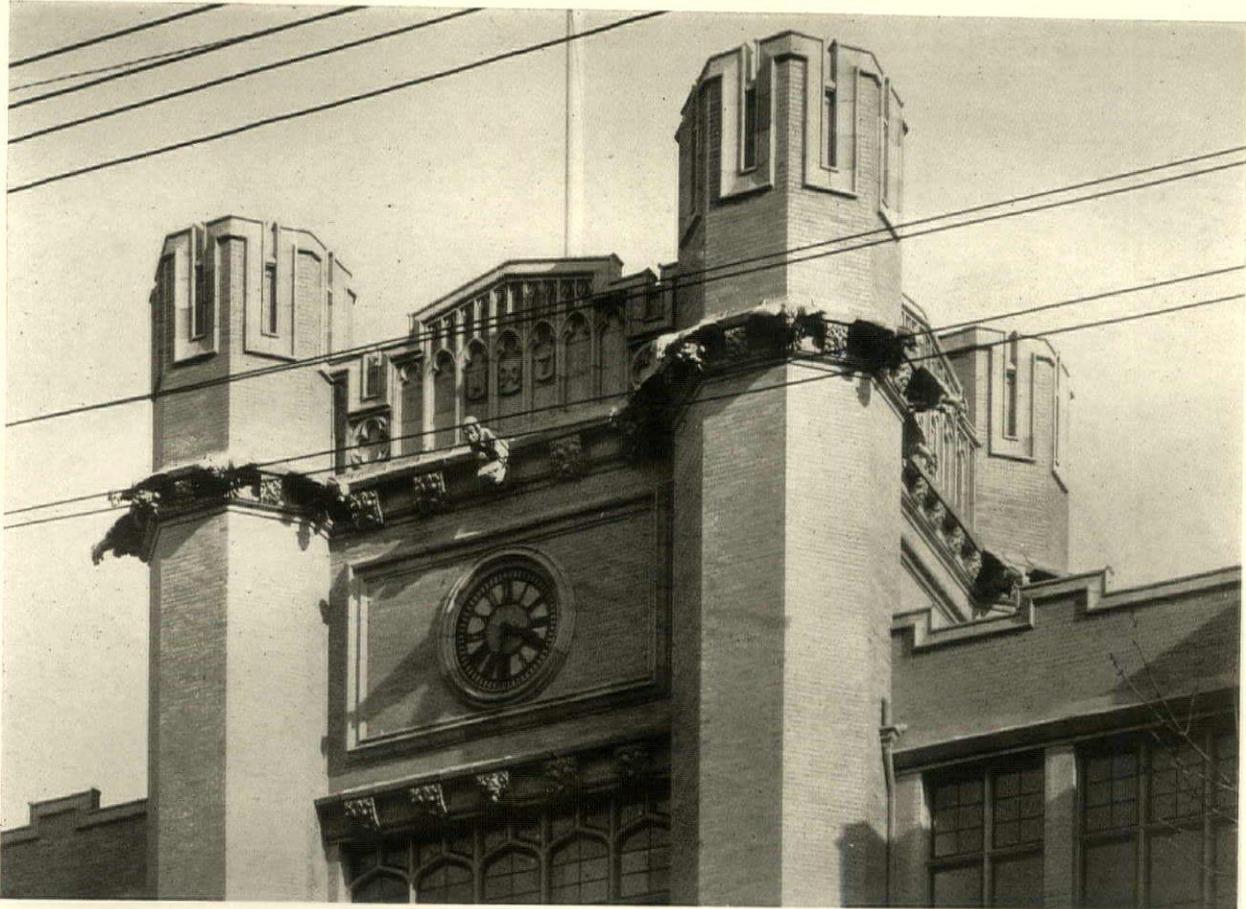
HIGH SCHOOL, WHITE PLAINS, N. Y. (See Plans page 105).

American Radiators.

Yale & Towne Hardware.

H. C. PELTON, ARCHITECT. Wurts Bros. Photo.

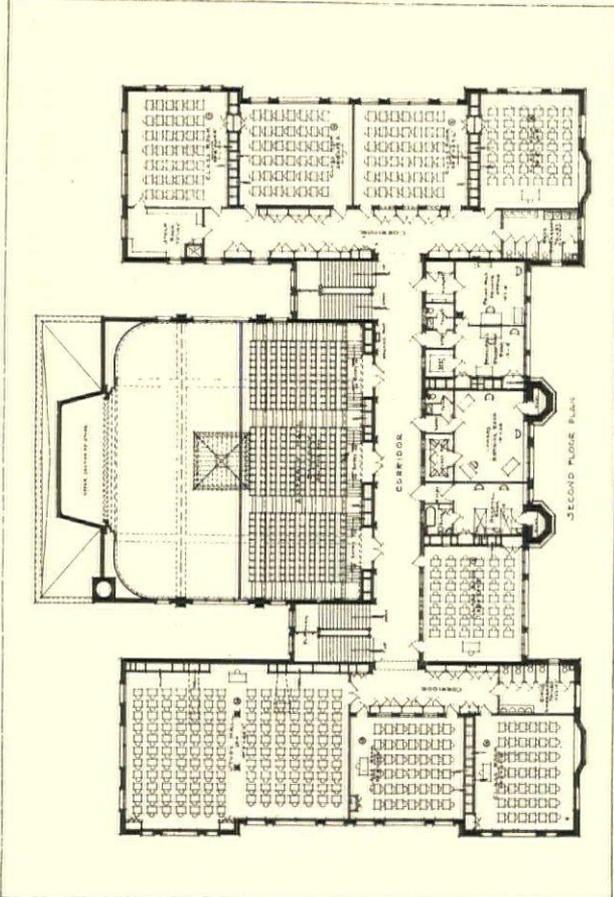
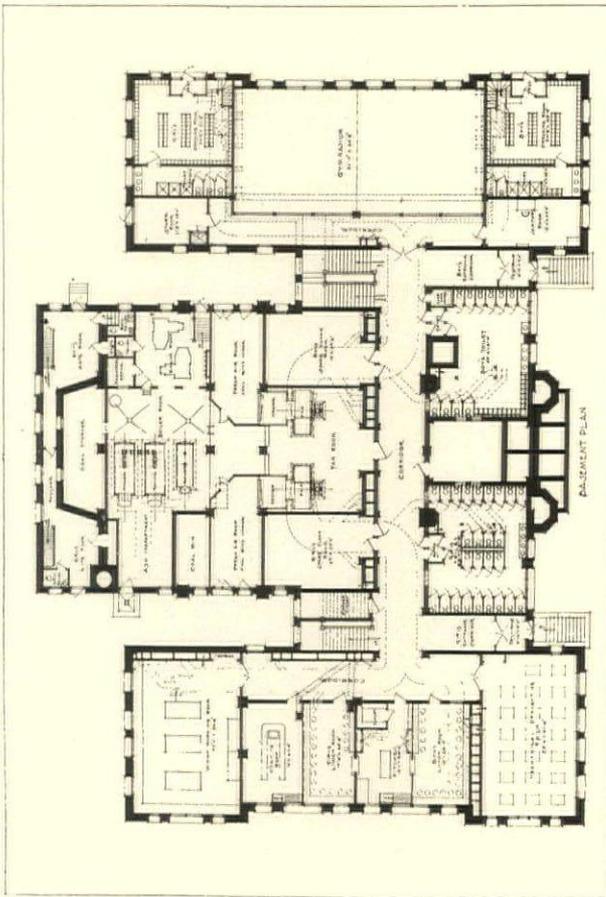
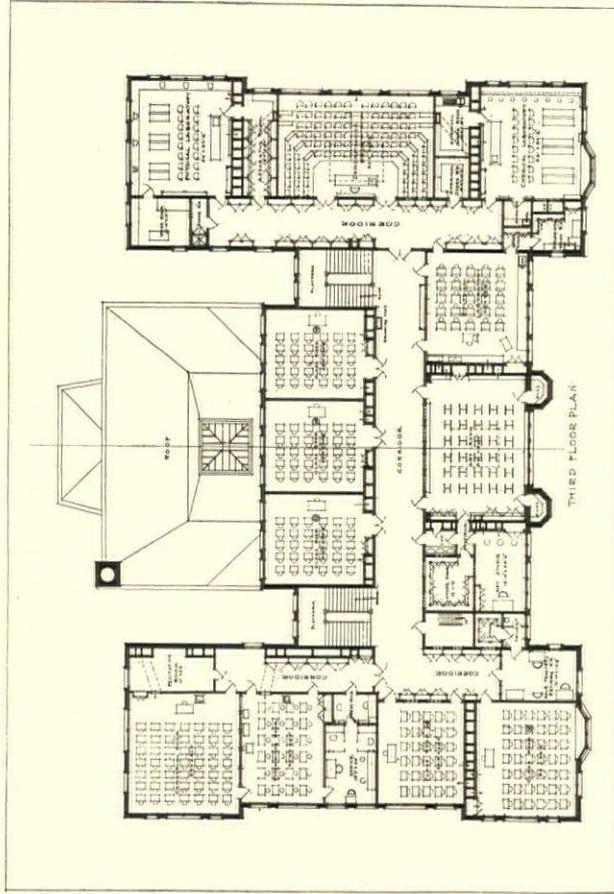
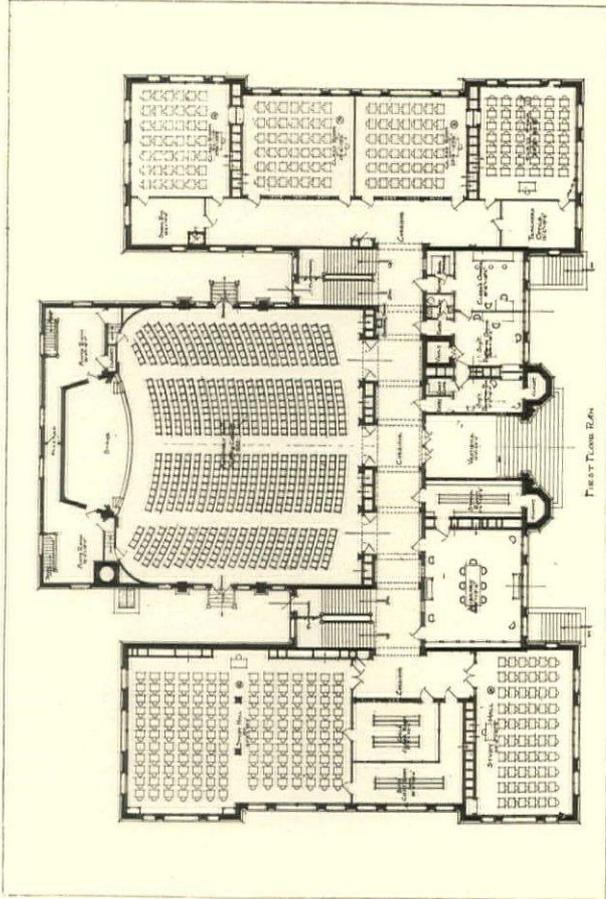




DETAILS, HIGH SCHOOL, WHITE PLAINS, N. Y.

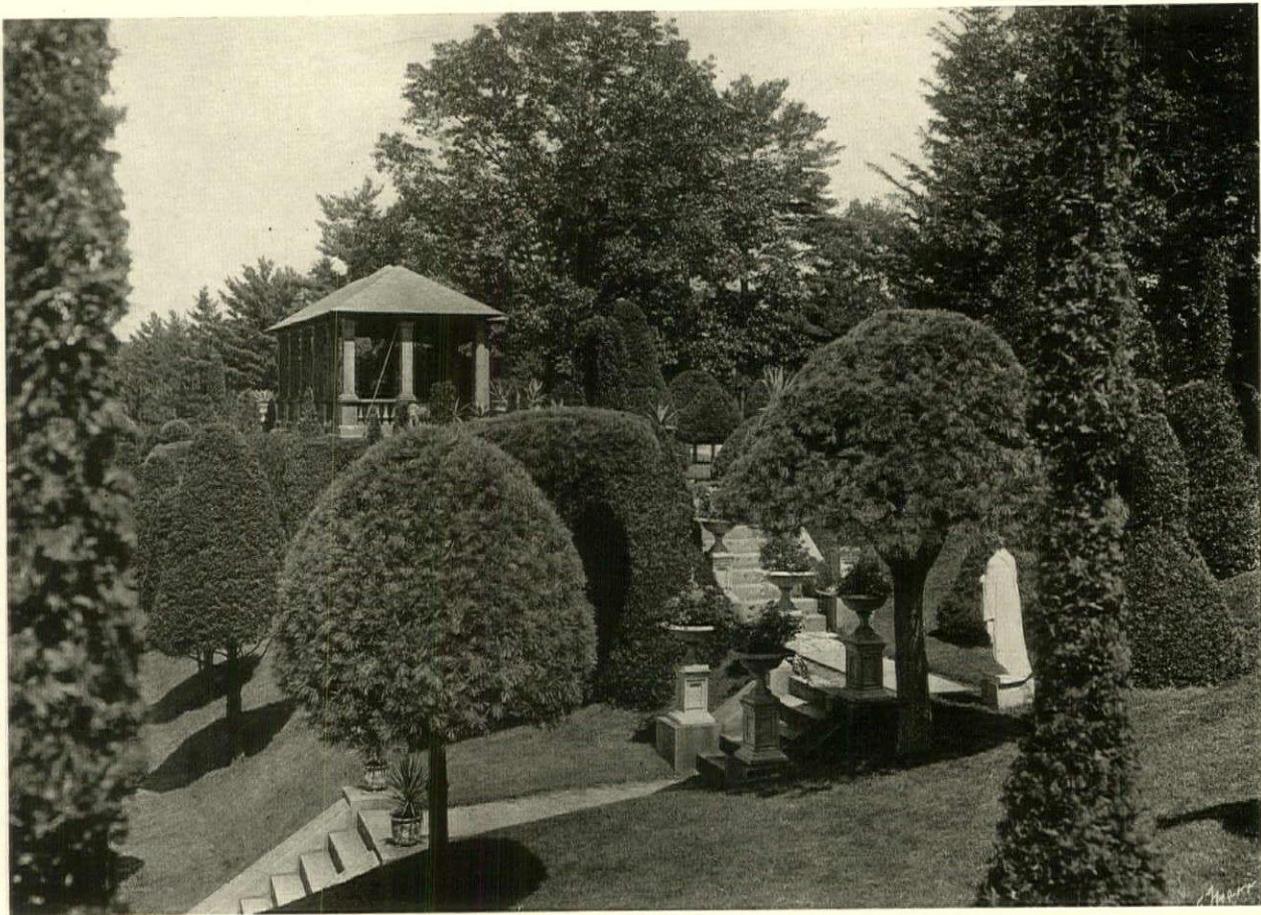
H. C. PELTON, ARCHITECT.





H. C. Pelton, Architect.

PLANS, HIGH SCHOOL, WHITE PLAINS, N. Y.



THE HUNNEWELL GARDEN, WELLESLEY, MASS

T. E. Marr, Photo.

(Continued from page 99)

room in the basement, which is used as a drill hall, and an assembly room and synagogue, on the third floor.

A small hospital, containing about twelve beds, provides for those who are ill and also serves as the headquarters for the inspecting physician.

The superintendent's residence is located at about the center of the group of buildings, so that he may have a convenient survey over the entire institution.

A central power house contains the heating plant for the three main buildings, the electric generating plant, the ice plant, fire and deep well pumps, and engineer's quarters.

A PLEA FOR TRUE DEMOCRACY IN THE DOMESTIC ARCHITECTURE OF AMERICA.

WE Americans flatter ourselves that in domestic architecture, at least, we lead the world; that we have said the last word that has been said as to the comforts and equipments of home. If perfection of plumbing and plenty of heat meant home, or if ingenuity of arrangement meant architecture, this would be so. But we have very little real domestic architecture that is worth while—real in the sense of being an expression of the life of the people, more than a mere shell for their bodily comfort, says William L. Price in the *Craftsman*.

What proportion of the people of the United States live in their own homes? We have a trite expression that "Fools build houses for wise men to live in." The facts are rather the reverse. Wise men build houses and fools live in them, for the builders, at least, had the fun of building, and they, as builders, do not live in the cast-off misfits of other men. Nearly all of our people live either in houses built to sell, without individuality or other relation to the inhabitants than selection of the least unfit by them; or they live in houses designed by architects who did not and could not know them and their life, and who in most part were more interested in their art than in the object of their art.

To really produce domestic architecture, three elements are essential: First, an intelligent demand on the part of home builders for houses that shall meet their individual needs, in accommodations, in convenience, in embellishments and as an expression of and interpretation of their real life and interests; second, architects who have the desire and are able to interpret these needs, and also to explain to the craftsmen how they can be brought into being; and third, craftsmen who can make solid the dreams of the architects and add to the building those indefinable touches of real craftsmanship that are essential to all vital architecture and that can be neither drawn nor specified, but must grow out of the work itself.

What is domestic architecture? Not pictures of houses, but houses. Not transplanted and unrelated diagrams, but stone and brick, wood, iron and glass, built up into an expressive envelope for human desires and sentiments.

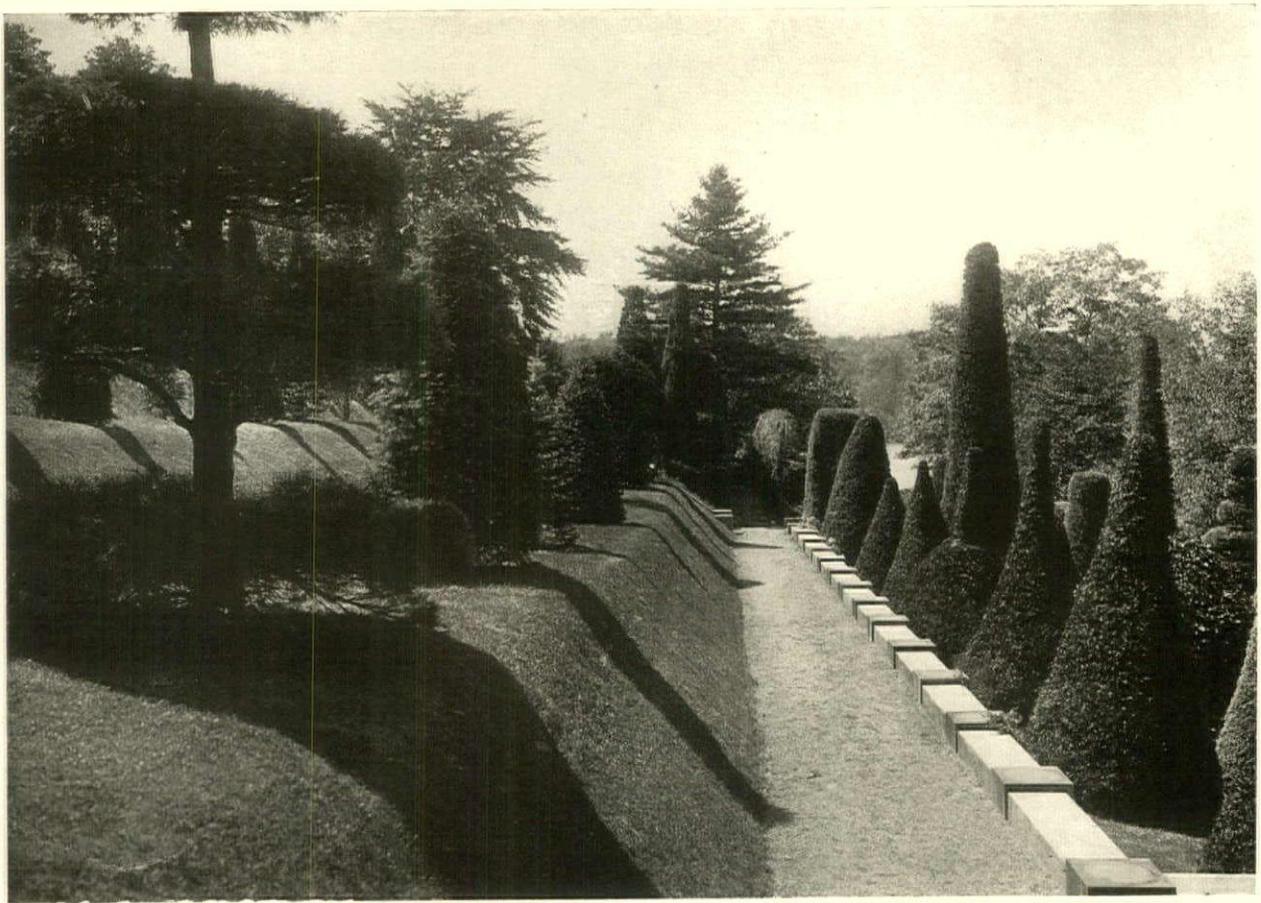
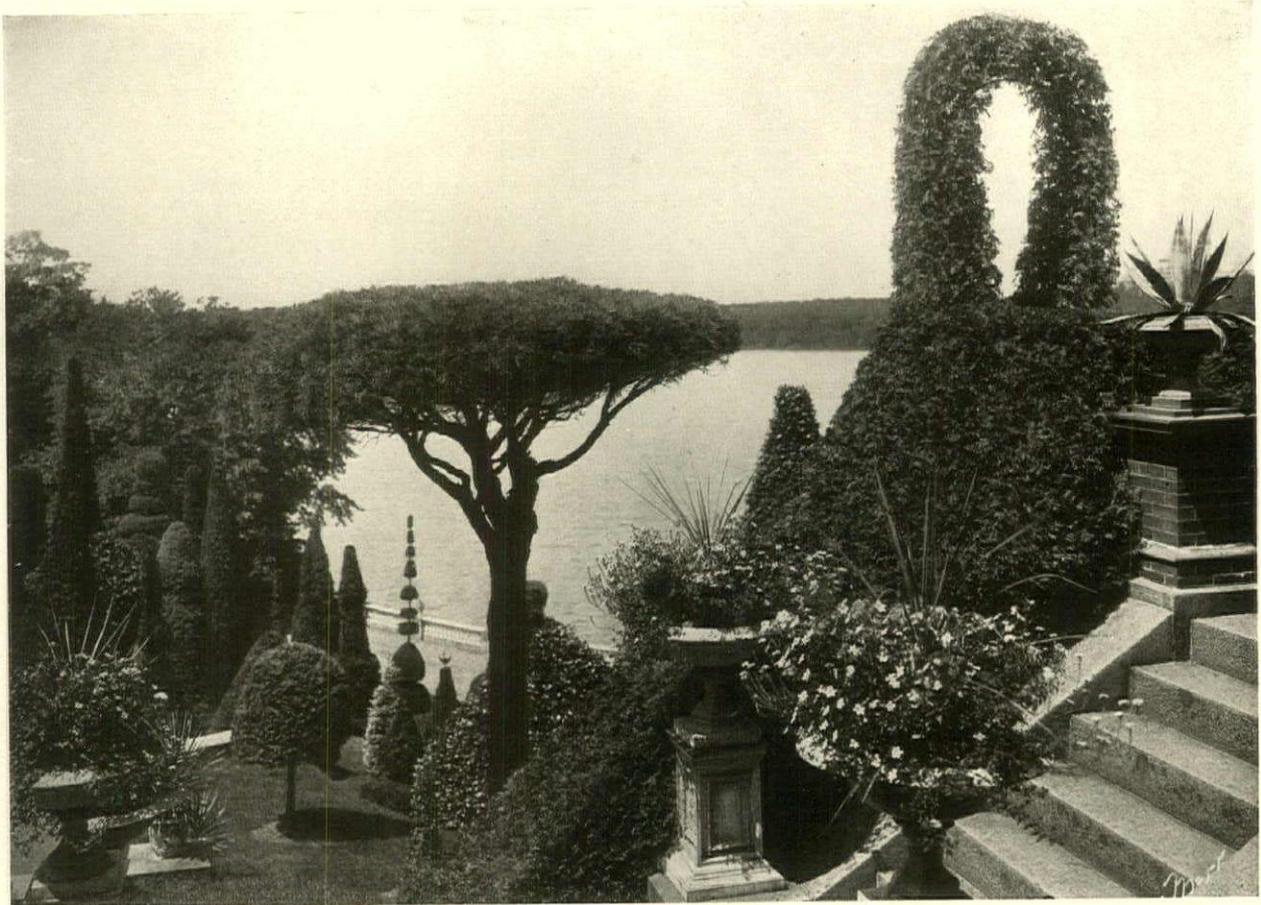
We have one real expression of domestic architecture in the Colonial, but we are no longer colonists, and we may not hope to get a real American architecture by futile attempts to copy either the letter or the spirit of an architectural expression of even our own forefathers. Our lives differ more from theirs than theirs did from the present life of Europe. Colonial architecture was a formal and stately background for the minuet, for the coach and four, for flowered vest and brocaded gown. Its elegance has the flavor of mignonette, and your trained architects can never galvanize

it into life by the application of a knowledge of Renaissance details that the creators of it fortunately lack. And most of the culture that demands it is as foreign to real democracy as modern Colonial is to real Colonial, and as spurious as the marble detail done in wood and paint, which it so much admires.

Isn't it about time for our spurious and insincere contempt for democracy to cease? Have we not paid the humiliating price of false ideals long enough? We have some real worth, some high purpose. There are some live Americans who are no more ashamed of our crudities and incompleteness than they are proud of our vanities and borrowed plumes. There are even some architects whose hopes are beyond income and the prestige that come from the production of extraneous elegance, whose desire is for a pregnant art, who are not afraid to interpret life as they find it, even its rawness, who are honest enough even to build in the vain-glorious absurdities that they laugh at. Be honest, fellows, tell it all, as simply and beautifully as you can, but *all* of it—the brag and the boast as well as the simple and manly worth and the shamed sentiment. The American is a good sport and will soon laugh with you at his own foibles, and better yet he is game, and when you have helped him to laugh at your combined efforts in his building, he will help you to tear it down and build better. Why, even our very rich men, who are many of them fine fellows when they are not at work, do not live in the fool palaces they build. They really *live* a few weeks in the year, on the water, in camp, somewhere beyond the bonds of the snickering and contemptuous servitude of their establishments. And you, rich men, why not really help life and art along by letting us build you something genuine, some place halfway fit for the fragments of a real craftsmanship for which you pay such fabulous prices? Quit building the silly, sham palaces that demean your powers even though they do express your dollars. The idea of a live craftsman like Mr. Schwab, who really does things, building a dead French chateau in New York, would be hilariously funny if it were not pitiful. Mr. Carnegie, who has built up a great American industry, and in his intense Americanism speaks for democracy and a world peace and world citizenship, scatters over our country library buildings that are in design essentially European and unmodern. If only he would insist that they be American architecture and real craftsmanship, he might help us to vital architecture as no other influence could, even to a real domestic architecture; for the library is an adjunct to and an extension of the home. Mr. Carnegie, like some of the rest of us, believes in the spirit of democracy, only we don't know what it is and don't try to apply it. We are beginning to look toward something beyond or behind it, and our college professors and wise men babble about the failure of the untried.

And we think we are so practical. We, the rankest spendthrifts in the world—spendthrifts not in the high sense of living to-day, of expending all in the expression of our real lives, but spendthrifts who toil and sweat and do not even always play the game fairly in getting, only to pour it out like water for shams and make-believes, for borrowed finery, for extraneous and barbaric displays of meaningless trinkets and stolen and insignificant architectural forms. We architects talk expansively and mysteriously about style, referring to the cast-off and outworn raiment of the past; and about design, meaning the limping, patched-up abortion of

(Continued page 109)



THE HUNNEWELL GARDEN, WELLESLEY, MASS.

T. E. Marr, Photo.

(Continued from page 107)

readjusted form. But there is no mystery about the problem of house designing, although there is mystery in the unknown process of design—the quick-flashing subjective answer to the objective problems—that is the joy of all real creation. A house is simply walls and windows, partitions and doors, floors and roof, stairways, closets and plumbing—that is all. But to be architecture, it must be something more. There must enter in other and more vital elements—the human being who has developed far enough to demand these, needs much more. But our sham, practical age has centered its efforts on these bodily requirements only, at least for others, thinking it enough that the house of the poor man should satisfy the artificial aestheticism of the cultured at best, and should merely keep him alive and exploitable at the worst.

You say the craftsman does not need to be surrounded by the beautiful—that if he has sanitary plumbing it is enough. How, then, should you hope for intelligent or even honest construction and adornment of your own house which he must build? You say that your mill operators have neither intelligence nor taste to demand the artistic. Then reform the methods of your boasted production that make them what they are! You can't have a civilization for a minority class, and the germ born in the sweat-shop breeds in the parlor, both physically and spiritually.

And these matters of brick and stone are very close to the spirit, but in the "how," not in the "how much." Just as a business matter, it takes no more material to build a beautiful house than an ugly one, and it takes less work, for most of the ugliness is attained by the addition of the unnecessary and unmeaning, and most of the beauty by simple directness and the elimination of extraneous detail. But you cannot attain beauty by the education of architects and the ignoring of the needs and powers of the common man, rich or poor. Architecture is the inevitable flower of real civilization, not the wax imitation under the smug glass of exclusion that adorns the stilted mantel of cutaneous cultures.

Now, I know that you will repudiate me and my philosophy, protesting that you do not have wax flowers on your mantelpieces. No, but your grandmothers did, and you have your near-Classic architecture, the same exquisite and exclusive taste for the dead, and I am not at all sure that you will not soon be back to the wax flowers. You are flirting with the hoopskirts of the past—the next step in your renaissance of dress, and you already cover your walls with the pop-eyed wall coverings of the early Victorian, and clutter up your rooms with their elaborate inlaid and veneered furniture (less the honest construction), which half-culture calls Chippendale, although that worthy made no inlaid furniture. Oh, yes, you are headed for the wax flowers all right.

How, then, should we go about creating a real, vital domestic architecture? Apply William Morris's saying as to furnishing your house. "Have nothing in your house that you do not know to be useful and believe to be beautiful." Be a child. Ask why? If you are consistent you may drive your architect crazy, or to thinking, but you will save your house. If you ask your architect why he puts this or that thing on, or if he ask himself, and his answer is because he believes it to be beautiful, insist on the first and more important part of the test. If the architect is self-insistent on knowing why he is putting on ornament—and most of it is put on—he will either have to admit to himself that he is dishonest, or leave it off, and then his real work will begin. The

subtle line that expresses purpose beautifully is far harder of attainment than the most gorgeous enrichment. The Japanese gentleman of taste, a taste which to ours is as fine gold is to fine gilding, drinks tea out of a Satsuma bowl, but it is not the Satsuma of embossed gold and hectic color, but the simplest of forms, with a surface that is crackled to the eye but velvet soft to the cheek, and with no ornament other than a simple written sentiment without and a drawing in three strokes of Fujiama within, and even this in a faded black. We might well, but for one thing, adopt the Japanese method of house adornment, perfectly plain walls and wood frames guiltless of oil or varnish, and just one of his many treasures for its adornment. But, alas, we haven't the treasures. Yet, we can adopt the principle that ornament must be good enough to look at more than once, good enough to live with, or it mustn't be there at all. The moldings and ornaments dictated by reason and purpose and not by the styles of the past are very few.

When your architect asks you what style of house you want, tell him domestic. And when he suggests Elizabethan or Spanish or Italian, still insist "domestic." A house may be English or French or Italian, but a home must be domestic. The better "Elizabethan" a house is, the worse domestic architecture it is, except in Elizabethan England. Even though we are in blood and life more dominantly British than anything other than American, we are no longer even English colonists.

Of course, culture always tends to cling to the elegancies of the past. It is the shadow of the past that is the very soul of culture. But suppose the past had also been "cultured" in this sense? Then we could have had no precedent and no culture. It is ours to pick over the scrap-heap of the past, putting its few vital records into the pocket of our minds, and, with knowledge enough, and hope unbounded, to turn our eyes to the future.

A new architecture is always struggling, Phoenix-like, to arise out of the ashes of the old, but if we strangle it in the ceremonies of the past, how shall it spring into effulgent life? Painting and sculpture and song may content themselves with yesterday. Architecture is of to-morrow.

There are few materials that are not fit to build with. It is in the misuse of them that disaster comes. When you use wood treat it as wood, even though it be painted. Stop using silly cut stone details and stone construction when you are building in other material. Use stone, plaster, brick, concrete, tile, anything you will, but use them for what they are, and let their qualities be shown forth as well as their purpose, and above all keep ornament out unless you can get real artists to put it in, and even then it must tell some story of purpose or interests. Cover your floors with carpets if you must, and rugs if you can, but the carpets must be of the simplest and without distracting detail, while the rugs may be as distracting as possible. For the rug is individual, even its repeats are not really repeats, while those of the carpet are deadly regular. And the rule for carpets will apply to wall coverings. I have seen many beautiful samples of elaborate wall-paper, but never a beautiful room papered with them. The more interesting they are, the more the individual spot in them attracts attention and interest, the worse it is when that spot of interest is hurled broadcast about a room in meaningless repetition. Use wall-papers as backgrounds, either plain or in patterns that are little more than texture to the eye, used so that they are entirely defensible. Paint on them if you have anything to say, but don't

flatter yourselves that the good sellers of the store windows are in good taste because they are the momentary vogue. Vogue and stylishness are the evanescent vulgarities of the élite, but taste and style are permanent attributes of truth. They are the inevitable expressions of sincere, creative life, expending itself in the service of humanity.

THE GENERAL PUBLIC AND ARCHITECTS.

SIDNEY WARREN.

AMONG architects, and perhaps we may add among artists generally, it has long been a subject of regret that architecture, of all the arts, is the one least appreciated by the public; and the reasons most generally given for this have amounted almost to accusation. The architects attribute it to want of artistic perception on the part of the public, and urge education in art as the remedy; while the public are inclined to regard architects as a very unpractical body of men, whose employment is desirable, perhaps, where some public building has to be erected, but quite unnecessary for less important work. In other words, they look upon the architect as of no practical value, and art as quite superfluous in any but monumental works. It may be well for once to examine the subject from the point of view of the public; to consider the practical and scientific side of architecture; to inquire if there be any degree of truth in the statement that the profession is lacking in these qualities; and to try and ascertain if, and in what way, its sphere of usefulness could be extended so as to raise it in the public estimation. It may be conceded that architecture is a constructive art, and its profession a many-sided one. Domestic and street architecture, with which, for the moment, we are mainly concerned, consists not merely in designing individual houses or shops, with their appurtenances and drainage as parts of a street, but should also be concerned in the laying out of the streets themselves as parts of the estate, which in its turn should be considered as part of the village or town. Unfortunately, under existing conditions it appears to be practically impossible for the architect to control the whole of these. The landowner considers his rent-roll, and the engineer considers the gradients of his roads and sewers. The best plan is the best compromise; but too often the compromise is based solely on the above considerations. How often does one hear it remarked how very dismal and dreary such-and-such a street is! The architecture may be, and probably is, bad; but this of itself it not sufficient to call forth such a remark from the average layman. On investigation, it will most likely be found that these streets have been laid out without any regard to aspect—possibly the most important point in the whole problem, and one which directly concerns the health of the inhabitants and the degree of success of its architectural treatment. The popular idea limits the science of sanitation to sewers, drains, and plumbers' fittings; but an architect should be a thorough sanitarian in a broader sense than this. He should, among other things, understand the value of direct sunlight which, as a cleansing agent, is second only to water: for perfect cleanliness both agents are necessary. One of the aims of an architect should be to obtain all the sunlight possible, both in streets and houses. It is part of the problem which he has to solve—a problem rendered all the more difficult by the present haphazard method of laying out our streets. Given due scope and proper training, the architect is second to none in his power to prevent disease—particularly such ailments as are due to a generally low

standard of health, not easily traceable to any definite cause.

In these two essentials to the exercise, by the architect, of his true functions, scope, and proper training, the young architect of to-day has constantly more and more opportunities of obtaining a proper training; but scope must come from the outside. It must be obvious to any man with a knowledge of sanitary science and building, that the present system of taking over and adding to the city or town an estate over the laying out of which little or no control has been exercised, has been as disastrous to town planning as the system of allowing any charlatan to erect buildings, subject only to the inspection of the building inspector, has been to good building. This can be said without disrespect to any of the officials named, for they have been set an impossible task, as the thousands of badly-built houses in the suburbs of all our large towns at the present moment bear witness. Looking at the matter from the point of view of the public welfare, it is not too much to say that no amount of official inspection or control can make up for the removal of responsibility from the right shoulders—those of the building owner or the private architectural practitioner, whom he ought to employ at his own cost, and whose aim it should be to so design towns, estates, and houses as to secure the maximum of health, both of mind and body, for their occupants. For lack of scope, caused by the responsibility for such matters having been taken out of his hands and put in those of rate-paid officials and local governing bodies, no blame attaches to the architect. It is equally his misfortune and that of the public, as it is also a misfortune that so many estates are laid out by estate agents, the best of whom certainly study the subject, but solely, it often seems, from a financial standpoint, for the houses erected on such estates rarely show evidence of having been designed with any higher motive. In the other matter of an architect's training, this, as in all professions, is a matter of degree; but it may fairly be questioned whether, in any other profession so necessary to the public welfare, skill is such a variable quantity as it is among those practicing architecture; and the reason for this is that it is not necessary to be trained as an architect before practicing as one. But if we confine our attention to those having any title at all to the term, it must be admitted that, whatever measure of justice there may be in the accusation that they are unpractical, there can be no doubt whatever that they very largely suffer reproach for errors which they never commit. It is astounding what hazy notions the great majority of the middle-class public possess as to what an architect is, what his duties are, and who employs him; and until they can be disabused of these notions the great bulk of the building in the country will be carried on in the present unskillful and haphazard fashion, to the great detriment both of public health and public taste. The man who buys or rents a house—one of a hundred, we will say, on a new building estate—never gives the architect a thought until some awkward bit of planning or faulty construction forces itself on his attention, when he immediately blames the architect—whom, by the way, he has never seen, nor has he even heard his name mentioned, but whom he supposes to be hovering somewhere in the background, a necessary evil, solely responsible for all that is bad in his house. As a matter of fact, the nearest traceable approach to an architect in connection with the estate is probably the man or boy in the agent's office who made the very crude eight-inch scale drawings by which, particularly as regards the elevation, the builder

has unfortunately to abide. Or it may be that the plots have been let subject only to houses of a certain value being erected on them, the design being submitted for the approval of the agent, who for this purpose styles himself a surveyor. The drawings in the case, such as they are, have probably been prepared by the builder himself, his son, or a young friend who has been through a course of scale drawing at a technical school.

The present system of estate development, too, militates strongly against the education of the public in architecture. The man of limited means, even if he be a man of taste, can but take the best ready-made house he can find. The public taste in things architectural can only be properly educated by beautiful streets and houses. The architect works in brick and stone, and in this form only can his scientific knowledge and artistic perception fully manifest themselves. By extending the field of operations of the competent architect, the community would gain largely in health of body and mind, and imperceptibly advance, by association and environment, in the appreciation of the beautiful. Again, the more general the employment of architects (properly so called) becomes, the less necessity will there be for rigid building Acts and by-laws, until we can contemplate a time when an architect shall be responsible for every building erected, of whatever class or size, and when building Acts and by-laws will only be necessary to strengthen his hand against obdurate clients, and not to restrict his inventiveness. Under the present system these are regularly ignored in some of their most important particulars.

GEOGRAPHY AND ARCHITECTURE.

CHAS. A. CUTLER.

THE connection between geography, as ordinarily understood, and architecture is not too obvious at first sight, even although we recognize generally that the great styles have always had their geographical centers, from which they have spread in accordance with political changes and geographical circumstances. In this way, and in the larger sense of geography, as now generally defined to include the consideration of such matters as trade routes and the commercial development of countries, the connection is much more plain, so that it may be of some interest to trace how these influences have acted and reacted upon one another in the past, if it be only with the idea of forecasting, so far as is within the limited capacity of human beings, what is likely to be the course of architectural development in times to come. Primarily, it appears that the great historic styles have had their origin in what are generally known as wealthy countries, which have been to such an extent isolated from their neighbors as to be free from undue external influence, and capable of development within themselves during long periods of peace. Perhaps it would be more accurate to say that such countries have contained a wealthy aristocracy than that they have themselves been intrinsically wealthy or wealth-producing; for it is a necessity, for the erection of great buildings, that there should be much money located in the hands of a few. There have been periods and places where this state of things has existed simultaneously with a generally high standard of living and ease, as in the case of Greece in Classic times, and of England in the Middle Ages; but it is also possible for a few people of great wealth to build magnificently, while the majority are leading sordid lives, in a state of semi-starvation. Under such circum-

stances, great palaces may arise; but there will hardly be a living art in which all are interested, permeating all ranks of society and all classes of building.

Considering first the case of Greece, it is notable that all its greater buildings were erected in a time of peace and great prosperity. Almost an island, situated at a point of the Mediterranean where Eastern and Western trade routes met, it was also wealth-producing in itself on account of its fertility, and possessed a magnificent building material in the beautiful Pentellic marble. But it was its geographical position which led to its being so greatly enriched by commerce with the extreme East, and even India, by way of the caravan route across the desert, through the port of Tyre; with Egypt on the south; and with Sicily and Southern Italy on the west. Thus its inhabitants were enabled to lead the leisured life of a cultured race, and the art of architecture necessarily flourished; for painting as we now understand it was practically unknown, and the whole artistic instincts of the people were centered on the buildings. Trading thus with East, South, and West, ideas were imbibed from each direction; but by filtration only, without too close contact, giving freedom for a high development, in consonance with the trend of the existing Grecian civilization. In turn, the influence of Greece reacted precisely along the same routes, and spread more particularly towards the East, especially after Alexander's great expedition—so much so that it is traceable in the ornamentation of the buildings of Northern India of a very much later date.

It was with the destruction of Tyre by Alexander, and the replacing of the Eastern trade route by another, which developed through the newly-formed city of Alexandria and the Red Sea, which seems to have terminated Greece's architectural supremacy. But the influence was sufficiently strong to outlast many centuries, and to implant its general character upon the work of the Roman Empire. So far as Roman architecture is distinct from the Greek, as it undoubtedly is in its constructional character, that, too, developed in a great center which was free from the horrors of war for many centuries; for Rome itself was peaceable, whatever may have been happening upon the borders of its dominions, and Roman architecture followed the routes of Roman trade and the course of Roman arms. It exerted little influence upon surrounding nations, but wherever the Romans went, there they built in the Roman manner. Thus the style of architecture was identical from Judea to Britain, and geography only comes in as a factor in so far as it controlled the expansion of the Roman Empire, which spread outwards from Italy as from a center, enclosing the whole of the Mediterranean like a lake, but never penetrating far either into Asia or Africa. Although one is often inclined to look upon Rome as a military power, this aspect of the matter shows that it was command of the Mediterranean Sea which rendered its expansion possible. The extension northwestwards, through Gaul to Britain, was something quite distinct. Rivers played a great part in this, and Roman towns and Roman buildings are found possibly more along the Rhine than in any other part of Europe north of the Alps, except in England, which could be reached by sea, as well as across the Continent.

Upon the eventual fall of Rome, it was its geographical position which rendered Constantinople the trading center of the world, and a place where the great Byzantine style of architecture was to arise, and where it was to spread again along the Eastern trading route across the desert into India,

as well as by sea along North Africa into Spain, and in modified form to follow the great European rivers northwards into Russia. Subsequently Venice also rose into prominence because of its position at the head of the Adriatic, concentrating the commerce from Constantinople and the East, and from the rich plains of Northern Italy. Originally selected by a few refugees from Aquileia, on account of the safety afforded by its muddy and sandy islands, it soon attracted so much of the Eastern trade that Constantinople fell into the second place. Holding the control of the sea, and unassailable by land, its position was ideal for architectural development. Possessing wealth, great building was possible; and it was so situated that it was able to assimilate all that was best of the architectural styles of other nations, and again to disseminate in return.

Geography also influenced the development of Romanesque architecture to a great extent. A stream of Byzantine influence passed northwards from Milan and the Lombardy Plains, across the great Alpine passes, to the Rhine, and thence along the great trade route which followed the course of that river, resulting in the production in that district of buildings having basilican plans and much pure Classic detail. Another more Southern trade route passed from the same district of Italy along the Riviera and subsequently northwards into the heart of France, a route which was followed by Eastern merchants, and thus naturally resulted in the transference to that part of Europe of a Byzantine class of work. The rising trade center of Paris drew together travelers from both routes, and resulted in an admixture of the two types of Romanesque. Further modifications were produced along the coast-line of France by the introduction of Scandinavian influence, due to the ravages of Northern pirates. This affected detail more than general forms, with the resulting production of what is known as Norman architecture, both in the northwestern parts of France and more particularly in England.

As time went on, and means of communication became more easy, and trade routes multiplied, so architectural styles have become more diffused. The old boundaries have been breaking down for some centuries past, and it looks now as if we were coming to a time when there would be great similarity in all parts of the world. The only distinctive styles a little while since were those of India, China, and Japan; but India, at least, is being rapidly brought under English influence, and Japan is becoming Europeanized, while as China is opened to Western traffic, so, it is to be feared, will Western architecture displace native China's work. The tendency is thus towards cosmopolitanism, only such distinction being discernible as a marked difference of climate may dictate, and influencing the domestic work more definitely than the great monuments. These, at present, at any rate, are similar in character over the whole of the civilized world—for trade routes are innumerable—the character, however, being dominated, as of old, by that which is in vogue in some great trading center.

THE Atelier which has been conducted by Eli Benedict, architect, adjoining his office at 1947 Broadway for the past few years will be open day and evening all summer. Individual instruction of a practical nature will be given along all the lines usually covered in a school of architecture and necessary for the proper training of an architectural draftsman.

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ARCHITECTURE

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COMPETITION

The Robert Fulton Monument Association of No. 3 Park Row, New York City, announces a competition among the Architects of the United States for the purpose of securing designs for the memorial of Robert Fulton, costing \$2,500,000.00 and to be erected in Riverside Park in the City of New York.

Architects of experience and good standing are requested to apply to the Association for forms on which to make application for the competition program and permission to have their names entered as competitors.

ARCHITECTURAL CRITICISM.

THE Editor regrets that Messrs. Pell & Corbett were not named as associates of Lord & Hewlett, architects of the Masonic Temple, Brooklyn. This building was published in July ARCHITECTURE and Pell & Corbett should have been credited.

MR. WALLIS has long been known for his intimate knowledge of colonial architecture, and his excellent adaptation of Colonial designs to modern work. His work, unfortunately, has been mostly country houses, as often happens to clever men who have become known primarily as country house architects. The examples illustrated in this issue of ARCHITECTURE include, however, a college hall as well as a country house, and the same wise and thorough application of Colonial motives are there evident, as well as in the house of Mr. W. I. L. Adams, also illustrated in this number.

The Clark Hall at Williams College presented the difficult problem of a three-story building of no very great area, and it was cleverly solved by the introduction of the principal entrance into the second story at the only point where it was possible. This, and the use of the usual water table at the second story level produces the effect of a two-story building, and the lightness and simplicity of this water table, which still entirely fulfills its purpose, is noteworthy. While one inevitably feels that the mass of the building is not perfect, it is at once recognized that this is due to conditions and not to the design.

The building is very pure Colonial, much more so than most of the modern adaptations of that style, but is, nevertheless, very sincere and straightforward in design, and without the dryness and hardness which it is usually impossible to disassociate from work so archeological. The treatment of the end bays on the main front without any break in the roof above is saved from being illogical by the slightness of their projection, and the treatment of the skylight at the top of the roof, surrounded by the Colonial "fence" is both unusual and brilliant. The cupola, too, is both in character with the building and delightful in itself. The doorway is a very delightful piece of architecture, combining the dignity essential to a college building with the lightness and grace of the best Colonial work. The iron railing is also charming as is the treatment of the Palladian window above. It would have been perhaps better had this window come down to the top of the entrance roof, if not by a doorway, at least by means of white panels below the window. The reveal of the doorway seems too great for the reveal of the windows, and a lighter treatment of this would have been happier, but this is one of the few points to which exception can be taken.

Of especial excellence is the detail in the frieze and in

UNIVERSITY OF PENNSYLVANIA

THE SCHOOL OF ARCHITECTURE offers full professional training in a FOUR-YEAR COURSE leading to the degree of B.S. in Architecture. An option is allowed in ARCHITECTURAL ENGINEERING. The GRADUATE YEAR grants a Master's degree, allowing specialization in advanced work. ADVANCED STANDING is granted to college graduates. Qualified DRAFTSMEN, desiring advanced technical training, are admitted without examination to the TWO-YEAR SPECIAL COURSE leading to a Certificate of Proficiency, and technical studies only may be taken by other persons of approved fitness. ILLUSTRATED ANNUAL sent on application. For FULL INFORMATION address Dr. J. H. Penniman, Dean, College Department, University of Pennsylvania, Philadelphia, Pa.

the door frame itself, of a kind which in these days of striving after the "virility" of French architecture is generally far too little used. Our architects seem to shy at delicacy of scale, but this example where delicacy of scale is combined with the utmost strength of proportion is precisely what is needed to lead them back into the paths of virtue.

The Adams house lacks something of the charm of Clark Hall, although it is admirable, both in mass and in detail. The transformation from the large windows extending to the floor, at the left of the entrance, to smaller windows at the right, the form of the large windows being recalled by the brick arches which form the mason's opening for the large windows, quite satisfies the eye accustomed to the repetition essential to perfect symmetry. The shutters in the second story are well designed to give both air and the solidity which all shutters of Colonial type should have, although had they been painted white they would have looked, in the photograph at least, somewhat better. The treatment of the extensions as semi-detached, is a motive with which I cannot entirely agree, although their mass bears the proper relation to the main mass, and they are in themselves admirably designed. The dormers, while exceedingly simple are correct, both in their absolute and proportionate size, and the manner of treating the grounds with the terrace in the front part flanked by shrubbery at the sides is a good one. The entrance motive of two story pilasters supporting the low pediment is agreeable except for the lack of support of the circular porch over the entrance which seem, at least to me, somewhat unfortunate. Nevertheless, there is so much charm in the detail of the cornice with the characteristic Colonial drops and the strygil frieze that it more than compensates for the unfortunate character of the hood.

Mr. Wallis was one of the first of present day architects to perceive the charm that lies in the Colonial style and its eminent suitability to American needs. With him is associated Mr. William J. Rogers. This use of it shows a depth of feeling and a note of honesty which some of our other architects conspicuously lack, and in choosing the Colonial style for the Willams building he is recalling to that splendid old college its ancient traditions.

D. H. BURNHAM & Company are always somewhat surprising, one can never tell what to expect from them. Sometimes they do buildings of the most utilitarian character and of wretched design, such as the Wanamaker building in this city, and at other times such splendid pieces of architecture as the Washington Union Station. The Pittsburg National Bank, while not of the highest order of merit is in many ways excellent. The character is that of the Italian Palazzo, with a tremendous cornice surmounting the entire building, and windows pierced through the frieze. The mullions between the windows and the corners are decorated as is usual in this firm's architecture, with plaques in low relief and they here fit very much better than in most cases where they are employed. The type of ornament is architectural in the extreme, and while lacking in the softness and roundness of the Italian ornament is nevertheless eminently suited to this work. The building will never rank as one of the mile stones of American architecture, but it is substantial, suitable for its purpose and without a single feature which can be criticized to its detriment.

LIKE the new Brooklyn Masonic Temple, that in New York is a rational and dignified piece of architecture. While by no means so imaginative and sympathetic as the Brooklyn building, it is well conceived and beautifully executed. The character is that of an office building, rather than of a society building, with its purpose made evident by the wide spacing of the windows, leaving every alternate floor, at least in appearance, dark. The brick work is of the same high quality as in others of our latest buildings, and the brick is not only good in color, but worked into a pattern which, without distracting the eye from the mass of the building, adds interest to what would otherwise have been a blank wall. It is unfortunate that Mr. Knowles's treatment of the sides should not have been carried further. I suppose that every owner feels that it is a waste of money to embellish those portions of the building which may be seen only temporarily, but in a semi-public building such as this, it seems desirable to manage the design, not as a facade but as a block. Such an arrangement as that on the sides and rear of the Engineering Society's building would have immensely added to this, and while one cannot entirely blame an architect for not doing more than to carry light colored horizontal bands through the red brick of the sides, it seems as if he should somewhere have found the money to do it.

Photographs do not exhibit it to the best advantage, because they do not show the excellent color scheme which is one of its main attractions. The detail, although French, has none of the restlessness and heavy scale which one is wont to associate with that architecture, and which, I am glad to say, is becoming less and less prevalent in our newer buildings. We have certainly had the French epidemic very badly, but have been, I think, sufficiently inoculated to ward off any serious attack in future. When properly used, as in this case, the French style is both flexible and impressive, adapting itself equally well to tall buildings and to low ones, yet it can never attain the monumental sincerity and dignity which Messrs. Pell & Corbett and Lord & Hewlett achieved in the Brooklyn Masonic Temple.

THE architecture of banks has been always studied with a view toward dignity, strength and impressiveness, and usually the architecture has been classic. Where the building is, as in this case, located in the middle of a block the problem is a simple one in every respect but novelty. There have been so many hundreds, possibly thousands, of banks built in the United States on similar plans and of similar heights that the exterior treatments have simmered down into almost a single design, with slight variance between different examples. Nine-tenths of them include an order the full height of the facade, treated sometimes with pairs of columns, or with columns and antæ enclosing a central arch, or at other times the facade is composed with three bays. The only difficulty which arises is the treatment of the cornice; how to terminate this without encroaching upon neighboring property is always a difficult problem. In the First National Bank of Cleveland, here illustrated, the three bay arrangement is used three stories high across the front with a single high banking room in the center, and the rear again returning to a multiple story arrangement. The quality of the design then, depends largely upon the detail and the fenestration. In this case, largely owing to necessities of interior design which are not at once apparent, the highest story comes at the top of the facade, behind the large windows, and is by no means so happy as it would have

been had the second and third stories been transposed and the small windows placed at the top. There was an attempt made to treat the second and third stories in one by carrying down the exterior trim to the top of the first story. It is very likely that had the stone work in the second story been changed into metal the desired result would have been obtained, but as it stands the arrangement is not a happy one.

The key blocks with the Minerva heads and the arch of the third story window are both too large, and project too far from the surface of the building. A flat key block without sculpture (unless in very low relief) would have bettered it, especially as the scale of the heads is in conflict with that of the sculpture above the first story openings. With the exception of these two points the building is a magnificent piece of design, simple and attractive in mass and exquisite in detail. While the columns and capitals are distinctly scholastic they are of exceptional beauty and excellent in scale. The enrichment of the cornice is admirable and the carvings over the end columns both interesting in themselves and well placed to show to best advantage the lettering. The chief interest in the facade lies, however, in the remarkable sculptured figures over the first story windows, together with the detail that frames them. The key blocks have upon them single nude figures in very low relief, so low, indeed, as to suggest the Egyptian wall decorations, while at either side are placed seated female figures exquisite in modelling and of wonderful architectural character. They are blocked out rather than modelled, in the stiff and constrained pose essential to their positions, and they carry out admirably the lines of the building. Sculpture such as this is rare indeed, and their design suggests at once that the architect and the sculptor must have been, not only in sympathy with each other, but working in conjunction.

I cannot omit mention of the beautiful draftsmanship of the details, where not only is the ornament admirably drawn, but the construction is thoroughly worked out and shows clearly the intent of the architect. A drawing is primarily an instrument of service, but good drawing is more than that, it is itself beautiful. Too many draftsmen forget the practical side of their work in endeavoring to compose a sheet prettily and to silhouette and render it. This drawing is one which anyone could be proud to have made from the point of view of appearance alone and in addition, it is as useful a working drawing as I have seen.

The interior is, like the exterior, a careful and scholarly piece of design, with little departure from accepted lines. It is beautiful in detail, and of broad and generous effect. The Directors' Room, a cut of which is shown here, has one of the painted wooden ceilings which are again coming to be used for large rooms, with an excellently designed painted frieze below it, and a wall covering, which though here somewhat spotty, is in reality much simpler and quieter. The mantel piece, of pronounced Greek origin, is out of sympathy with the other details of the room, both in design and in color. It appears absolutely disconnected from the wall.

As a whole, both the interior and exterior represent the careful and painstaking effect of a thoughtful mind, resulting in a building both beautiful and worth while.

PROFESSIONAL ETIQUETTE IN GREAT BRITAIN.

A PROPOSAL to alter the declaration which every Fellow and Associate has at present to sign when joining the Institute, and every Licentiate will have to sign

in the future, has raised the whole question of architectural etiquette, says the *London Building News*. The matter is also the subject of one of the By-laws of the R. I. B. A., which is so drastic in character that at first sight there appears to be no reason for any other declaration than that the new member has read the By-laws and is willing to be governed and bound by them. It is even comprehensible that an undertaking couched in definite words, and aimed at certain particularly objectionable customs might prove embarrassing. Some considerable portion of the present declaration deals with matters which are covered by a recently passed Act of Parliament rendering penal the taking of an illicit commission, so that it is almost an insult to ask anyone to sign it. Anything beyond this must more or less encroach upon the individual's personal prerogative, and many things which may, in a general sense, appear inadvisable may, in other special instances, be not only perfectly permissible, but almost inevitable. It may very well happen, for example, that, when entering a body like the Institute, a young man might sign anything that was put before him, including, say, an undertaking not to tout for employment as an architect, not to advertise himself as such, and not to have any interest in any materials or appliances which might be used upon the buildings which he may in the future be called upon to supervise. All these are reasonable things to ask, and for a member of the Institute to undertake not to do, speaking broadly. It is not proposed, we believe, to introduce them all into the amended declaration; but they are all, however, perfectly covered by the By-law which states that any member conducting himself in a manner which, in the opinion of the Council, is derogatory to his professional character shall be liable to suspension or expulsion. There is a good deal of difference, however, between a definite undertaking to refrain from certain forms of misconduct, and liability to punishment if such misconduct is proved. The word "liability" as used here has a sufficiently wide meaning; for punishment may be given or withheld at the Council's discretion, thus providing for exceptional cases. The undertaking is more definitely binding. There are, for instance, many descriptions of advertising. We have discussed this matter on previous occasions, and have endeavored to show that every case has to be considered on its merits, with regard to the circumstances of the particular man and the way in which he advertises. A member of the Institute practising in some of our Colonies or in some places abroad, may find that it is the usual professional course to insert advertisements in newspapers. Where this is the custom, there can be no real objection to it; yet it would be highly objectionable if an architect were to do this in England. An architect may not advertise himself as such, yet he is allowed by old custom to advertise in the technical journals that he prepares students for architectural examinations. A clever man will see that his name appears in his local press as the architect for this, that, or the other building in course of erection or just completed. The advertisement is a more valuable one than if he paid for it; but it is an advertisement, all the same. Yet no Council of the Institute would for an instant think of blaming the architect in consequence. The whole problem bristles with difficulties; yet when each case is considered individually, the difficulties melt away, for common-sense can then be applied, and the question resolves itself into whether the advertisement is such as good taste permits or condemns.

(Continued page 117)



SECOND REFORMED CHVRCH
SCHENECTADY NEW YORK.

*James H. Squires
44 Central St.
New York City*

(Continued from page 115)

Touting for work is an even more difficult thing to tackle by declaration. It can be done openly or in the most subtle manner, and the more subtle canvassing—such, for instance, as a clever woman will undertake on her husband's behalf—often more flagrantly violates the dictates of our sense of justice than that which is open and above-board. Somehow or other (it will be said) work must be sought; and, just as in the case of advertising, the whole thing resolves itself into a matter of good taste or bad, and frequently as to whether some other architect is being harmed by what is being done. What would be perfectly justifiable, too, in some instances would be entirely unjustifiable in others. A signed declaration not to tout might be very much in the way of the advancement of a highly honorable young man, who might, having signed, feel that he ought not to do many things which an older man or one less scrupulous would think quite justifiable. As a result, the declaration would act as a bar to the progress of the architect with the more sensitive nature, while it would be either forgotten, or at any rate neglected by those with tougher skins, who, if they were brought to book for their action, would be just the men who would be capable of fighting their case to the uttermost. The Institution of Civil Engineers includes a clause relating to touting in its entry declaration, and the etiquette with regard to the manner is well observed. All the same, we think that the R. I. B. A. is well advised to say nothing about it, but to leave flagrant cases to be dealt with under the general terms of the By-law. Inherently, every man recognizes that etiquette controls a matter such as this, and everybody knows what etiquette requires.

With regard to admitting goods into a building, in which goods the architect has an interest, there are more difficulties to contend with. It seems outrageous to suggest that the Institute should interfere in any way with the private investments of any of its members. On the other hand, it is conceivable that an architect might specify over and over again some particular fitting of which he was the patentee, and in which he held proprietary rights, or at least upon the sale of which he received a royalty. Too binding a declaration would prohibit an architect from holding shares in, say, a brickfield or a cement company, except under the condition that he never permitted bricks or cement manufactured by those companies to be used upon any of his works,

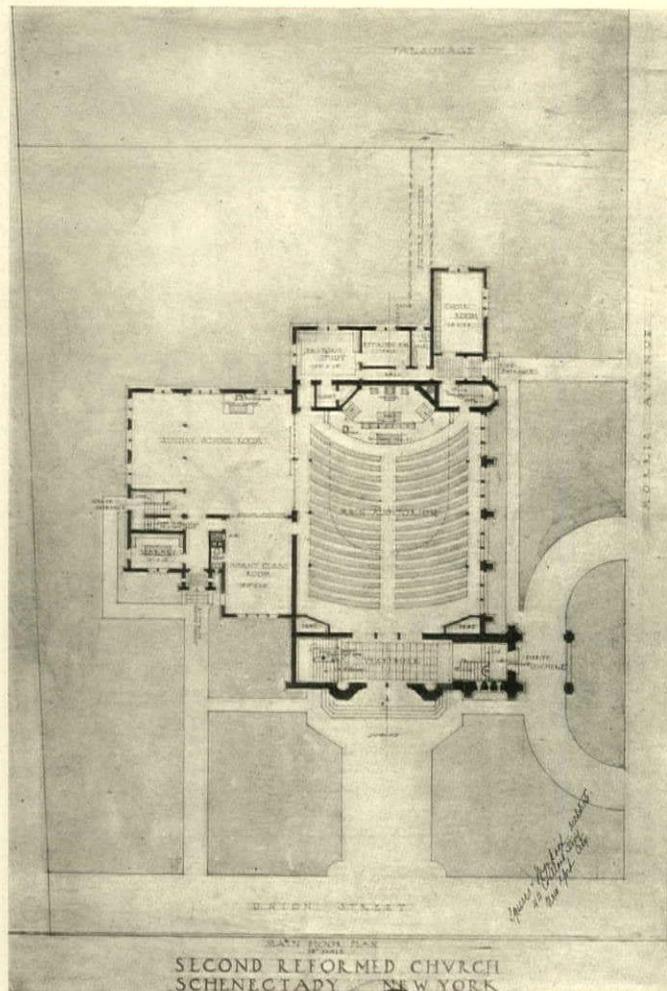
however good they might be, and however suitable for the circumstances of the building. This would be extremely unjust. In many cases it might necessitate an architect selling valuable shares at a loss as an alternative to resigning his position as a member of the Institute; and it is even conceivable that he might hold the shares as trustee for others, or be himself one of a number for whose benefit the shares were held in trust. In the one case he would not be justified in selling, and in the other case he possibly could not control the sale or purchase, not being himself trustee. Yet the undertaking would be binding upon him; even if his client particularly wished him to use those special materials, he could not do so and retain his membership. The matter seems, again, to be one which is much best left to be dealt

with by the Council under the By-laws, when special circumstances such as these can be taken into consideration. An architect may be an inventive genius; yet the very fact of his inventing an important appliance and putting it upon the market would prevent him from utilizing it for any client of his own, unless he took the drastic course of selling his patent rights — and this would probably be the wisest thing that he could do; but it might not be the best for his pocket, nor probably even the right thing if he had a wife and children depending upon him.

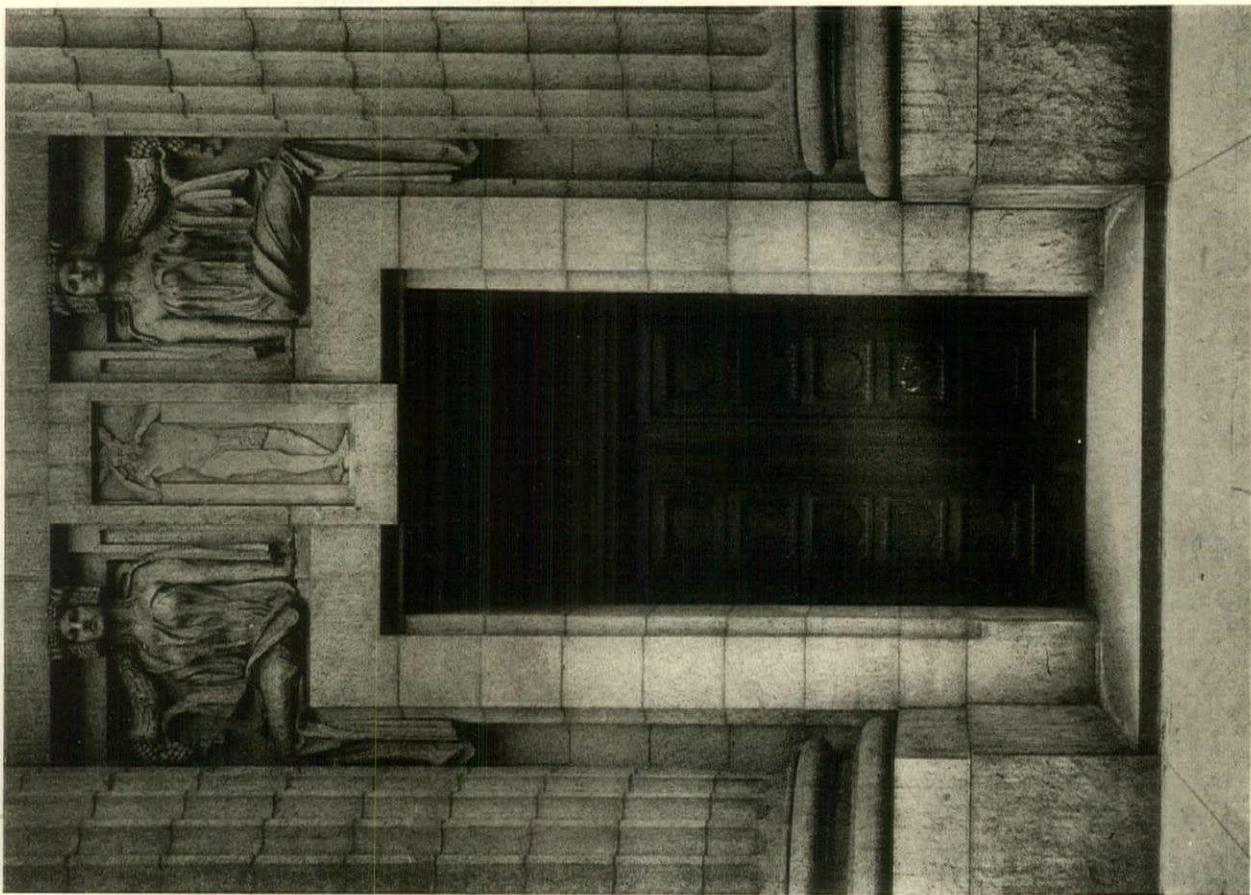
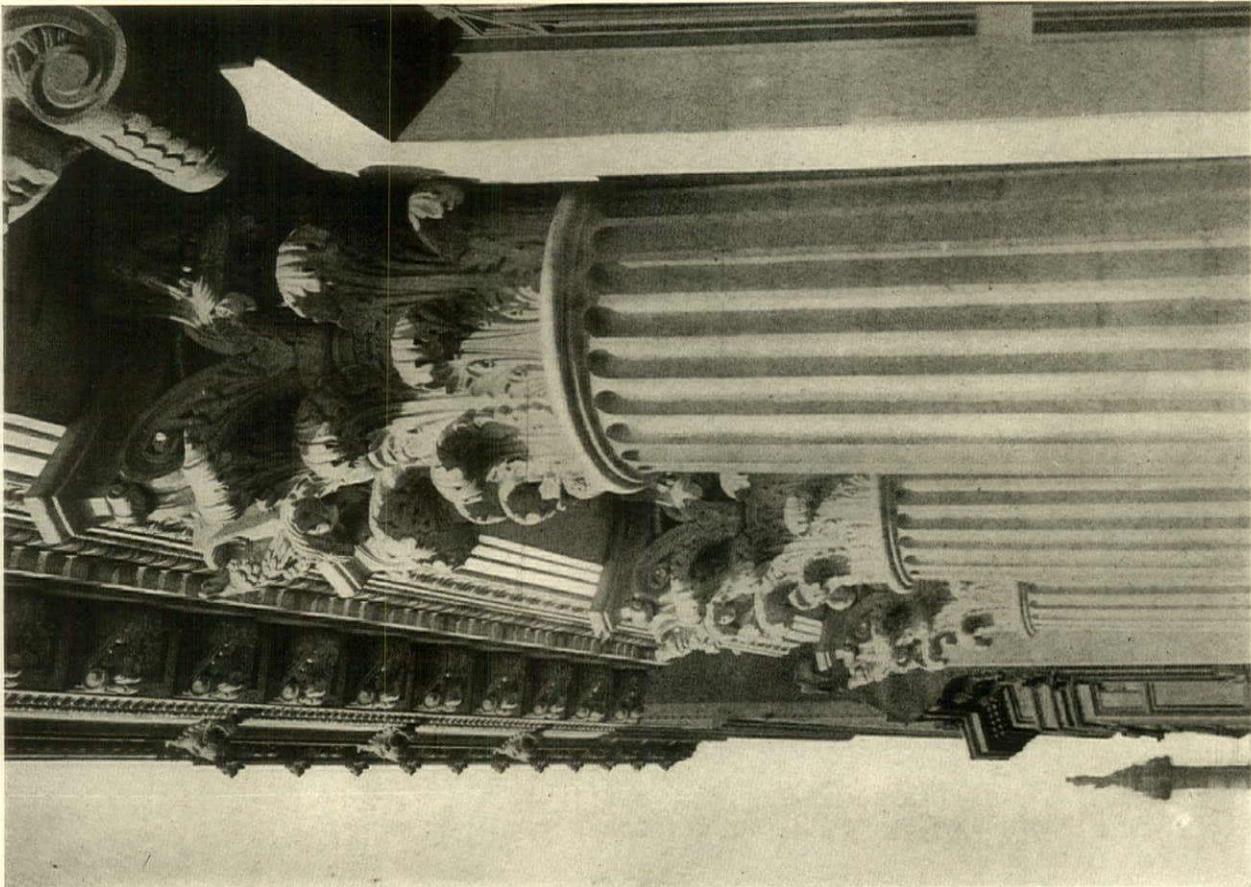
The net result seems to be, therefore, that the less detailed the declaration is the better, coupled with wide powers given to the Council to consider each case as it arises, quietly and judiciously, upon its own merits, taking every circumstance into consideration. No declaration, however carefully worded, could possibly cover every case. There is the architect, for instance, whose

brother is a builder, or whose sister has married the manufacturer of some patent article. He might play into his relations' hands, and he might do this either honestly or dishonestly. No declaration could touch him in either case; but wide-reaching powers, wisely used by the Council, could be appealed to where dishonesty was suggested. It is, too, as a rule, the unexpected that most often happens. Thus the most difficult, and sometimes the most flagrant, cases of professional misconduct are utterly unprecedented, and not to be touched by declaration at all.

Anthony U. Morell and Arthur R. Nichols have entered into a partnership for the general practice of Landscape Architecture and Engineering, with offices in Minneapolis.

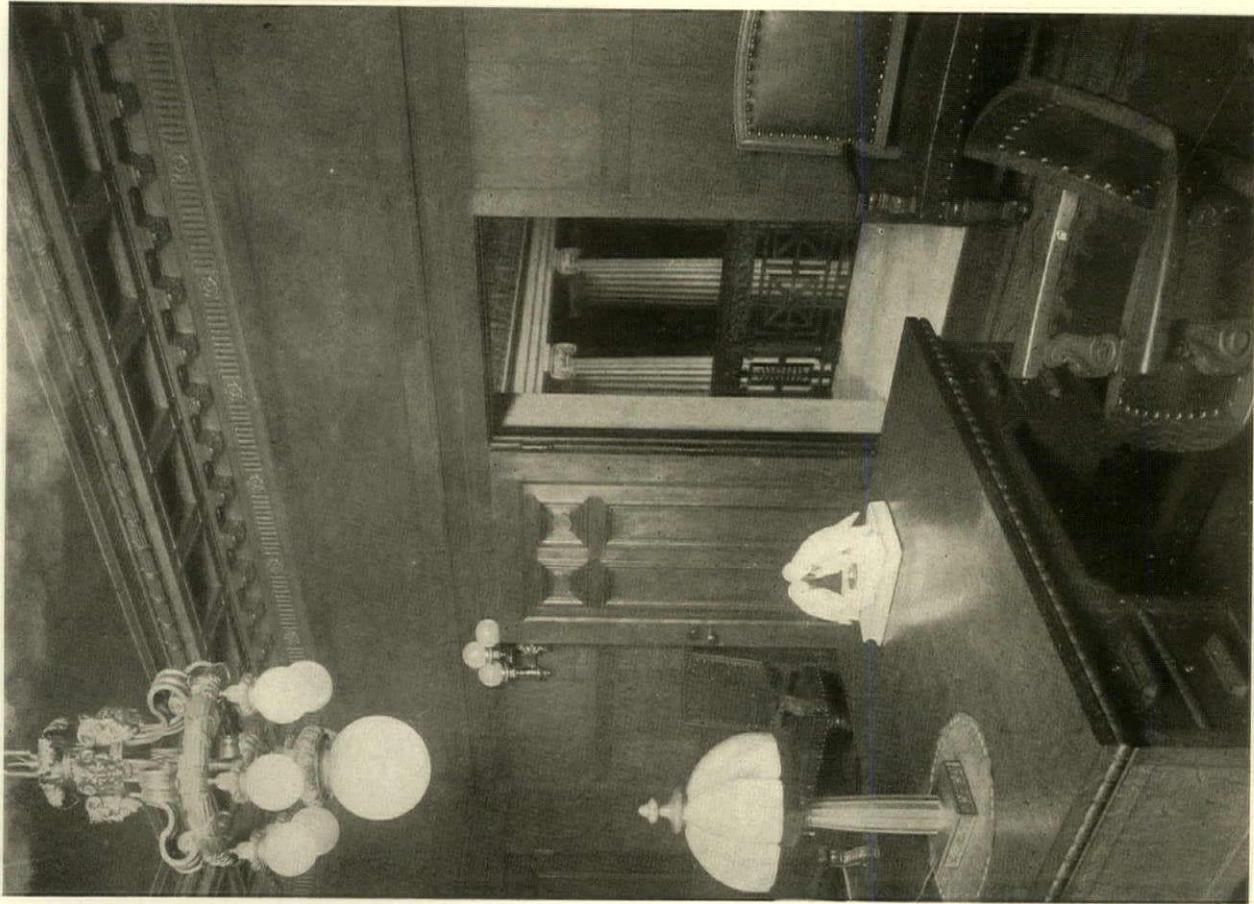


PLAN, SECOND REFORMED CHURCH, SCHENECTADY, N. Y.
Squires & Wynkoop, Architects.



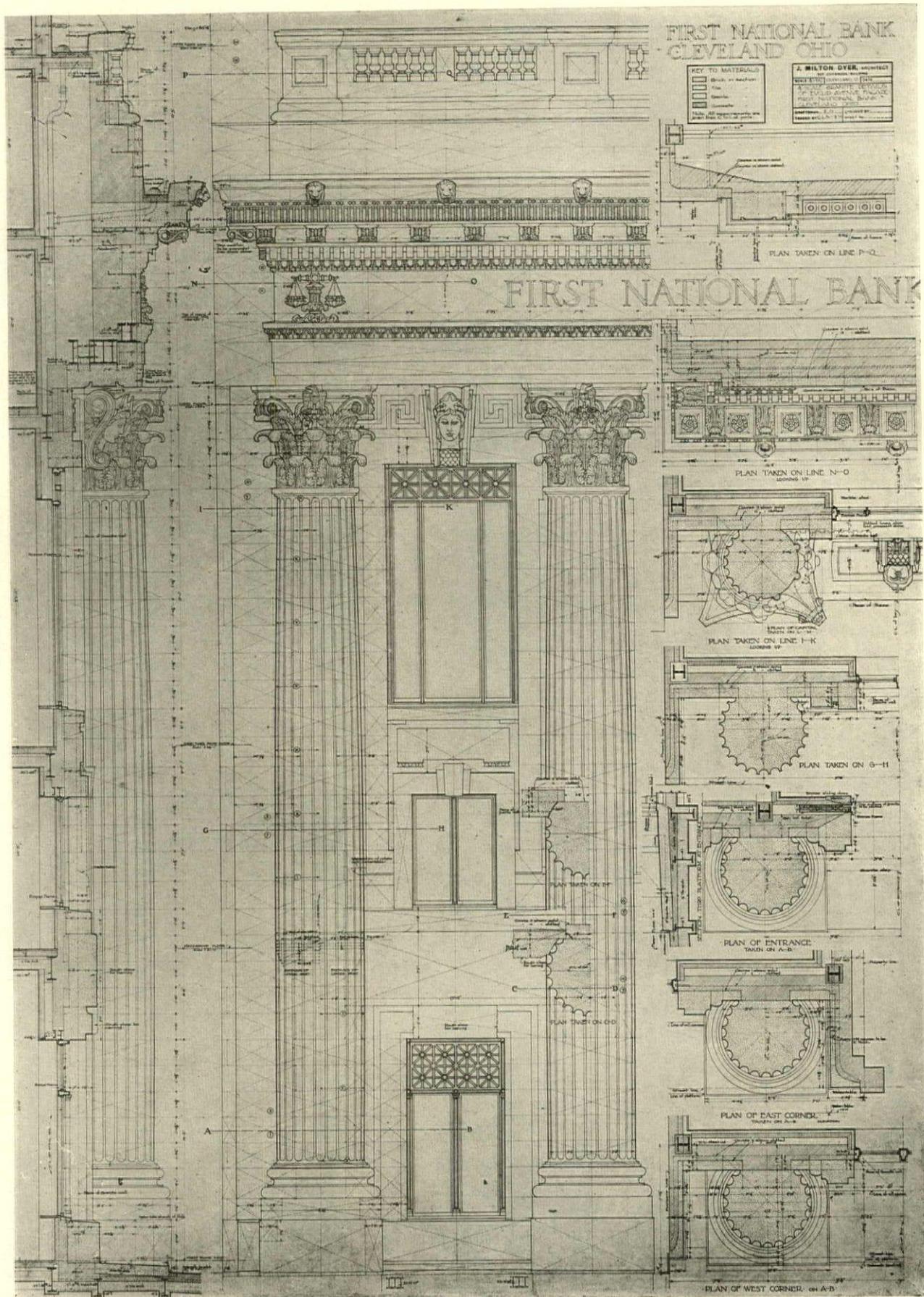
J. Milton Dyer, Architect.

DETAILS, FIRST NATIONAL BANK, CLEVELAND, O.



J. Milton Dyer, Architect.

INTERIORS, FIRST NATIONAL BANK, CLEVELAND, O.



DETAILS OF FACADE, FIRST NATIONAL BANK, CLEVELAND, O.

J. Milton Dyer, Architect.



AUGUST, 1909.

ARCHITECTURE

PLATE LXVI.



EDW. CLARK HALL, WILLIAMS COLLEGE, WILLIAMSTOWN, MASS.

American Radiators.

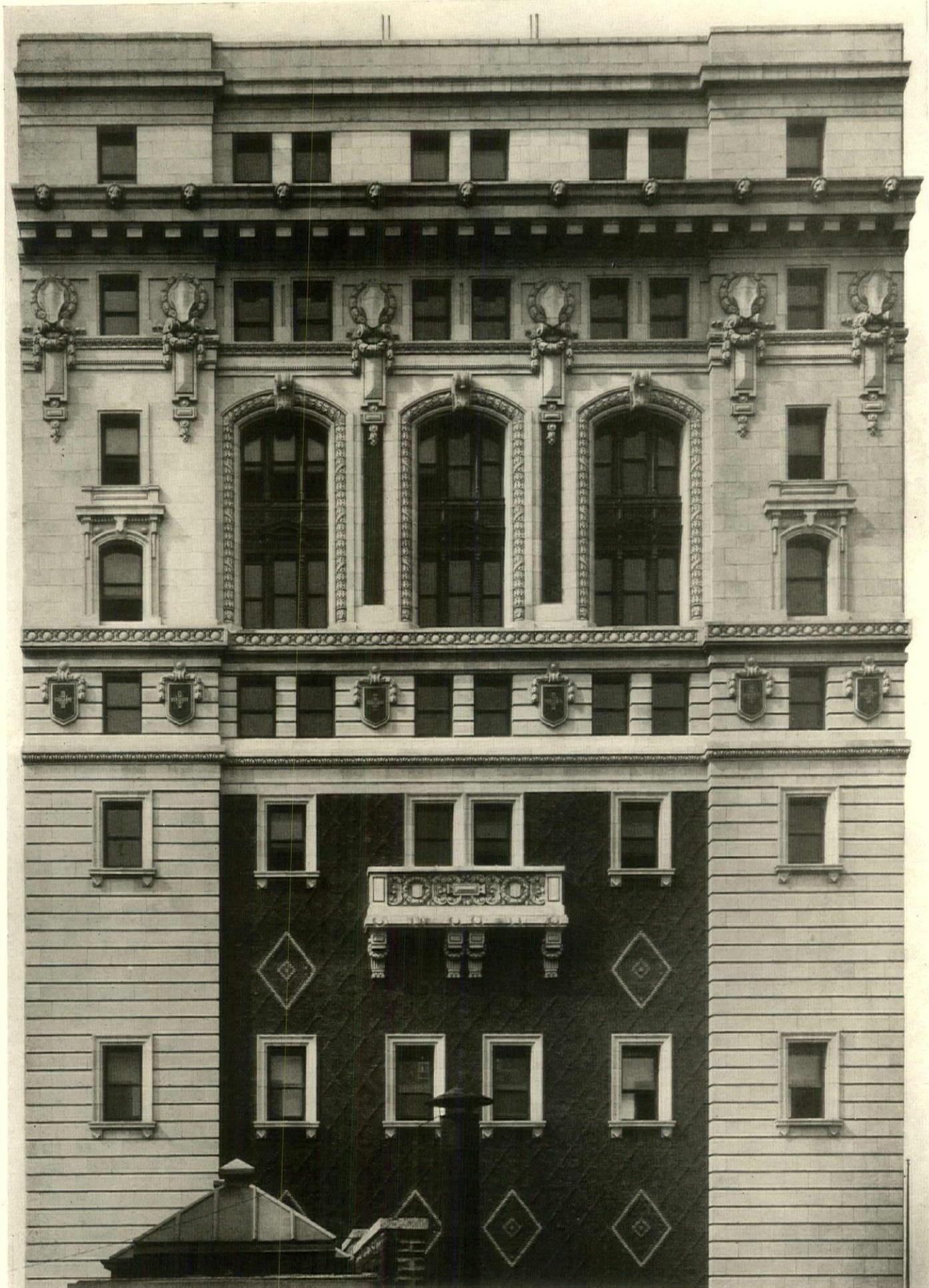
FRANK E. WALLIS, ARCHITECT. WM. J. ROGERS, ASSOCIATED.





ENTRANCE, EDW. CLARK HALL, WILLIAMS COLLEGE, WILLIAMSTOWN, MASS.
FRANK E. WALLIS, ARCHITECT. WM. J. ROGERS, ASSOCIATED.





DETAIL, EXTENSION, MASONIC HALL, 46-54 WEST 24TH ST., NEW YORK.

H. P. KNOWLES, ARCHITECT. Wurts Bros. Photo.

Wells Brothers Company of New York, Builders.





EXTENSION, MASONIC HALL, 46-54 WEST 24TH ST., NEW YORK.

H. P. KNOWLES, ARCHITECT. Wurts Bros. Photo.

American Radiators.

Otis Elevators.

Wells Brothers Company of New York, Builders.

Yale & Towne Hardware.





EXTENSION, MASONIC HALL, 46-54 WEST 24TH ST., NEW YORK.

H. P. KNOWLES, ARCHITECT. Wurts Bros. Photo.

American Radiators.

Otis Elevators.

Wells Brothers Company of New York, Builders.

Yale & Towne Hardware.



FIRST NATIONAL BANK, CLEVELAND, O.

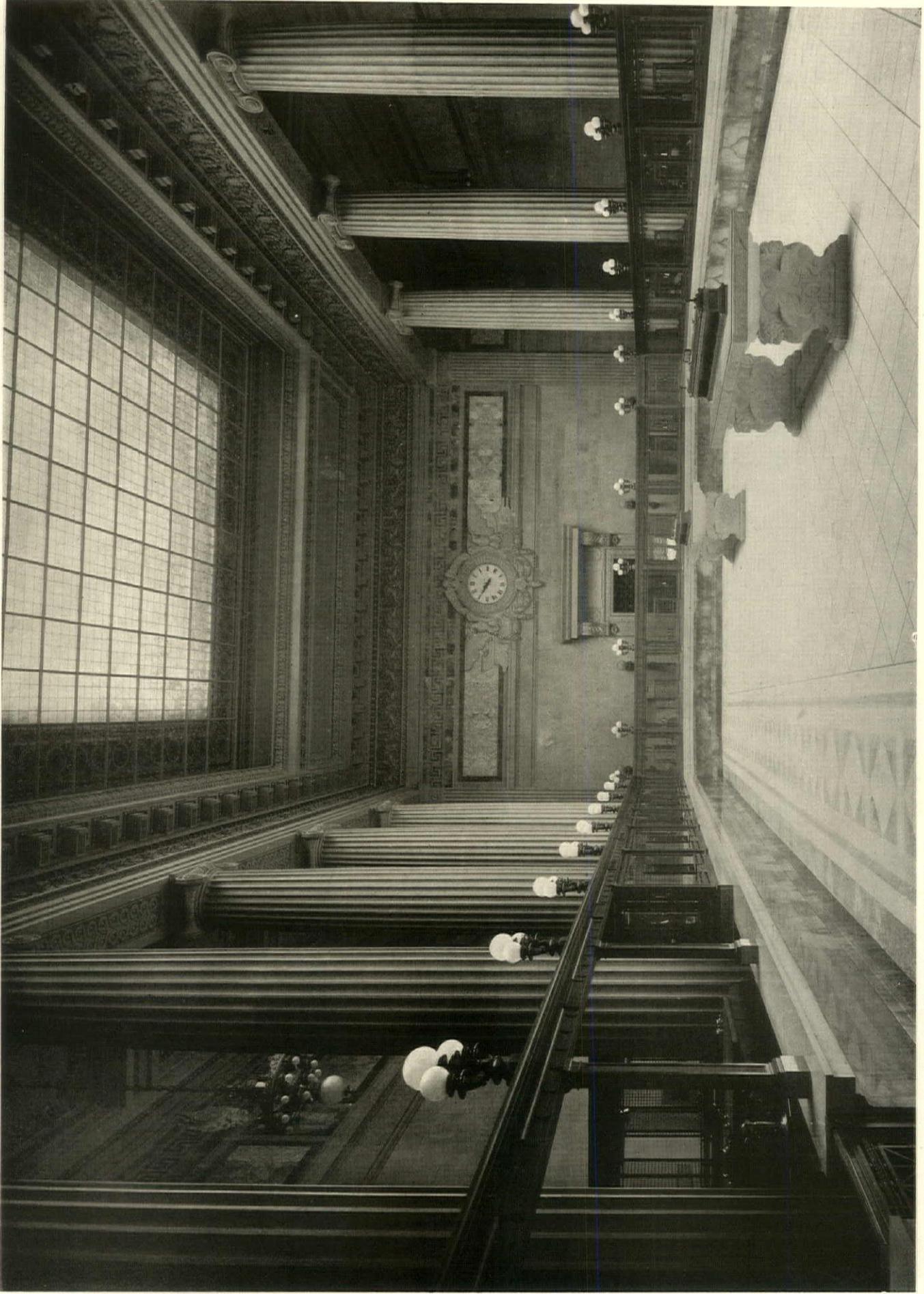
American Radiators

Ornamental Bronze and Iron Work executed by Wm. H. Jackson Co.

J. MILTON DYER, ARCHITECT.

Yale & Towne Hardware.





BANKING ROOM, FIRST NATIONAL BANK, CLEVELAND, O.

Ornamental Bronze and Iron Work executed by Wm. H. Jackson Co.

J. MILTON DYER, ARCHITECT.





COUNTRY HOUSE, W. I. L. ADAMS, MONTCLAIR, N. J.

American Radiators.

FRANK E. WALLIS, ARCHITECT. WM. J. ROGERS, ASSOCIATED.





ENTRANCE, COUNTRY HOUSE, W. I. L. ADAMS, MONTCLAIR, N. J. FRANK E. WALLIS, ARCHITECT. WM. J. ROGERS, ASSOCIATED.





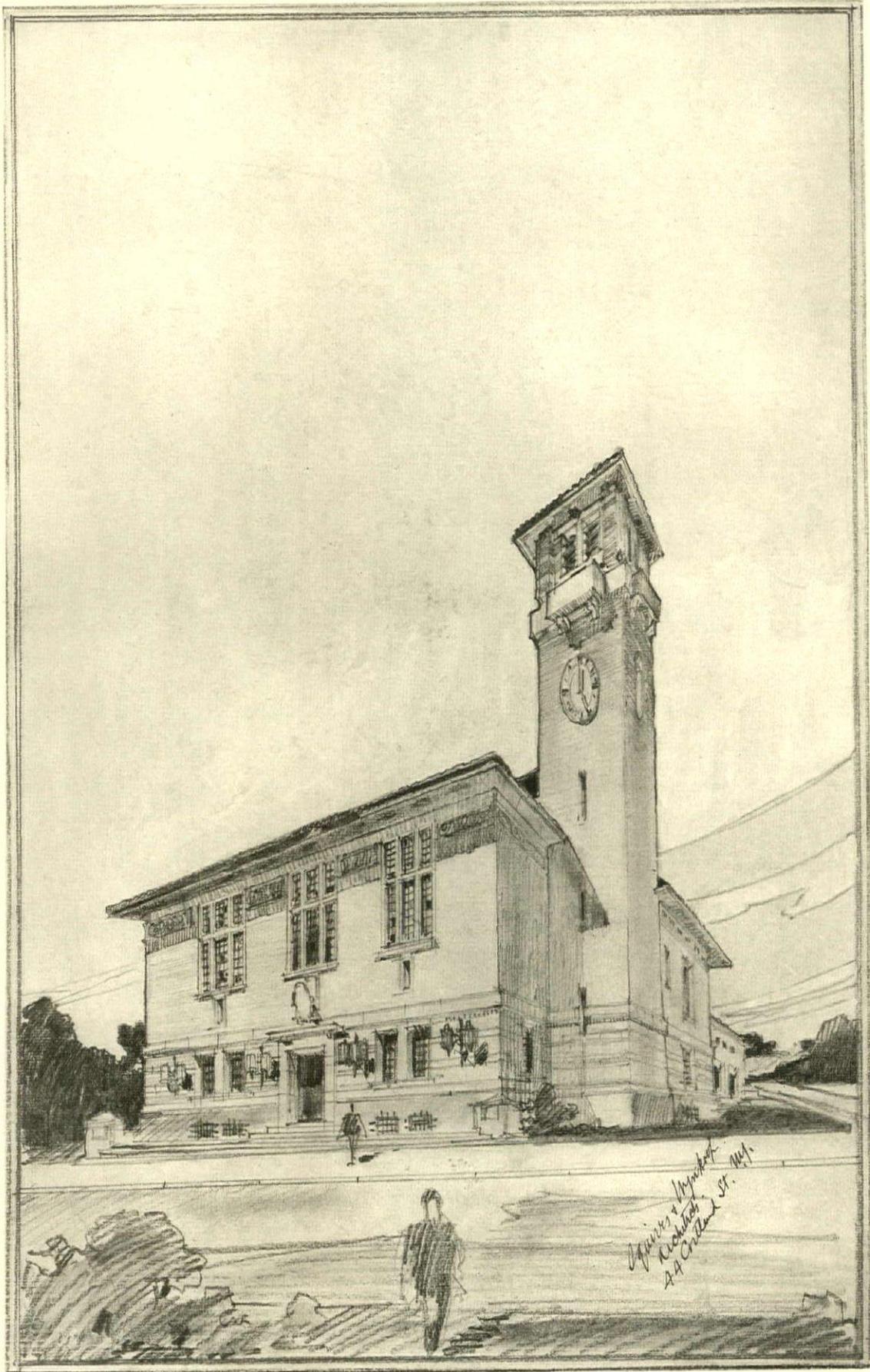
FIRST NATIONAL BANK, PITTSBURGH.

Kinnear Pressed Radiators.

Otis Elevators.

D. H. BURNHAM & CO., ARCHITECTS.

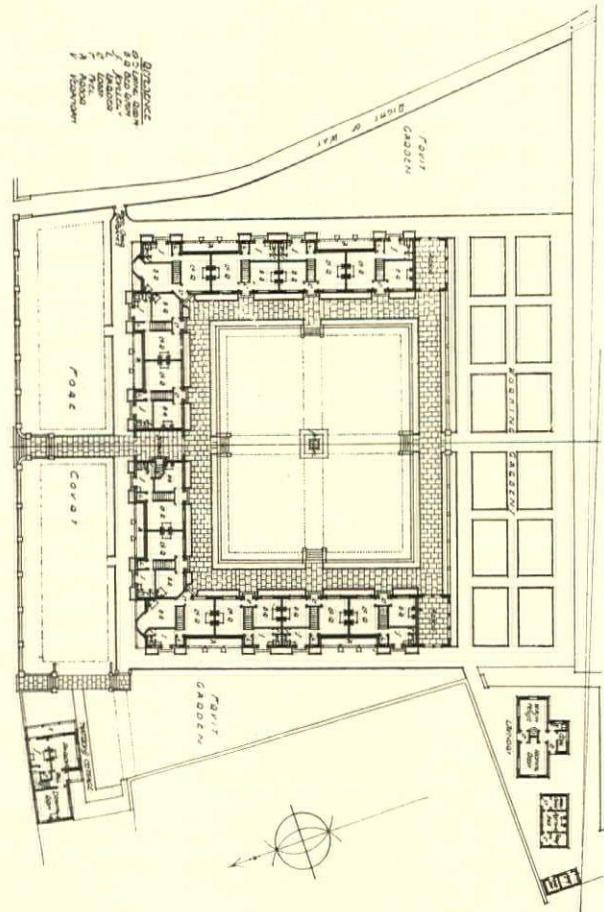
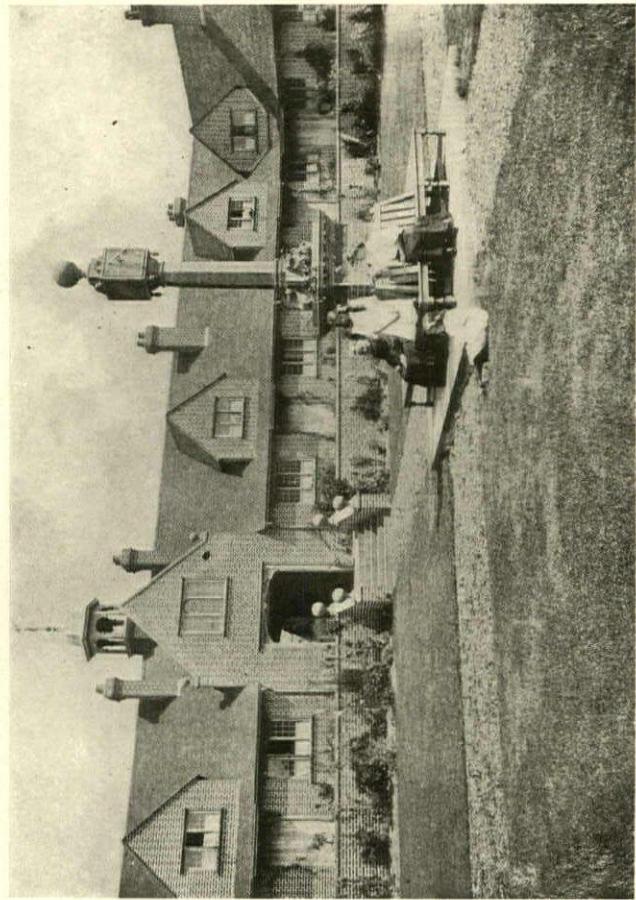
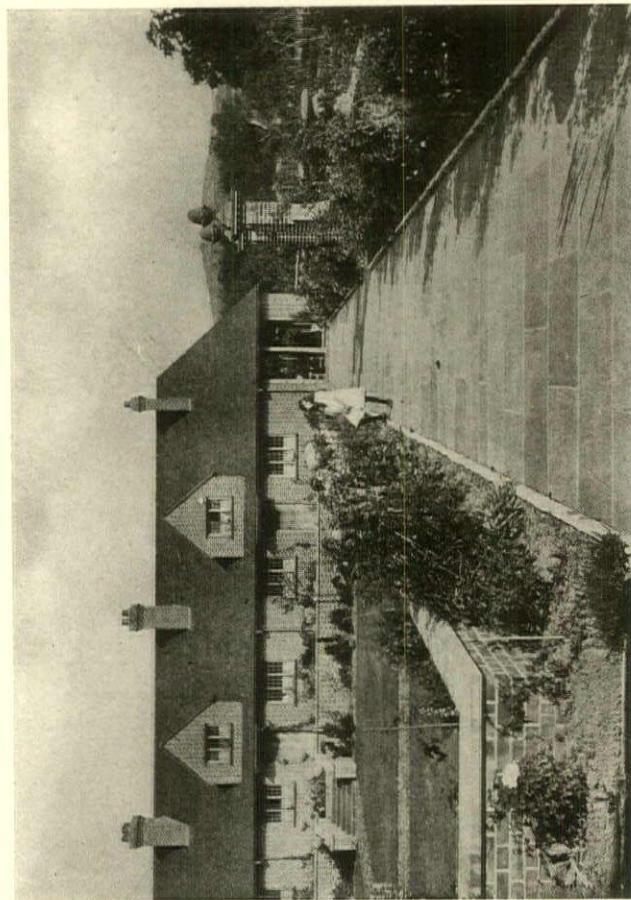
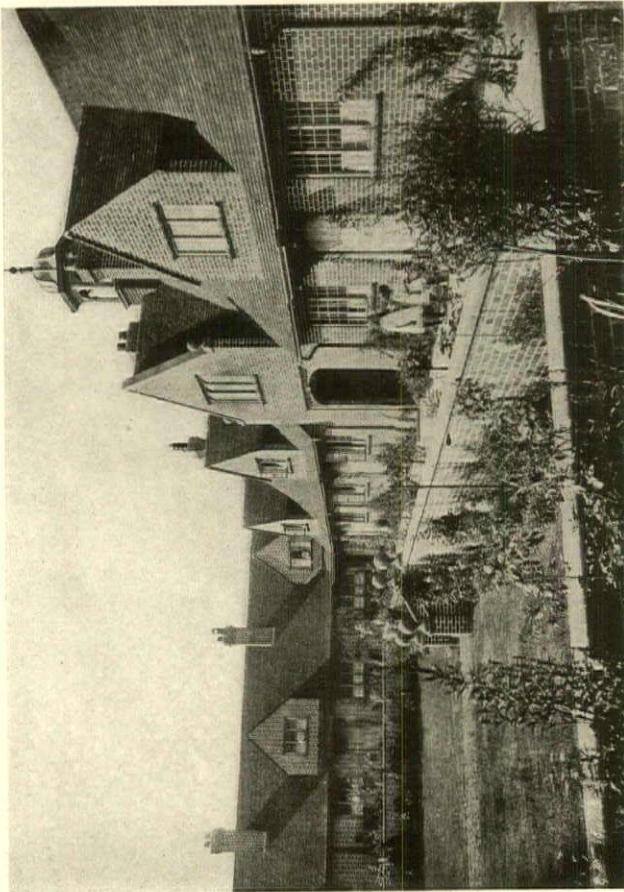




*Squires & Wynkoop
Architects
24 Central St. N.Y.*

COMPETITIVE DESIGN, BOROUGH HALL, RUTHERFORD, N. J.

Squires & Wynkoop, Architects.



CHURCHILL COTTAGE HOMES, CHEDDAR VALLEY, SOMERSET (ENGLAND).

Twelve comfortable homes for the deserving poor built by the late Mr. Sidney Hall, who also provided a sufficient fund for maintenance.

Silcock & Reay, Architects.

TWO BURIED INDIAN CITIES.

FEW architects of the present day—of the younger generation, at any rate—recognize how full India is of architectural works of great magnitude and beauty. They have forgotten, even if they have read of, that about which Fergusson and Stevens wrote. They know, in a vague way, that there are great buildings there, but hardly realize that many of them are of a pure architectural style. Some attention has lately been drawn to the ruins of Gaur and Pandua, now hidden away in a remote corner of Bengal, in a desolate region where for nearly four centuries the banyan-tree and the wild beasts of the field have reigned supreme. They were Mohammedan cities—Gaur, the earlier, being supposed to have been the most ancient city of Bengal. Its acknowledged history, however, begins with the Mohammedan conquest in 1242 A. D., and the ruins which have been recently exposed, owing to the efforts of the late Sir John Woodburn, might very well have been discovered in the South of Spain, so wonderfully similar are they to those of the Mohammedan buildings there. They are, in fact, pure Moorish work, presenting features of great beauty, combined with curious methods of construction which suggest that the beauty aimed at was to render the buildings ornate first and constructional afterwards. Among those at Pandua, which are known to have been built in the 14th century, there is a beautiful Moorish niche in the Royal Chapel, indicating the direction of Mecca, the head of which appears to have been originally in two planes of cusped-pointed form. Careful examination of the jointing, however, shows that the two rings are cut out of the same stone, and that the work, instead of being arched, is corbelled. There is an even more interesting piece of construction in the corridor within the Golden Mosque at Gaur, a little later in date. The arches here are constructional, extremely deep, and formed of stones in thin slabs; but each bay is covered by a dome, the pendentives being formed by corbelling with alternate straight and herring-bone courses. Originally the effect must have been sombre in the extreme, as there are no apparent means of lighting; but two domes are now sufficiently destroyed for light to be admitted and for the construction to be seen. The only indication that the work is Indian, and not that of any other great Mohammedan country of that time, is to be found in the use of waterspouts, or gargoyles, through which flowed the drainage of the main building, in the form of elephants' heads with the trunk raised and the mouth open. These indicate work in a country where the elephant was known, while at the same time they are contrary to the strict Mohammedan rule that the figures of animals should not be represented on their buildings.

The ruins which have been cleared consist of little else than the mosques in these two towns, the Adina Mosque at Pandua having been commenced in 1307 A. D., and being the most remarkable example of Pathan architecture which exists. It should, perhaps, be better described as Indo-Saracenic. It forms a great quadrangle on plan, surrounded by massive walls, which support what is left of the ruined cloisters, its length being 500 ft. from north to south, and its breadth 300 ft. from east to west.

APPROXIMATE ESTIMATES.

TO the old practitioner, the preparation of an approximate estimate will probably present but little difficulty, because he will have accumulated the necessary data

during the course of his practice; but to the young man just commencing, and not yet in possession of such data, the task is one of very considerable difficulty, especially in the case of a large public building. Although the difficulty may arise rather from lack of information than from ignorance of method, still the subject is one of such importance that it may be useful to consider the arrangement of data and the systematizing of methods. There are three generally accepted ways of arriving at an approximate estimate, each useful in its own proper connection and each requiring its own proper set of data. Perhaps the most frequently—one might almost say *too* frequently—adopted method is that of calculating the cubic contents, and pricing at so much per foot cube, according to the type of building and kind of materials. This is an exceedingly useful and rapid method, and experience will enable a man to estimate with considerable accuracy in this way. The data required are the prices per foot cube of various classes of buildings of recent erection; but to be of real value these prices should have been collected by the estimator from buildings which he himself has carried out. It is a good practice to ascertain at the finish of each job what its price per foot cube has actually been, and to keep tabulated lists. In the case of a building differing materially from anything one has carried out before, it will be readily seen how difficult it is to assess with anything like accuracy the amount by which such variation will affect the price per foot cube. In estimating for a large building from its cubic contents, it will generally be found necessary to subdivide the building into two or more classes, and to price each at its own particular rate. For instance, the main block of a building may be of a much more expensive character than the remaining portion; and in this case it is much more accurate to price them as separate buildings than to attempt any kind of averaging which, at the best, can be little better than a rough guess. In the case of a building with a large basement, where the work is of a perfectly plain character, it will often be found convenient to keep the basement and superstructure separate. Where this method of estimating is adopted, it is usual to let the price include only the building pure and simple, and to put in separate estimates for drainage, heating, etc., which obviously could not be accurately apportioned at per foot cube of building. Fence-walls, yard-paving, etc., should, for a similar reason, form separate estimates. The most generally accepted rule for ascertaining the cubic contents of a building for estimating purposes is to take the area on plan by the height from the top of the concrete foundations to halfway up the roof, and to add for dormers and other projecting features. In collecting data for these estimates, attention should be given to classification, and any peculiar features or circumstances affecting the cost should be carefully noted.

Another method adopted in the case of churches and schools is to allow so much per head of seating accommodation. This is often a useful guide where one has exactly similar buildings already carried out for comparison; but a warning is necessary here, to see that the ratio between seating accommodation and cubic contents are similar in both cases. Any extra height given to the building or extra vestry or other accommodation will entail extra expense which has to be distributed over the whole, and expressed at per unit of seating accommodation.

The most reliable method of arriving at an approximate estimate is by means of rough quantities; but it is not used

as frequently as it should be, because of the time involved. It should be the only allowable method for any large building and for competitions, the price per foot cube being ascertained merely as a check. In competition work, it is, unfortunately, rarely possible to spare the requisite time for the preparation of the roughest of quantities, and the result is only too well known. In settling the price per foot cube the wish becomes father to the thought, and the desire of the architect to get his design carried out for the stipulated sum persuades him of his ability to do so; and there is very little doubt but that men who are too honest to deliberately deceive, do, in their anxiety to win a competition, persuade themselves first, and then others, that work can be satisfactorily carried out at impossible prices. Indeed, it is not too much to say that a man whose enthusiasm does not carry him so far, stands but a poor chance of winning many a competition. This injustice (for it is no less) to any honest competitor is likely to continue so long as the task of checking or judging the estimates is not given a much higher place among the duties which the assessor is called upon to perform than is the case at present. Such a task would certainly be rather a formidable one in the case of a big competition, and one which it would hardly be fair to call upon the assessor, who must be at the head of his profession in other and very diverse matters, to perform unaided. He should have the advice and assistance of an expert of no less standing in his own sphere than the assessor is in his. It may be argued against this mode of procedure that a competitor might fairly claim to have the question of price settled by actual tender. This, of course, would seem the fairest way; but, then, it must be remembered that quantities have first to be prepared, and who is to pay for them in case the price exceeds the allowable limit? Then, again, in such a case the competitor will be certain to claim that he can reduce the cost by cutting out or cutting down materials or finishings; and heart-burnings (of which there are enough in every competition) would be increased rather than diminished. Enough has been said to prove, if proof be necessary, the importance of the subject, and the injustice which its neglect often inflicts. In important work, then, the time and trouble expended on the most accurate method will be well repaid in all cases, unless we must except competition work.

The method of estimating by rough quantities consists in measuring the main items and including in them all finishings and labor. No very hard and fast rules can be laid down; but each case must be settled on its merits, and the method will vary, within certain limits, according to the judgment of the individual estimator. Generally, the work will be divided into sections, the digging being roughly measured and priced by itself, and also the concrete foundations and walling up to basement floor, or, if there be no basement, the ground floor. From this point, the walling will be measured per foot or yard super., according to thickness, and priced, including plastering and all finishings; the external walls being measured first, the price to include facings on one side and plastering, etc., on the other. Doors and windows may be measured in, the price being adjusted accordingly, or they may be deducted and priced separately at so much each, or so much per foot super., including everything. The price for floors might include floor-boards, skirtings, joists, pugging, ceilings, and cornices. Staircases may be taken per tread or per foot super., the price to include strings, newels, balusters, handrails, apron linings, plastered soffits, etc.; and roofs at per square, the price to include

slating, boarding or battens, felt roof-timbers, external plumbing, eaves-gutters, and rainwater pipes. The top ceilings may be separately measured, or may be included with the roof, while sanitary appliances may be numbered and priced at so much each, to include fixing and all plumbing complete. Water service may be priced by a lump sum, or the length of piping roughly measured and the cisterns and fittings numbered. Grates and ranges may be numbered, and an average price put to include hearths, mantelpieces, and fixing. Drainage can be taken out per foot run, the price to be an averaged one, to include all bends, junctions, etc., digging, filling-in, and cutting away and making good, the manholes being priced separately at per foot of depth. Fence-walls may be measured per foot super., or per foot run by an average height, the price including digging and foundations; stonework, if ashlar of an ordinary thickness, to be included in the price of the walling. Ordinary window-sills and doorsteps may be included with windows and doors. Copings may be measured per foot run, but any other special stone features will probably be better cubed. Rolled-steel joists, if supporting floors, would, if we follow our principle out, be included in the price of the floors. As, however, their quantity per unit of floor area must vary considerably, this ratio would have to be worked out separately for each individual case; the simpler plan would be to measure them separately and weight them out from a trade list. The price might include stone templates, and, in the case of joists carrying walls, cover-stones also. A workable average of template, etc., per hundredweight might be arrived at. Gas or electric lighting and bells would be priced at per point. The measurements are quite a simple matter; the accuracy of the method depends chiefly on the preparation of the schedule of prices to be used. If time permitted these to be accurately prepared for each job, then the resulting estimate might be made practically as accurate as that prepared from a complete bill of quantities. In approximate estimates, however, such a course is usually out of the question, so that the most practicable thing to do seems to be to prepare an average schedule, to keep it revised and up-to-date (quite a simple matter, and one which occupies but a few moments at a time once the schedule has been prepared), and to modify the prices to suit each particular case. A little practice and judgment will enable this to be done with very considerable accuracy. The preparation of the schedule, itself a most valuable education in pricing, will now be considered. It may be said to consist in apportioning to the main items the value or values per unit of the subsidiary items to be included with it, and will entail the assignment of the proper fraction of lineal items to each superficial unit of main item, and of the proper fraction of superficial or lineal items to each cubic unit of main item. In the case of the walling this will be quite simple, because the same dimension applies both to walling, facings, and plastering, so that the three separate prices per foot super. have merely to be added together. In dealing with a floor, however, the case is very different, and whether it be decided to price this per foot or yard super., or per square, it will be usually much simpler to work it out for the larger area in the first instance. Taking a square of flooring, the price of any given thickness and description can be readily found from the average of recent contracts, or by analysis from the current prices of materials and labor. Now, a square of flooring consists of 100 ft. super. Assuming, then, a room 10 ft. by 10 ft., and, say, 11 in. by 2 in. joists are used, then ten joists will be required, each 10.9 ft. long,

which will equal 16 ft. 6 in. cube of fir framed in floors, the value of which must be added to that of a square of flooring. Twenty feet of 4½ in. by 3 in. wallplate will also be required; this will equal 1 ft. 11 in. cube of fir in plates and lintels, the value of which must also be added, besides 40 ft. run, or, to allow for door and fireplace, say 36 ft. run, of skirting, and, say, six mitres to skirting and four yards of paint. Then, if there be a ceiling under, there would be 100 ft., or, say, 11 yds. super., of lath, plaster, float-and-set ceiling, and twice distemper, and about 40 ft. run of cornice, with a minimum of four internal mitres—say six—to be added also. In this case, cubic, superficial, and lineal dimensions have all been apportioned to a square of the main item, and if the price per foot super. be required instead of per square, it can readily be found by dividing by 100. So in the case of windows and doors: take one window or one door of average size, add in its run of linings, architraves, and window-boards, and the value of hinges, locks, etc., and the super. of glass and painting, and you have the total value per door. Divide it by the number of feet super. in the door or window, and you have the total value per foot super. A very little practice will enable the estimator to apportion all these things mentally in less time than it takes to write it, and a most valuable system of estimating will have been acquired. The preparation of one standard average schedule on these lines is strongly urged, for its own as well as for its educational value.

To ascertain the price of roofing, including boarding and all timbering, etc., a similar method would be adopted; but it might be more convenient in the first instance to find the value of one complete bay, as this would contain one whole truss, if trusses there be. With regard to window and door openings, one often hears it asserted that the value of the deductions about equals the value of the windows; but it must be obvious that if this holds good for one thickness of wall it cannot hold good for any other. It is advisable to work out one or two examples in order to find what actual difference exists, and then a figure or figures may be arrived at which may be added or deducted for every opening, grouping the openings according to the thickness of the walls or any other condition affecting the price. The preparation of a schedule as suggested, and its subsequent use, will gradually suggest to the mind of the user many valuable hints and short cuts which can be acquired in no other way. There is no royal road to estimating, either approximate or otherwise, and the short cuts and quick methods can only be used intelligently and safely by the man who has discovered them for himself.

THE catalog on Tungsten Reflectors recently sent out by I. P. Frink, is an interesting proof of commercial alertness, for its contents deal with the new tungsten lamps and show a full grasp of the situation. These special reflectors embody all the essential conditions that are necessary in dealing with the new illuminant, and offer many practical ideas that will be promptly welcomed by architects and builders all over the country.

ISN'T it strange," mused the woman, "that so many different names should be applied to persons who patronize the different trades and professions. A lawyer has his clients, doctors and dentists have their patients, a merchant has his customers, an artist has his patrons. What," she added turning to the architect, "do they call the people who patronize you?"

"Victims," said the architect with suspicious spontaneity.

THE rebuilding of the Campanile at Venice has made rapid progress during the last twelve months, and it has now attained a height of 150 feet. By the end of 1909 the main portion of the tower will be finished, and the marble loggia which will surmount the tower will be begun.

This time ample precautions have been taken to insure the stability of the Campanile, all the bricks being chemically tested and subjected to high pressure before being used. The old pile work was in an excellent state of preservation.

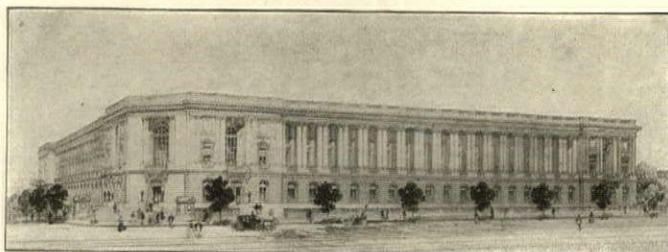
A gilded statue of the Virgin in terra cotta, which was a special object of veneration, and which was broken in more than 4,000 pieces in the falling of the tower, has been put together again with infinite patience by experts, only the little John the Baptist by her side being irretrievably lost. It was practically reduced to dust. The statue of the Virgin will occupy relatively its former position in Sansovino's famous loggiatta.

BOOK REVIEWS.

CRAFTSMAN HOMES. Gustav Stickley. 1909. Craftsman Publishing Co., New York. Cloth. \$2.00.

A new interest is being taken by men and women who are building homes, and publishers are pressed for good books on this particular subject. Perhaps no man in America has given so much thought and is more fitted to compile a book to meet such a call, and from an immense collection Mr. Stickley has selected wisely. The plates and plans furnish a vast variety of ideas for buildings and the text matter, written by best authorities, contains innumerable suggestions for arrangement, convenience and general equipment for homes that breathe comfort and peace. This book is acceptable to both owner and architect.

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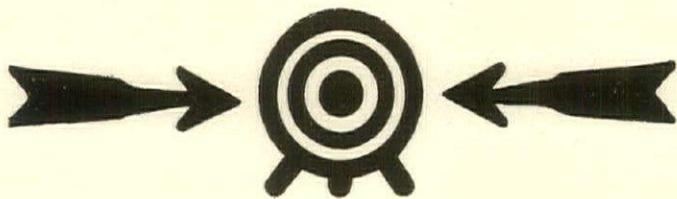


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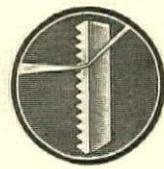
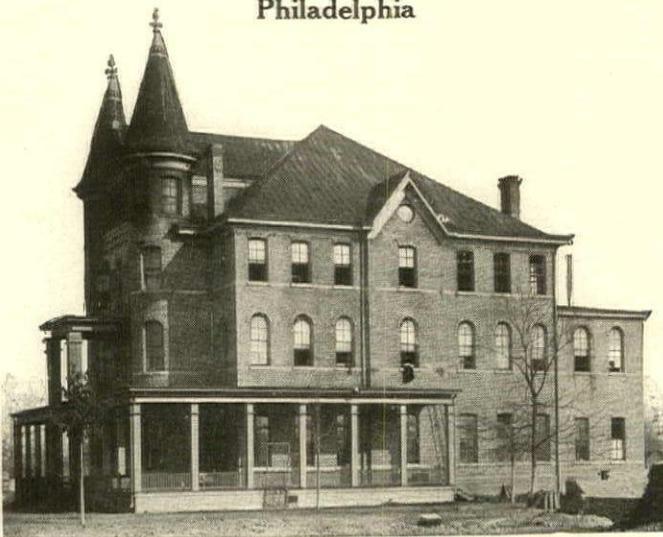
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ARCHITECTURE

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COMPETITION

The Robert Fulton Monument Association of No. 3 Park Row, New York City, announces a competition among the Architects of the United States for the purpose of securing designs for the memorial of Robert Fulton, costing \$2,500,000.00 and to be erected in Riverside Park in the City of New York.

Architects of experience and good standing are requested to apply to the Association for forms on which to make application for the competition program and permission to have their names entered as competitors.

ARCHITECTURAL CRITICISM.

THERE are presented in this number a photograph of the tower and three photographs of the interior of the new building of the Metropolitan Life Insurance Co., N. Le Brun & Sons, architects. (Plates lxxxi-lxxxiv). I suppose that the tower has been discussed as much as any building in New York, which is probably to the company, its *raison d'être*. Comparisons between it and the Singer tower are inevitable, and there seems to be no general consensus of opinion as to which is the better. I think most architects agree that the Singer tower is somewhat more cleverly conceived than this one, the vertical lines being much better emphasized, and the termination better handled, yet, as a serious piece of architecture, it seems too "stunty" for so tremendous an achievement. The tower of the Metropolitan building is immensely superior to the lower portion. One can never regret sufficiently the great amount of money lavished upon the small scaled ornamentation of the old building. I have been told that this was designed originally for terra cotta, and it seems too bad that that material was not used instead of the change made.

The tower is immensely impressive, seen from almost any point in New York or nearby towns, white against the blue sky, far more striking in color than the Singer tower, and perhaps somewhat better in silhouette. Its most notable defect is in the termination. At the point where the tower decreases in size it seems as if it might be slid up or down without marring the design. Some better connection would have been made between the upper and lower portions by means of buttresses or brackets, and had this been done it would have been greatly improved. But in the main, both in silhouette and in detail the effect is pleasing. It needs some sort of cornice other than the one at the top of the arcade, placed, I should think, where the balconies come. These balconies were probably designed to form a cornice, and they do accomplish that result when the building is seen squarely, although seen at an angle, as in this photograph, their effect is diminished. Perhaps the most charming single portion of the building is the pitched roof which worked out in diamond pattern marble, is extremely excellent.

I have found that every architect thinks that if he could have had one of the towers to do, he is perfectly sure that he could have done better than their designers, yet when he is set to work to sketch his scheme out, he finds that his treatment is no better, or not as good as those we have. From my own point of view, some such treatment as Eidlitz' "Times" tower, or Cass Gilbert's West Street building would perhaps have been better, although the architects of both towers were tied down to a single style by the important and expensive old work already built, in the one case, French, and in the other, Italian Renaissance.

The directors' room of the Metropolitan, which is illustrated here, is enriched with a wealth of carving, and a golden ceiling. It inevitably suggests that the directors of the company might better have used the money in giving lower premium rates than in building a room like this, so seldom used, and at such great cost. It is very elaborate and somewhat garish, a typical money-temple which will be less and less seen in the future. The staircases and elevator enclosures illustrate details familiar to every architect, and are remarkable only for the beauty of the marbles employed. While they are excellent both in design and in

mechanical execution they are somewhat cramped and difficult of access, faults probably due to the construction of the building at various times without any scheme at the start. This condition has doubtless militated against the general success of the design for while during its progress the character of the design has been much improved such unfortunate features as the termination of the arcade against the back of the stairway were inevitable. In spite of minor defects, the building makes a worthy home for a great insurance company and it is in some respects, and of these, the tower first, it is the sort of monument a man can be proud to leave behind him.

THIS curious and interesting Salesian Church and Institute at Bologna, Italy (plates lxxviii and lxxix) is thoroughly in accord with Italian architecture and widely different from our ideas. The architect is Edoard Collamarini. The whole scheme of the design is peculiar. The crowning feature, a dome with apses, would lead one to expect a low building below, in place of which we find a building extremely high for its width, and of a character which suggests a gable rather than a dome. Without a plan, it is difficult to perceive the logic of the superstructure, although there may be some excellent reason for its use. In spite of this apparent anachronism the whole composition has resulted in a building stately and splendid, and at the same time with the free and almost playful treatment which has marked the Italian attitude towards church work for a thousand years.

The building could hardly have been designed by other than Italian hands, yet the use of old motifs in a daring and original manner is seen to be possible in Italy as well as here. It is in Italy that the Art Nouveau has progressed furthest, and much further, in fact, than is at all desirable from our point of view, nor is it likely that this extreme Art Nouveau treatment is at all permanent. While there is no single point in this building where one could lay a finger and confidently assert that here is the result of the Art Nouveau influence, the whole atmosphere of the design is distinctly modern, and although most of its features have become almost time-worn with service, they are handled with that singular mixture of freedom and deference to tradition that is characteristic of Italian architecture in every period.

Donn Barber's Lotus Club is, up to the present time, the most remarkable example of decorative brick work in this country, but in this church its use has been carried even further, and brick cement panels, with small portions of stone, comprise the range of materials. The most complicated and fantastic forms are here worked out in brick at an expense which must greatly exceed their cost in stone, and with a result that is incomparably more interesting.

The little arches of the triforium gallery carried across the façade have trefoil arches with the bricks worked to a point, and above this are the interlaced circles of Venetian work again formed of brick. While I am not prepared to assert that this was never done in Mediæval times, it was certainly not a common method of procedure, and is, from a mechanical point of view, very difficult. In the cornice, small modillions of stone are introduced supporting a colored cement cymatium. Aside from this there is no cornice. The molded brick work around the triple windows on the sides and front is immensely interesting, and the great richness of surface produced by the combination of the brick and the mortar joints with stone insets, is worth remembering.

While the building as a whole will probably not appeal to the American architect, it is unquestionably one of the most interesting pieces of design which has appeared for a long time.

PHOTOGRAPHS of a country house by Horace Trumbauer at Landsdowne, Pa. (plate lxxvii and pages 136 and 137) show an altogether delightful Colonial house of the type which most architects, as they grow older, and more conservative, come to regard as the best for use for American country work. It is not necessary to select out and fit together Colonial motifs and to search for detail to copy, since this would never lead to any real advance in design. But to grasp so thoroughly old ideas and to infuse new life into them! That is real design, and such work as this seems to be about the highest standard which good taste and skillful design can furnish. Charles A. Platt has led the way in this direction, and even in his work there is hardly a single house more charming than this one.

It is essentially a home for a gentleman, well bred, well educated, and refined. There is no "splurge," no striving for effect, no vulgar seeking for admiration. The house was evidently built for the owner's use, fitted to his needs, and designed for his comfort. It is an example which can teach as no preaching could do, that quiet and simplicity must be sought after in a successful country house.

THE club houses of Princeton have been, many of them, most delightful pieces of architecture, the Ivy Club, by Cope and Stewardson, and the Cap and Gown Club, by R. C. Gildersleeve being especially note-worthy examples of Americanized English architecture and thoroughly in harmony with the general type of design of the Princeton buildings.

For a club named the Colonial Club (plate lxxvi), the Colonial type of architecture was inevitable, and the building here illustrated is designed with this purpose in mind. Francis G. Stewart is the architect. It suggests dignified rooms on the first floor, with bedrooms of secondary importance above, and with the portico in front is a sincere and dignified piece of design, although entirely lacking in inspiration. While in a general way Colonial, it has none of those charming bits of detail which make Colonial architecture. The columns and entablature seem to have been taken right from Vignola. Vignola, although excellent, is dry. The dormers while well placed and of good proportion are without any especial interest, and the balustrade in the valleys is both ill placed and overscaled. The garlands in the pediment are entirely inadequate to fill the space. As a whole the building, while good in mass and of a simple and dignified character, shows the work of hands without appreciation of, or sympathy with, the subtle spirit of the old work, nor does it show any great strength or originality of purpose.

NEW York City houses always furnish a difficult problem for the architect. Most owners have, at the present time, a "period bug." They want one room Louis XVI, another "Norman Gothic," and perhaps a third Chinese or some other unheard of architecture, and the architect has either to dig around in his books and pick them out, without any real sympathy with the styles and interest in using them, or lose the job.

Another difficulty of a New York house is that the long

sides of the rooms are blank, most of the rooms having their length with the length of the house, and the windows on the shorter sides of the rooms. This necessitates some treatment with panels or covering with pictures to make the room interesting and livable.

In this issue we publish some interiors of a residence by Edward I. Shire, architect, at 121 East 73d Street, New York (double plate lxxx). The hall of this house has the entire front of glass with just enough iron work to relieve its plainness. The panelled sides and delightfully executed doorways and heads over them are both plain and quiet. The single discordant note is in the mantel which has been furnished with brackets big enough to hold a bridge. Of the other rooms, the most interesting is the library. It is a cross between Flamboyant Gothic and early Renaissance, a mixture common enough in the time of Frances I, and here as well done as at that period. The detail is excellent, and the ceiling and bookcases both exceptionally good. The sash bars of the glass doors to the bookcases are especially pleasing. Altogether these interiors show a typical New York house of the better class, as executed by a competent designer.

THE POWERS OF ARCHITECTS IN BUILDING OPERATIONS.

On July 13th last, the Appellate Division of the New York Supreme Court, First Department, handed down a decision involving the novel point of the conclusiveness of an architect's certificate in a building operation. The following article is written by Edward W. Harris, Esq., of the New York bar, whose law firm, Harris & Harris, represented the Oxford Realty Company in the litigation.—*Editor's Note.*

THE Appellate Division of the Supreme Court of the State of New York in the case of Robert J. Mahoney vs. The Oxford Realty Company has just handed down a decision of great interest and importance to the architects of this country as well as to the public generally. The decision is of particular interest, for the reason that in this case for the first time the Court has formally recognized and defined the judicial powers of an architect supervising the construction of a building erected by a contractor who has made with the owner a contract in the form adopted and recommended for general use by the American Institute of Architects and the National Association of Builders. This form of contract has been in use for many years and contains the following provision:

"Article V. Should the contractor at any time refuse or neglect to supply a sufficiency of properly skilled workmen, or of materials of the proper quality, or fail in any respect to prosecute the work with promptness and diligence, or fail in the performance of any of the agreements herein contained, such refusal, neglect or failure being certified by the architects, the owner shall be at liberty, after three (3) days' written notice to the contractor, to provide any such labor or materials, and to deduct the cost thereof from any money then due or thereafter to become due to the contractor under this contract; and if the architects shall certify that such refusal, neglect or failure is sufficient ground for such action, the owner shall also be at liberty to terminate the employment of the contractor for the said work and to enter upon the premises and take possession, for the purpose of completing the work included under this contract, of all materials, tools and appliances thereon, and to employ any other person or persons to finish the work, and to provide the materials therefor; and in case of such discontinuance

of the employment of the contractor he shall not be entitled to receive any further payment under this contract until the said work shall be wholly finished, at which time, if the unpaid balance of the amount to be paid under this contract shall exceed the expense incurred by the owner in finishing the work, such excess shall be paid by the owner to the contractor; but if such expense shall exceed such unpaid balance, the contractor shall pay the difference to the owner. The expense incurred by the owner, as herein provided, either for furnishing materials or for finishing the work, and any damage incurred through such default, shall be audited and certified by the architects, whose certificate thereof shall be conclusive upon the parties."

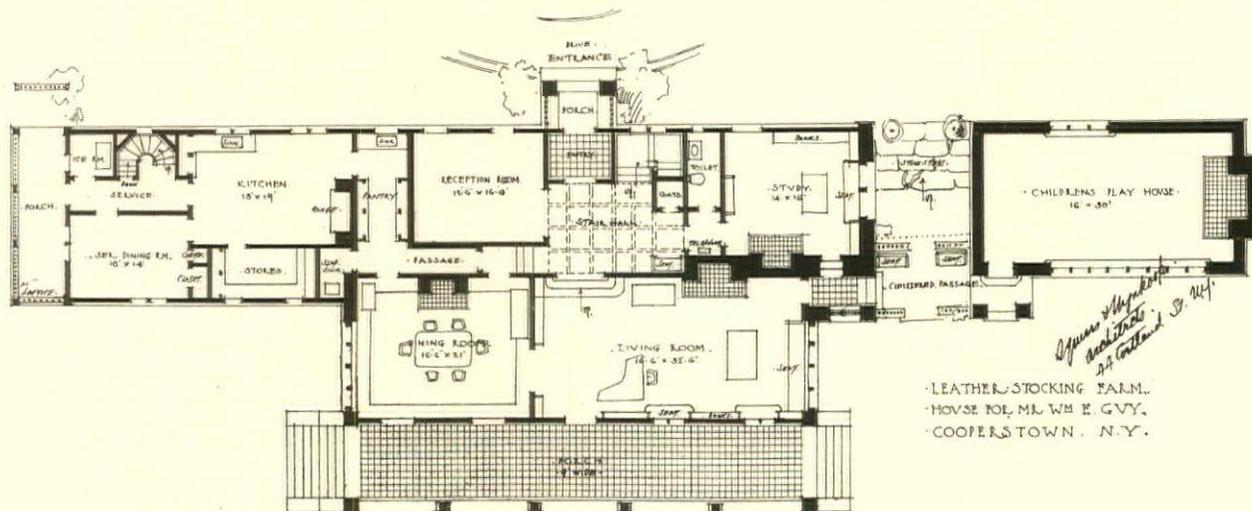
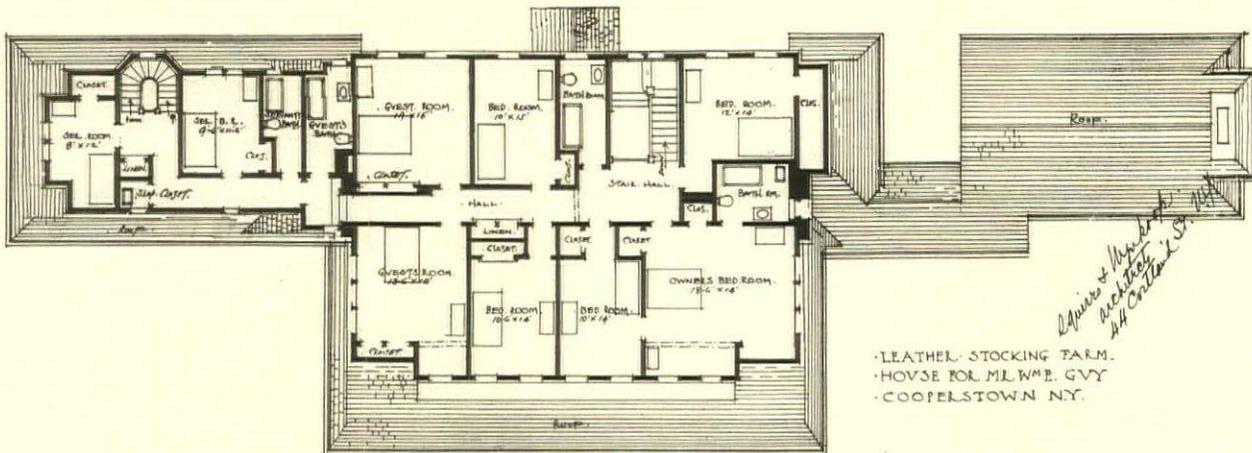
The particular question presented to the Appellate Division was this: Is the certificate of the architect authorizing the owner to discharge the contractor a complete protection to the owner, or can the contractor, notwithstanding such certificate has been given, bring suit against the owner alleging he was unlawfully discharged and demanding damages and then try before the jury in such action for damages the question already passed upon and certified to by the architects, namely, whether the contractor was proceeding with proper diligence or doing the right kind of work?

The facts leading up to the litigation were as follows: The Oxford Realty Company, which was the owner of a plot of ground on 55th Street between Fifth and Sixth Avenues, employed the firm of Israels & Harder as architects to prepare the plans and specifications for an eleven-story hotel to be erected on this plot. Messrs. Israels & Harder were also employed to supervise the construction of the building which, when completed, became known as the Hotel Devon. The Oxford Realty Company made a contract with Mr. Robert J. Mahoney according to which he agreed to do all the plastering in the building and all the mason work above the foundations for the sum of \$46,000. The form of contract was that called the "Uniform Contract" adopted and recommended for general use by the American Institute of Architects and the National Association of Builders and the contract contained the above quoted provision for the termination of the employment of the contractor.

Mr. Mahoney began work on May 3, 1904, and proceeded with commendable diligence until about the middle of August when he was unable to continue with his plastering by reason of a lockout of the union plasterers by the Employers Association to which Mr. Mahoney belonged and which forbade its members to employ union plasterers. The union plasterers in return declared a strike against the members of the Employers Association. The inability of Mr. Mahoney to get skilled labor, which was almost entirely to be found in the plastering unions, greatly embarrassed the progress of his work, many days there being no plasterers at all at work. Still Mr. Mahoney made a vigorous effort to cope with the situation, endeavoring to get men from out of town. But, despite his earnest efforts he was successful in securing but a few men and those he did have on the job the architects considered did not possess sufficient skill. The plastering job on the building having thus proceeded in this unsatisfactory way from the middle of August to October 3, on the latter date the architect sent to the Oxford Realty Company the following certificate:

"In accordance with the provisions of Article V. of

(Continued page 133)



(Continued from page 131)

your contract, under date of October 26, 1903, with Mr. Robert J. Mahoney, we hereby certify that the said Robert J. Mahoney has failed to supply a sufficiency of properly skilled workmen and materials on various parts of the work upon which he has been ordered to proceed, and particularly on the plastering, and we, therefore, recommend that the enclosed letter be sent to the said Robert J. Mahoney, as provided for in said Article V."

On the same day a formal letter which the architect had enclosed for the signature of the company was served on Mr. Mahoney. The letter was a formal notice in accordance with Article V. of the contract, to the effect that the architects had certified that Mr. Mahoney had failed to supply a sufficiency of properly skilled workmen and notified him that unless he should supply sufficient workmen of proper skill within three days from date of the letter the Oxford Realty Company would have the work done by other parties and charged to Mr. Mahoney's account, as provided in Article V. of the contract. Mr. Mahoney, however, was unable, in the architects' opinion, to meet the requirements of the situation. The required number of men were not put on the job and consequently, on the 10th day of October, the architects gave the following certificate to the Oxford Realty Company:

"In accordance with the provisions of Article V. of your contract, under date of October 26, 1903, with Robert J. Mahoney, we hereby certify that said Robert J. Mahoney has failed to supply a sufficiency of properly skilled workmen and materials on the work called for under the above contract, upon which he has been ordered to proceed by repeated notices duly served upon him in accordance with the contract, and you are now, therefore, warranted in terminating the employment of said Robert J. Mahoney as the contractor for the work and materials mentioned in the contract, and yourself to enter upon the premises and take possession for the purpose of completing the work and to employ any other person or persons to finish the same and to provide the materials therefor."

On the following day the Oxford Realty Company served on Mr. Mahoney a formal notice reciting the architects' certificate terminating Mr. Mahoney's employment and stating that the Oxford Realty Company had entered upon the premises for the purpose of completing the work in accordance with Article V. of the contract. The Oxford Realty Company then proceeded to finish the work. The cost of completion was \$15,150 which was certified to and audited by the architects. Mr. Mahoney had been paid, previous to his discharge, \$30,000. These two sums, aggregating \$45,150, were deducted from \$46,000, the contract price, leaving \$850 which the Oxford Realty Company stood ready to pay Mr. Mahoney.

Mr. Mahoney, however, naturally did not take the same view of the situation as the owners. He promptly brought suit against the Oxford Realty Company declaring that he had proceeded with his work with proper diligence and that he had been unlawfully discharged and demanded damages.

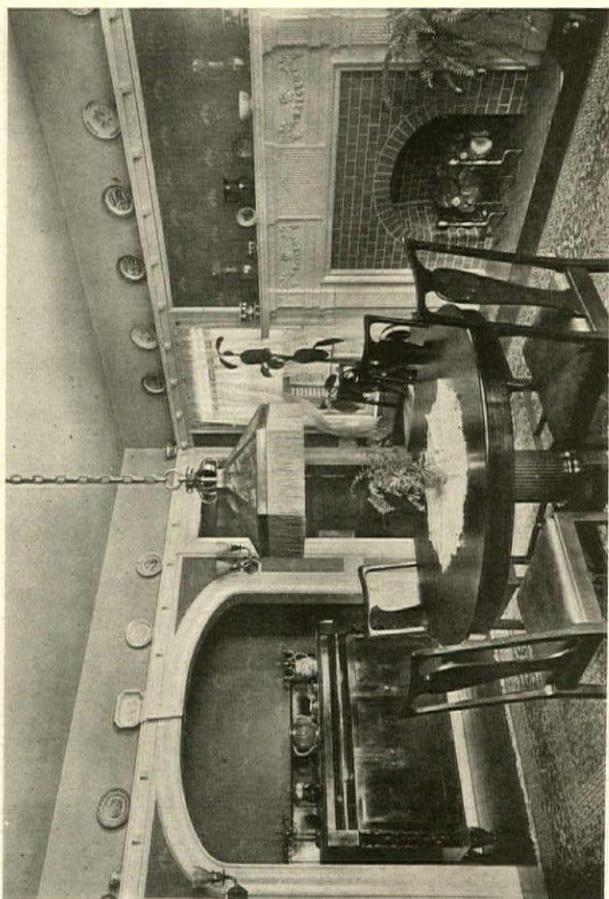
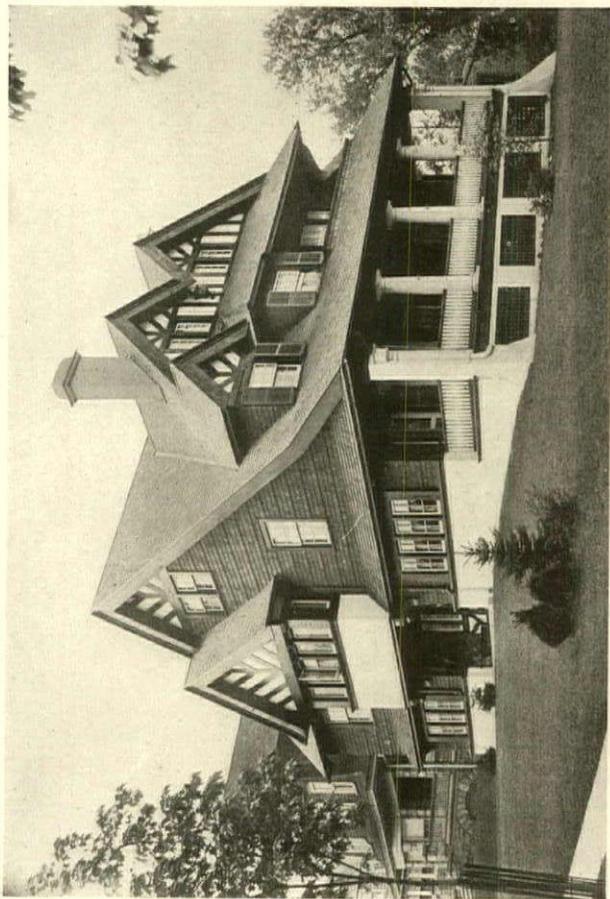
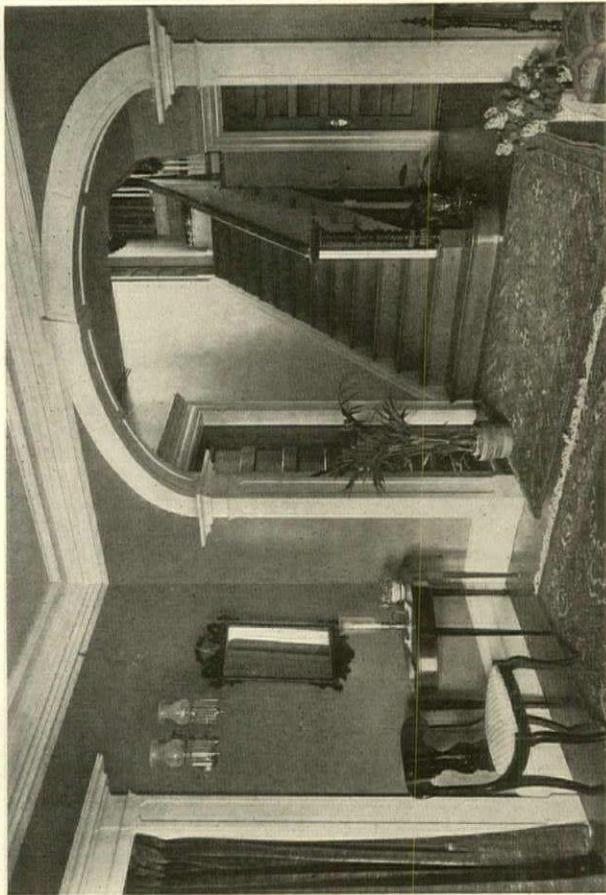
The case was tried before Justice Platzek and a jury. The trial Justice interpreted the contract as meaning that the architects were not the sole and final judges of whether the contractor had done his work with proper diligence or done the right kind of work, but that, notwithstanding the certificates of these architects, these questions could be submitted

to the jury and tried anew. The jury brought in the verdict for the amount the plaintiff asked.

The Oxford Realty Company immediately took an appeal to the Appellate Division of the Supreme Court through their attorneys Harris & Harris. On the argument of the appeal Mr. Mahoney's counsel contended that Article V. of the contract plainly provides that two things must exist to justify the defendant in terminating the employment of the plaintiff under the contract: (1) There must be a refusal or neglect of the plaintiff to supply a sufficiency of properly skilled workmen or of materials of the proper quality or a failure to prosecute the work or to perform agreements of the contract; and (2) There must be a certificate by the architect that such refusal, neglect or failure is sufficient ground for such action, *i. e.*, the termination of the employment, and it must appear that in giving this certificate the architect did not act arbitrarily and unreasonably. There is not one word to suggest or from which it can be implied that the certificate of the architect determines whether there has been a refusal or neglect or failure by the plaintiff, nor one word to suggest that if the architects certify to such refusal, neglect or failure that their certificate is conclusive or binding. The contract plainly provides that the fact of the refusal, neglect or failure by the plaintiff or contractor must exist, and that even after the existence of such refusal, neglect or failure the defendant still was obliged to have the certificate of the architect to justify it in terminating the employment. It is not presumed that the certificate of an architect is conclusive and binding upon the contracting parties unless the contract so plainly provides. To say that this plaintiff was bound conclusively and finally by the certificate as to his prosecution of the work and the notice of the defendant would be not only to do violence to the plain language of the contract, but to make him a party to an engagement which he never intended to assent. Mr. Mahoney's counsel also alleged that the architects were the agents of the Oxford Realty Company for the construction of the building and in all matters relating thereto. The contract is, therefore, to be construed rather against the defendant than in its favor. The first part of Article V., the only part of the contract relating to the termination of the employment of the plaintiff, cannot be tortured into a construction that the certifying by the architects to the refusal, neglect or failure of the plaintiff to proceed was conclusive and binding. It is apparent from the terms of the contract that the refusal, neglect or failure must exist as a condition precedent to any authority of the architects to certify, and then may be certified, and it is impossible to read into the contract a construction that the certifying makes the fact. This was clearly a question of fact for the jury. By the contract the parties had not chosen any other person to determine the existence of the fact of the failure, neglect or refusal of the plaintiff, and consequently, the jury was the proper tribunal to pass upon that question. Such was the argument of the counsel for the contractor.

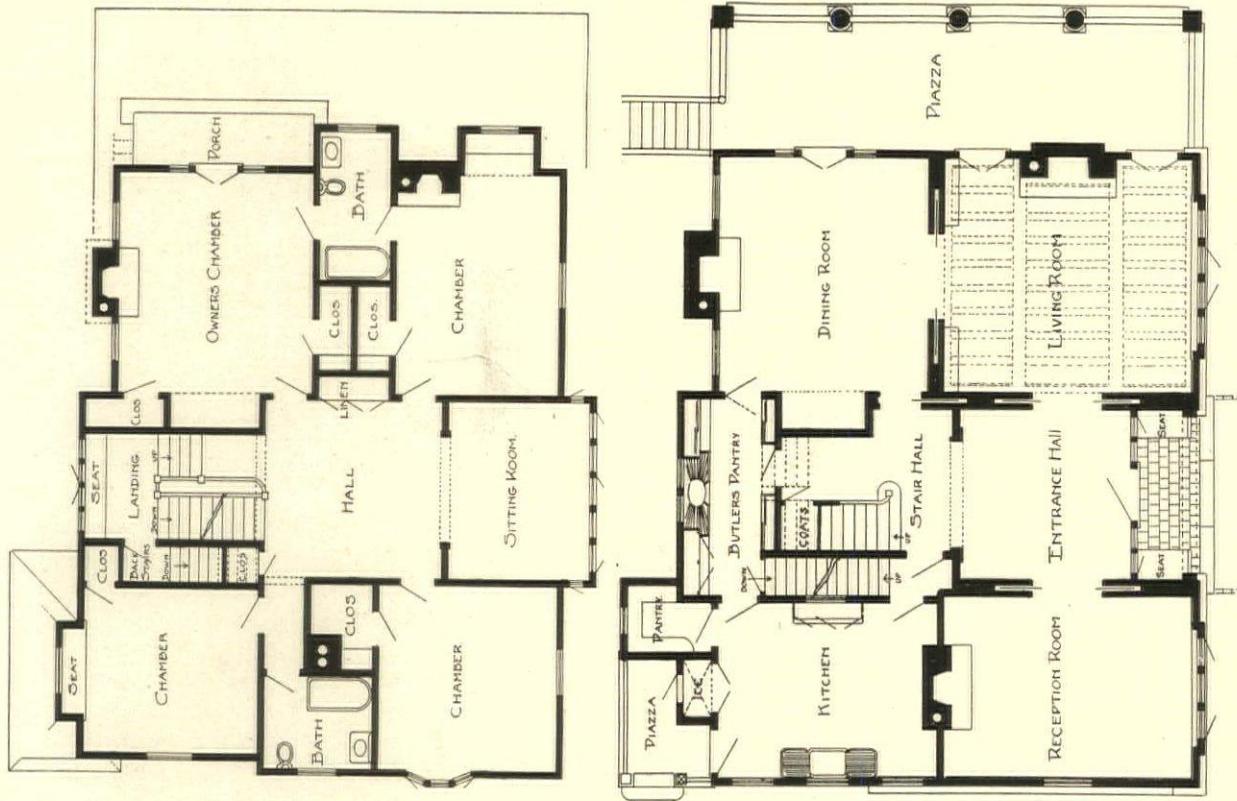
On the other hand the counsel for the owner contended that it had complied with the terms of the contract in terminating the employment of the contractor. The Court erred in declaring that the right of the defendant to terminate the employment of the contractor was a question of fact for the jury. The Court tried the case on the erroneous theory that it was a question of fact for the jury to decide whether the owner had the right to terminate the contractor's employment

(Continued page 141)



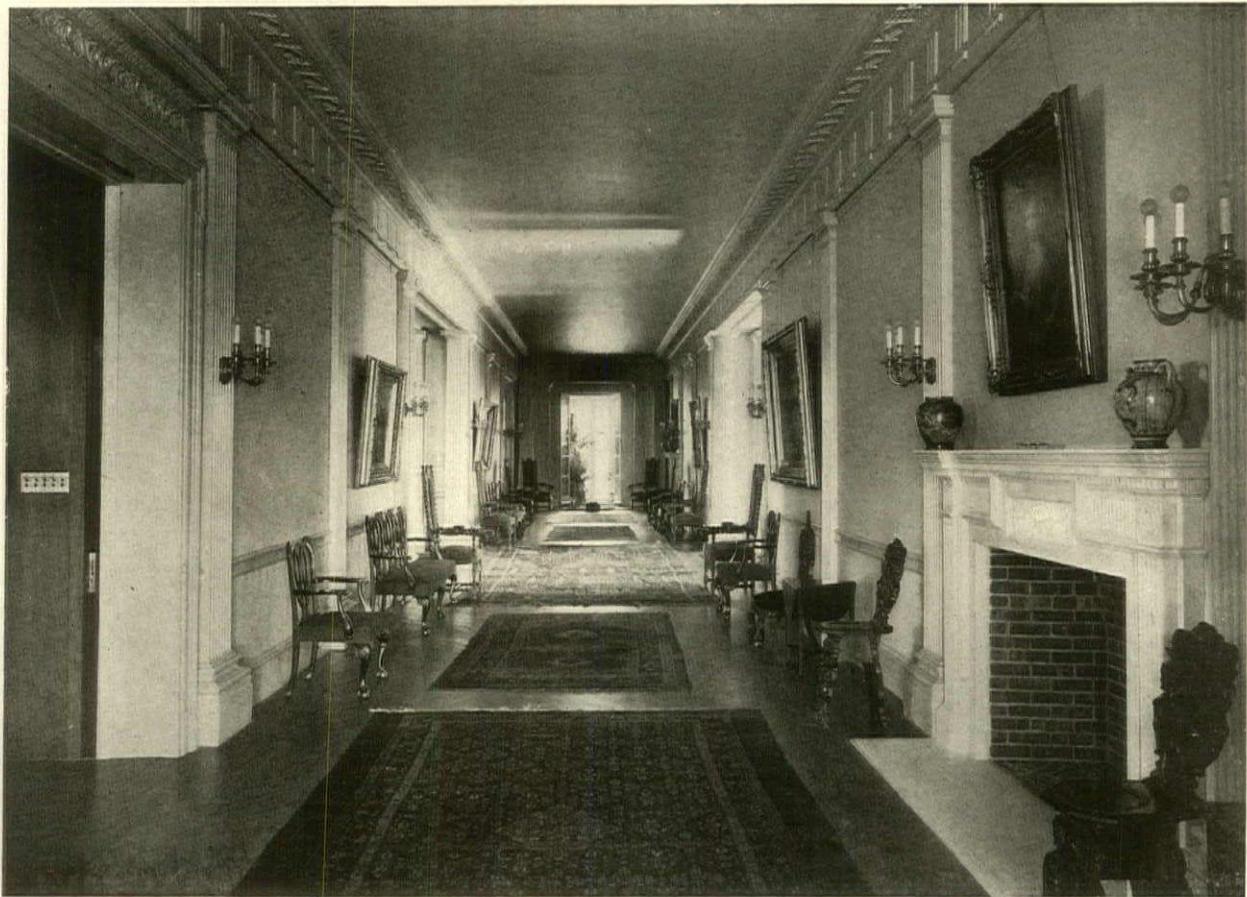
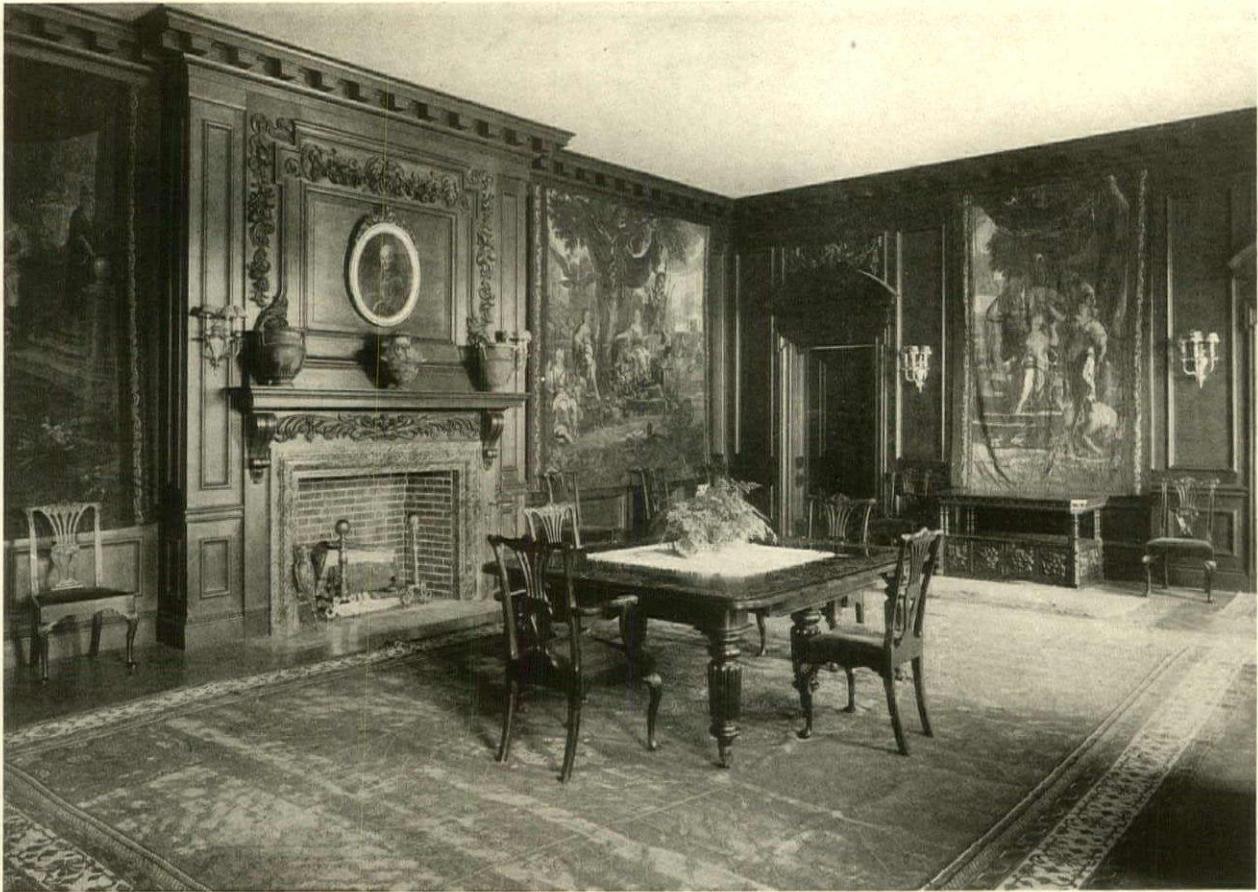
G. Howard Chamberlin, Architect.

EXTERIOR AND INTERIORS, RESIDENCE, A. F. DENNISTON, YONKERS, N. Y.



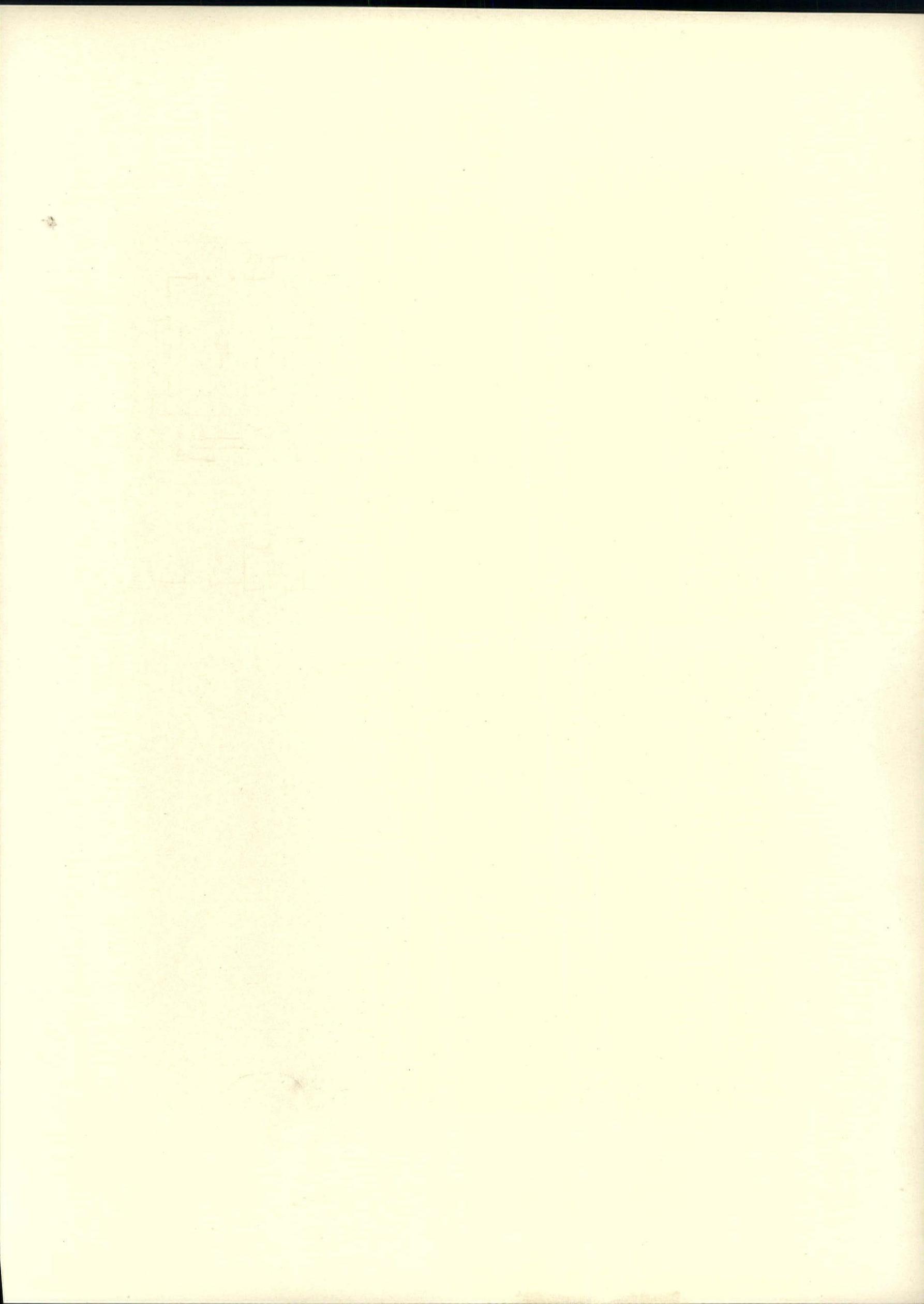
G. Howard Chamberlin, Architect.

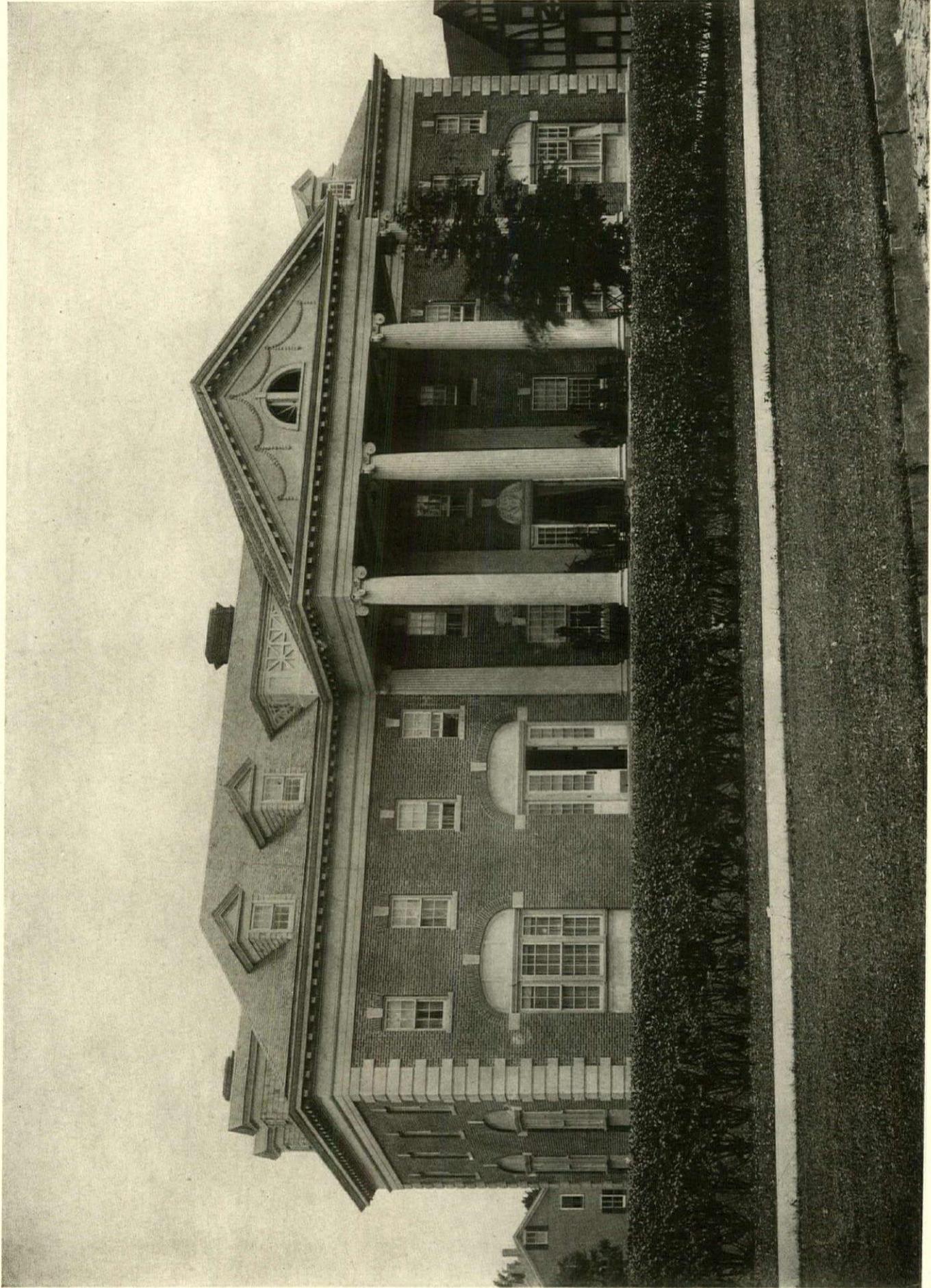
DETAIL AND PLANS, RESIDENCE, A. F. DENNISTON, YONKERS, N. Y.



INTERIORS, COUNTRY HOUSE, EDGAR T. SCOTT, LANSDOWNE, PA. (See Plate LXXVII).

Horace Trumbauer, Architect.



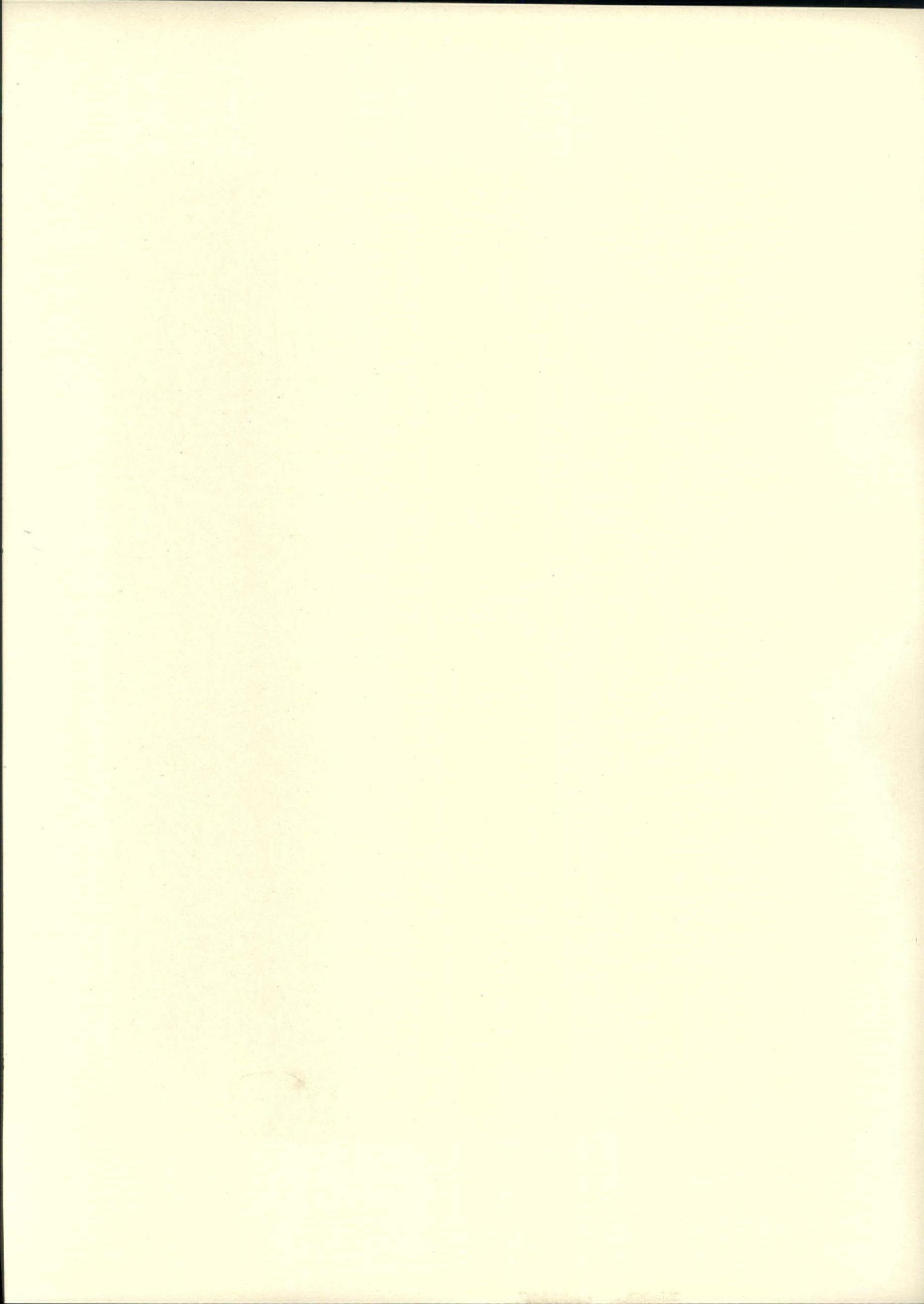


COLONIAL CLUB, PRINCETON, N. J.

Kinnear Pressed Radiators.

Russwin Hardware.

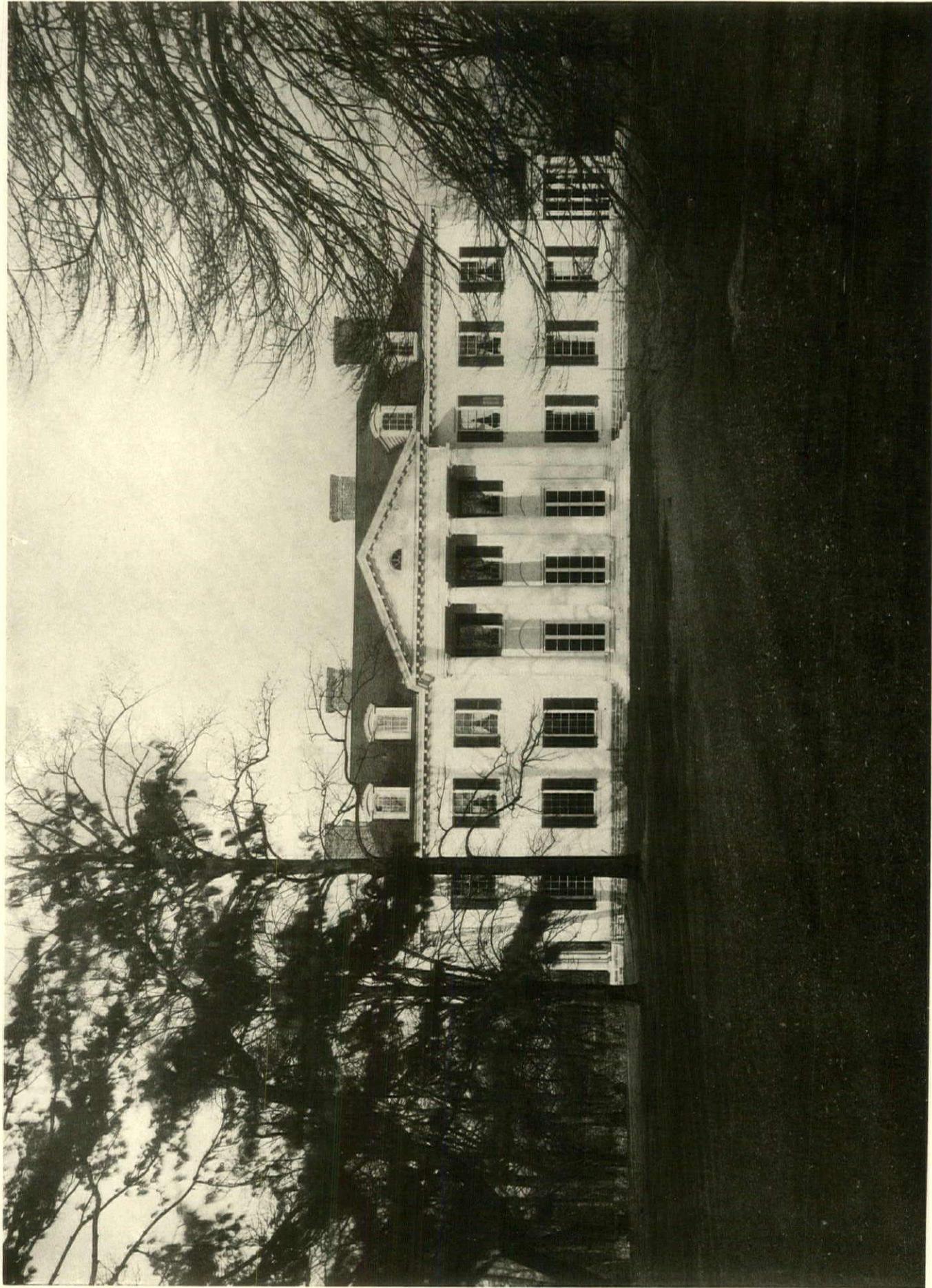
FRANCIS G. STEWART, ARCHITECT.



SEPTEMBER, 1909.

ARCHITECTURE

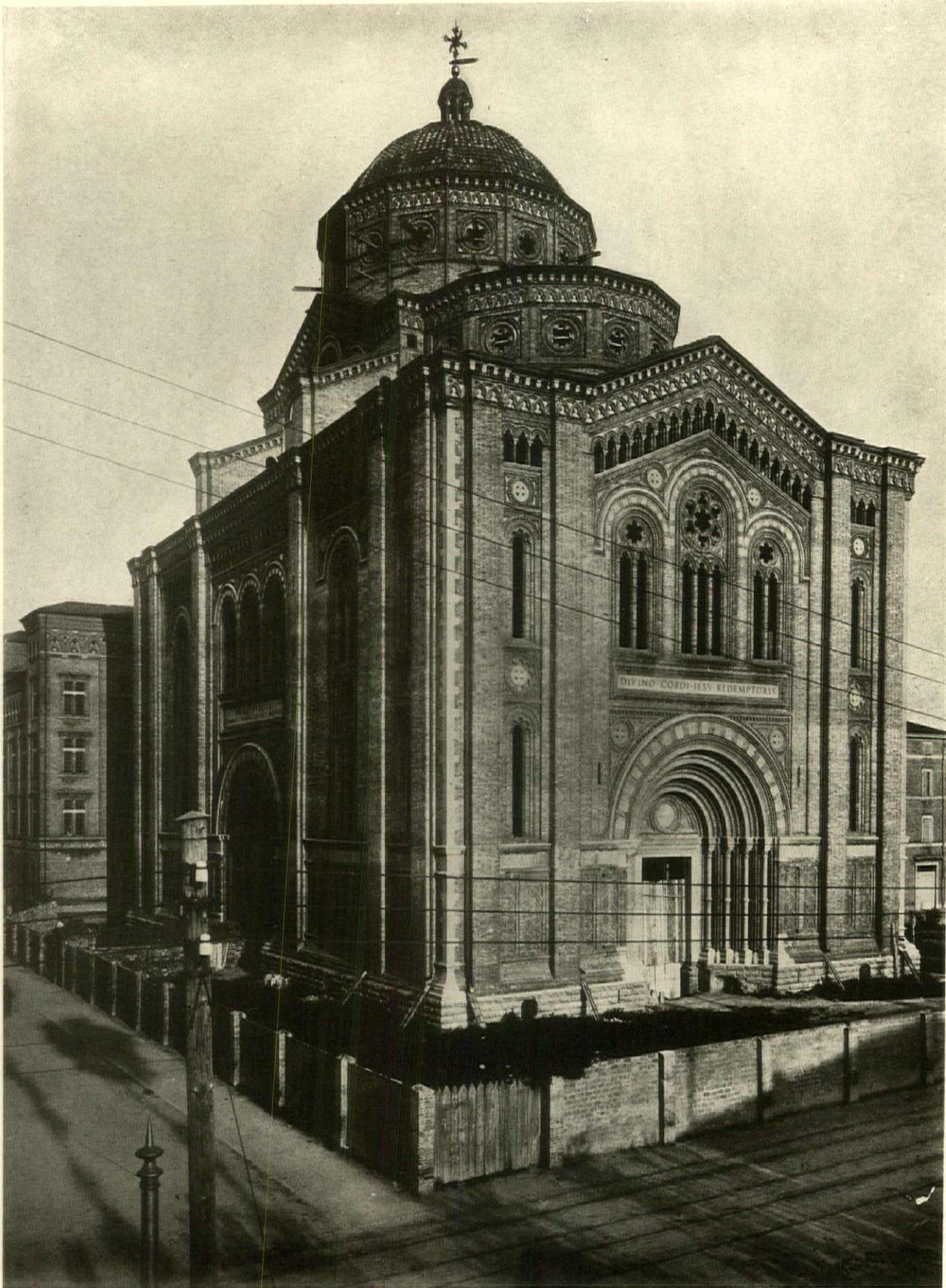
PLATE LXXVII.



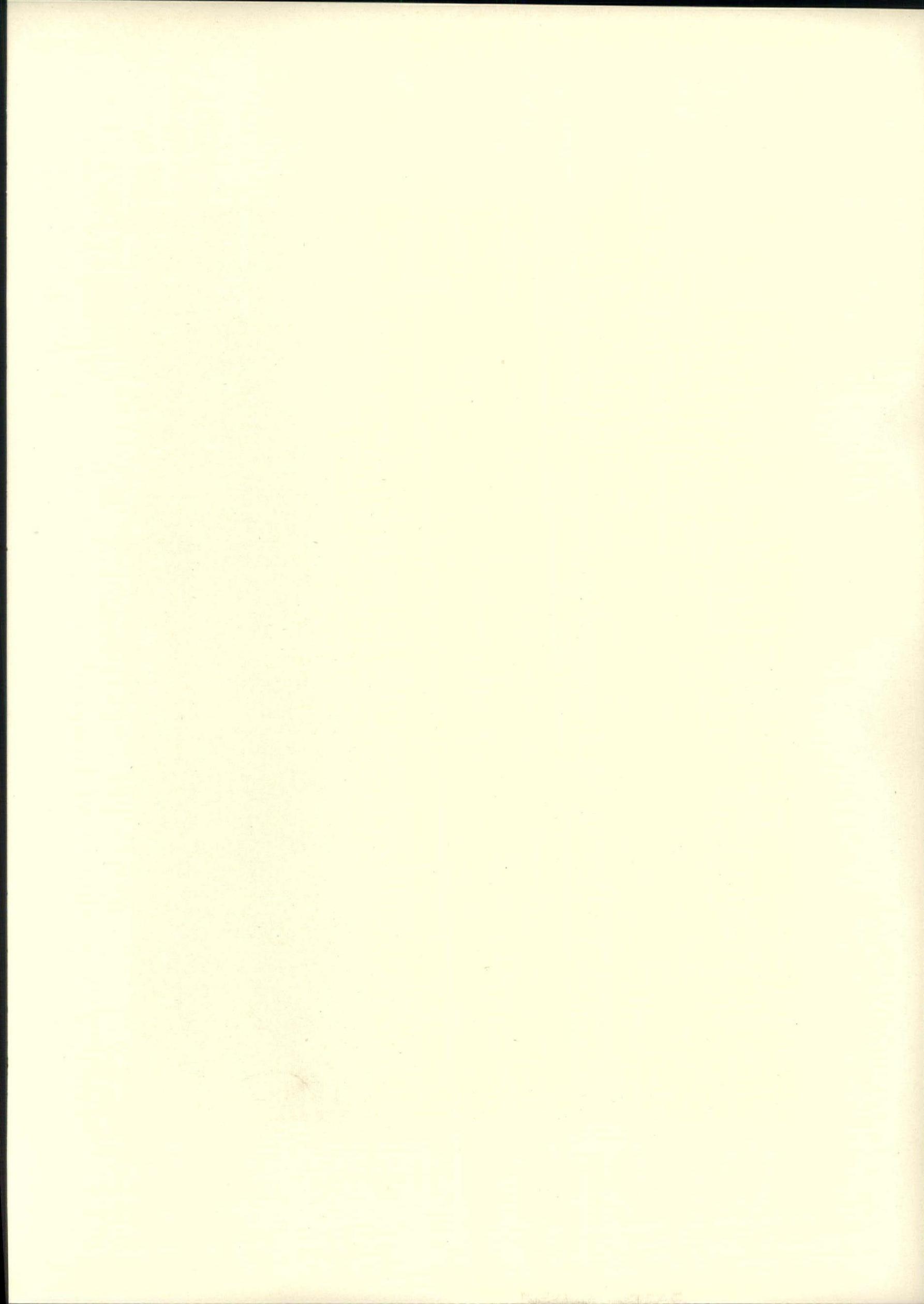
COUNTRY HOUSE, EDGAR T. SCOTT, LANSDOWNE, PA.

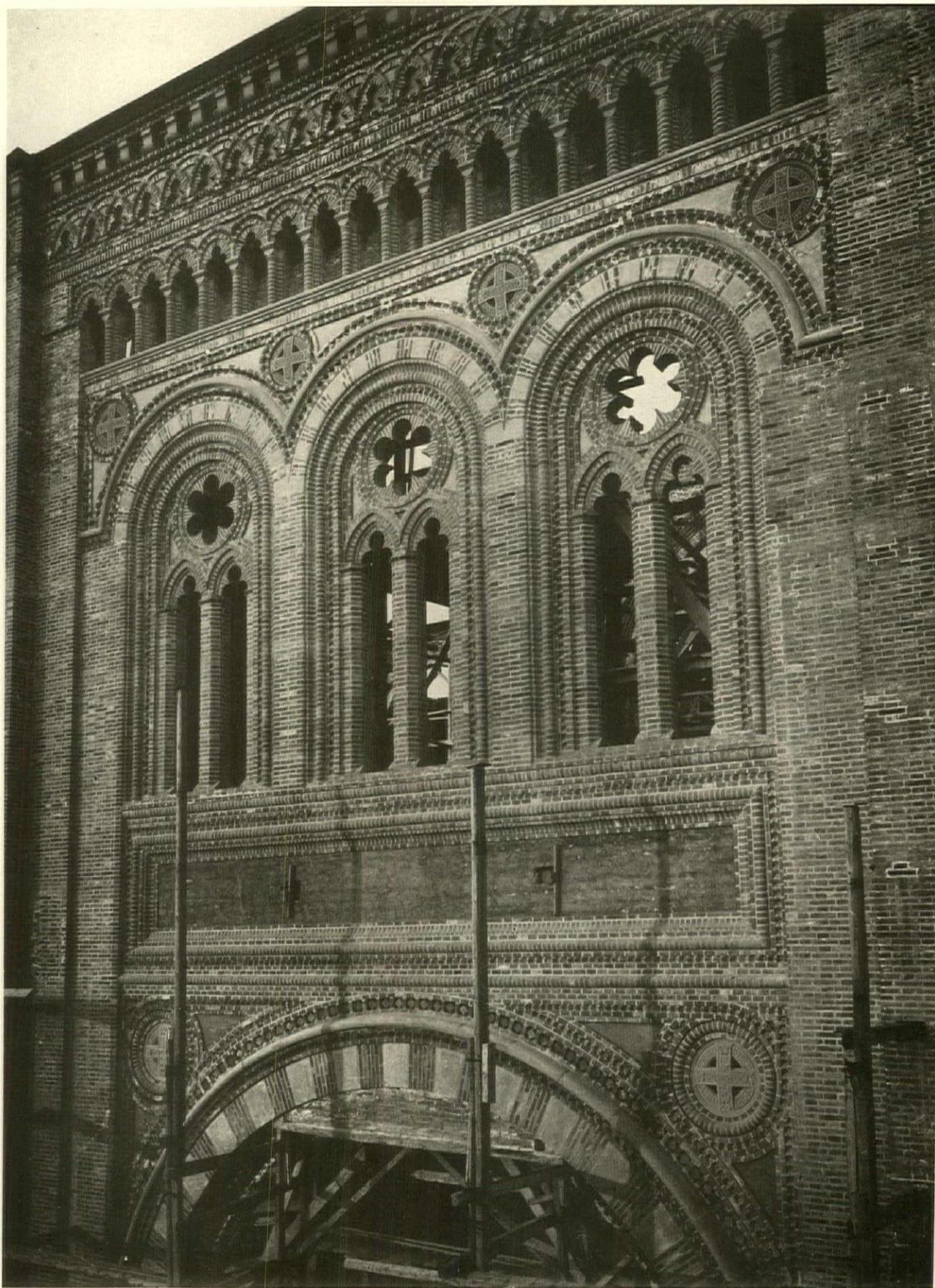
HORACE TRUMBAUER, ARCHITECT.





SALESIAN CHURCH AND INSTITUTE, BOLOGNA, ITALY. (Courtesy, W. W. Kent). EDOARDO COLLAMARINI, ARCHITECT.



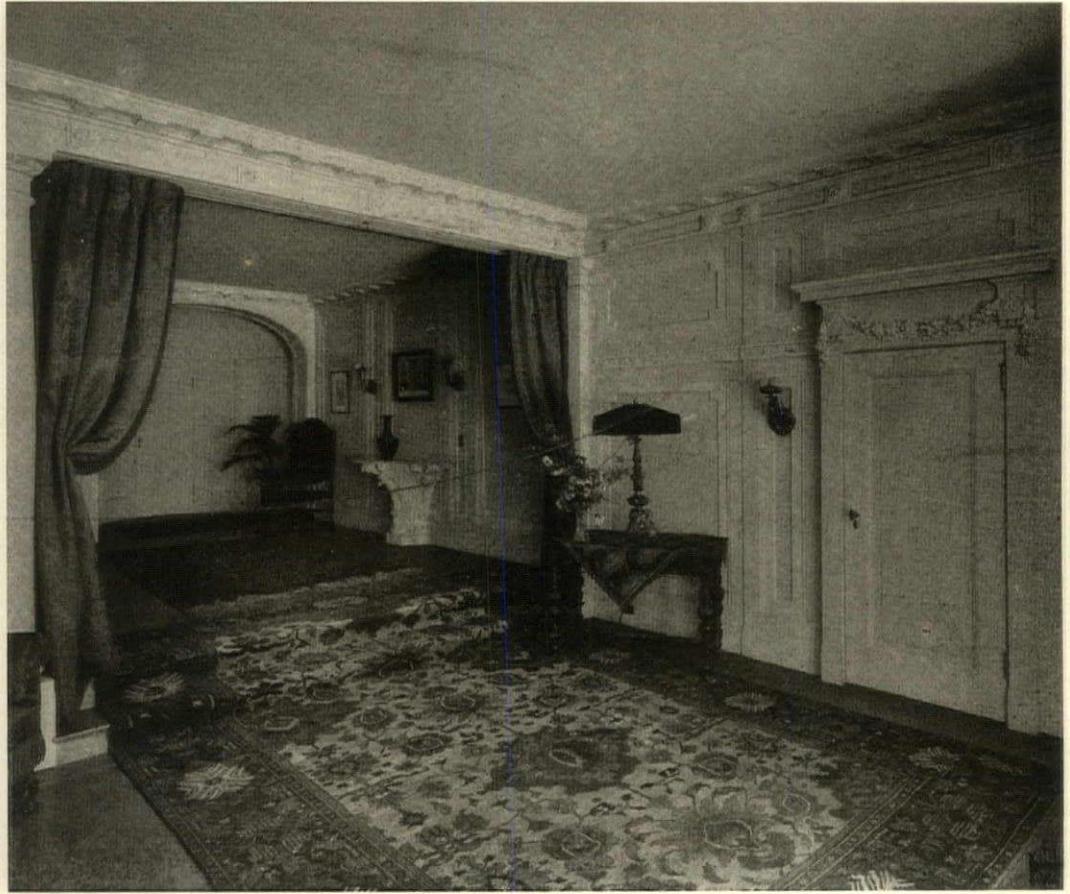
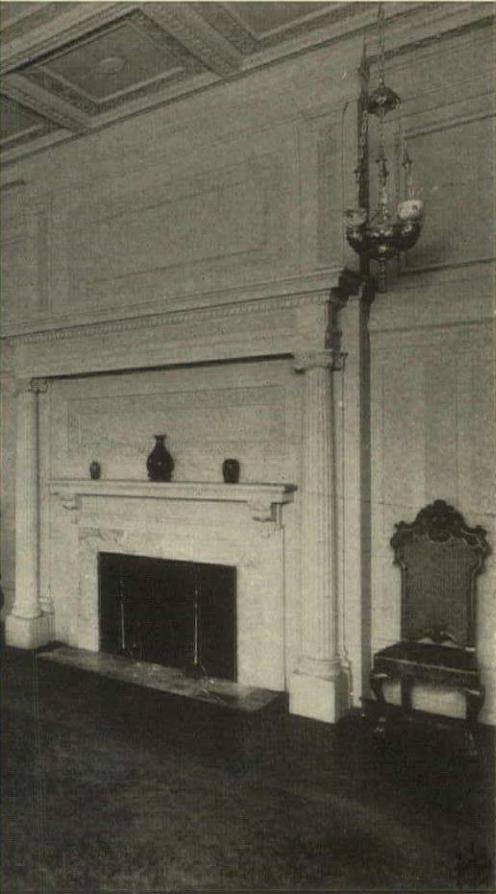


SALESIAN CHURCH AND INSTITUTE, BOLOGNA, ITALY. (Courtesy, W. W. Kent). EDOARDO COLLAMARINI, ARCHITECT.





INTERIORS, RESIDENCE, 121 EAST 73d ST., NEW YORK.







METROPOLITAN LIFE TOWER, NEW YORK.

Otis Elevators.

Self Winding Clock Co. Tower Clock.

American Radiators.

N. LE BRUN & SONS, ARCHITECTS. Wurts Bros. Photo.

Yale & Towne Hardware.

Hedden Construction Co., Builders.





ENTRANCE HALL, METROPOLITAN LIFE TOWER, NEW YORK.

N. LE BRUN & SONS, ARCHITECTS. Wurts Bros. Photo.

Bronze Work executed by the Gorham Co.





HALLWAY, METROPOLITAN LIFE TOWER, NEW YORK.

N. LE BRUN & SONS, ARCHITECTS. Wurts Bros. Photo.
Bronze Work executed by the Gorham Co.

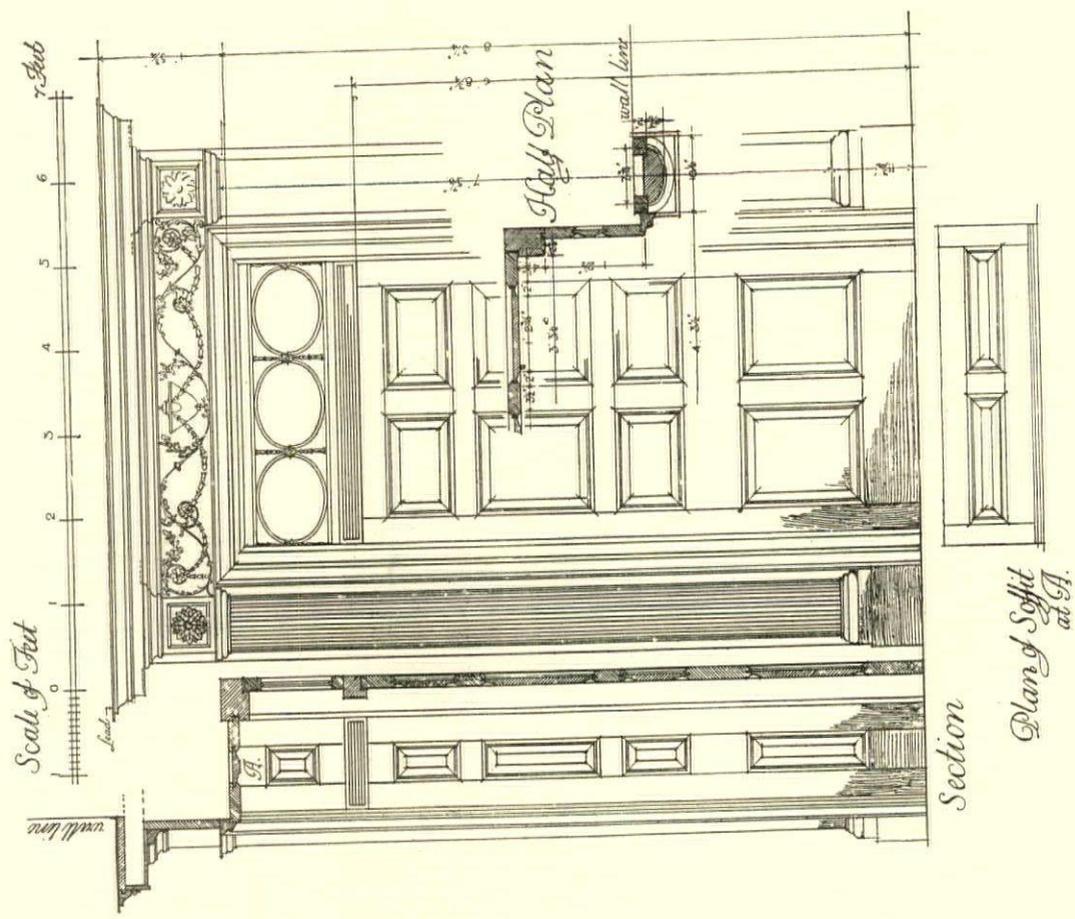




PRESIDENT'S ROOM, METROPOLITAN LIFE INSURANCE CO., NEW YORK.

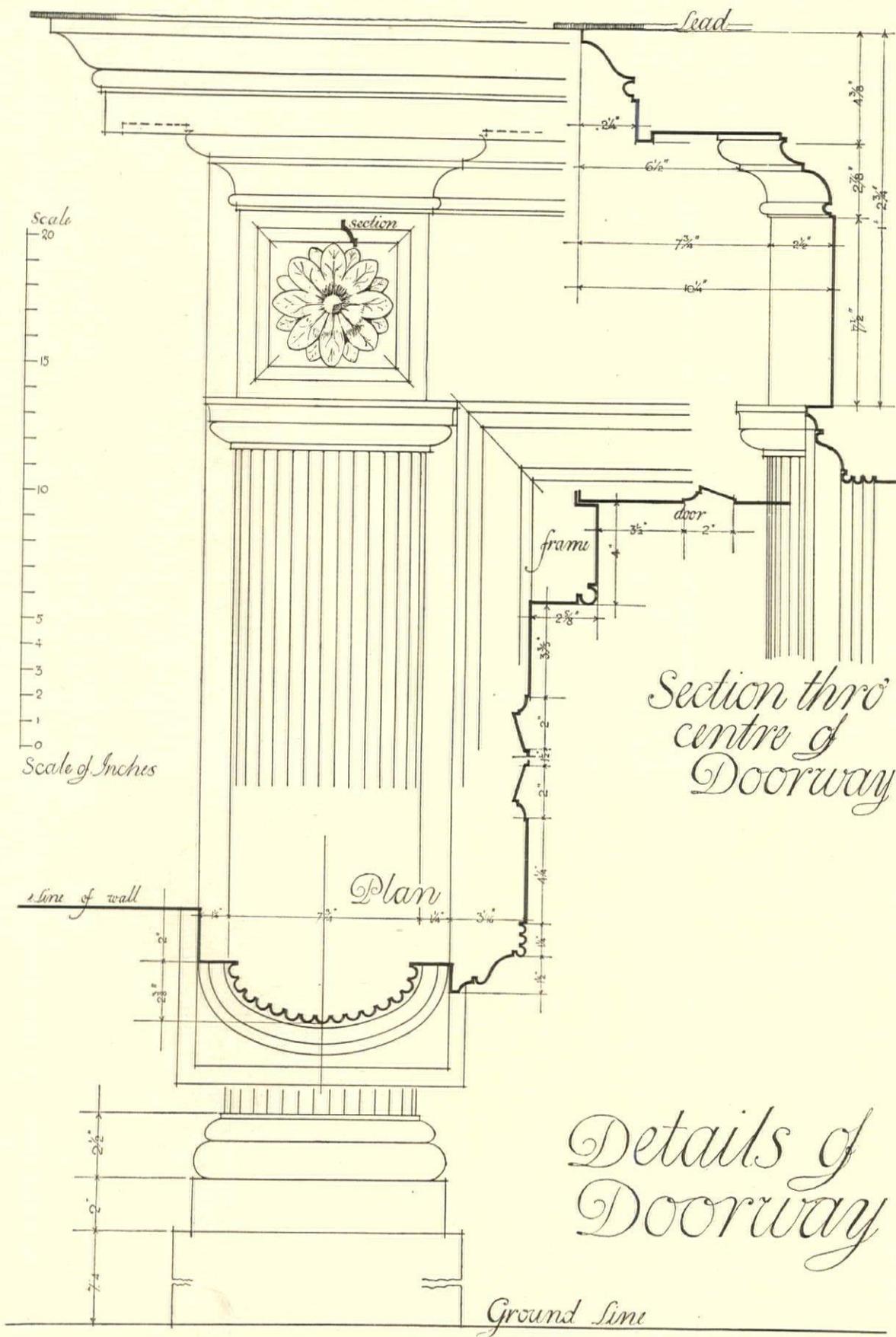
N. LE BRUN & SONS, ARCHITECTS. Wurts Bros. Photo.





Measured and drawn by H. A. McQueen.

DOORWAY, THE CLOSE, SALISBURY (ENGLAND).



DETAIL OF DOORWAY, THE CLOSE, SALISBURY.

Measured and drawn by H. A. McQueen.



THE GARLAND RESIDENCE, HAMILTON, MASS.

Winslow & Bigelow, Architects.

(Continued from page 133)

and to finish the work himself. The Court utterly disregarded the provision of Article V. of the contract and rendered the same of no effect. Under Article V. the architects are made the chosen arbiters between the parties to determine whether the work is proceeding with sufficient diligence and whether the owner has a right to terminate the employment of the contractor. The question of the right of the owner to terminate the employment of the contractor was a matter left to the determination of the architects and their decision is final and binding upon the parties and cannot be reviewed in any other court unless it be shown that the architects acted in bad faith or maliciously or corruptly. There was not a single intimation on the trial that the architects acted in bad faith. Having terminated the contractor's employment the owner had the right to complete the work and charge the cost against the contractor. The audited and certified statement by the architects of the expense of completing the work is conclusive upon the parties.

The counsel for the owner further showed that the contractor's contention amounted to this: that the owner cannot terminate the contractor's employment, no matter how great his delay or how bad his work, unless he has first obtained the architect's certificate and even after he has obtained the architect's certificate he is still not protected thereby, but must justify his action before the jury to the same extent as though the contract did not require a certificate. The contractor's contention would take away from the owner the right he would have to terminate the contractor's employment independently of any provision for an architect's certificate in the contract and would impose upon the owner a new and onerous condition, namely, the necessity of first obtaining the architect's certificate. It would thus impose upon the owner a burden, but confer no corresponding privilege. It would make the condition and necessity of obtaining the architect's certificate entirely for the contractor's benefit. It would cause the condition to operate only to keep the contractor on the job, but never to put him off, and to operate always for the contractor's benefit, but never for the owner's benefit. Such a construction makes the contract thoroughly one-sided and unfair.

The contract was in the form adopted and recommended for general use by the American Institute of Architects and the National Association of Builders. The contract was adopted by architects for general use throughout the United States and the intent of the architects in adopting such a contract was to induce owners to enter into building contracts rather than deter them from so doing. It was to promote rather than diminish the architects business. The article in question was intended to enable owners to select an architect both to draw the plans and to supervise the entire work. It was intended to relieve the owner from the responsibility of acting on his own judgment and initiative in passing on the work done by contractors, the sufficiency of men employed from time to time, and the quality of the materials. It was intended to relieve the owner from and to impose upon the architect, all duty and responsibility as to everything in the contract except the payment of the installments as they became due. But this provision in the contract was not only for the protection of the owner, it was equally and even more than equally for the protection and benefit of the contractor. It protects the contractor from capricious or arbitrary action on the part of the owner. No matter how excited, impatient or indignant an owner may become

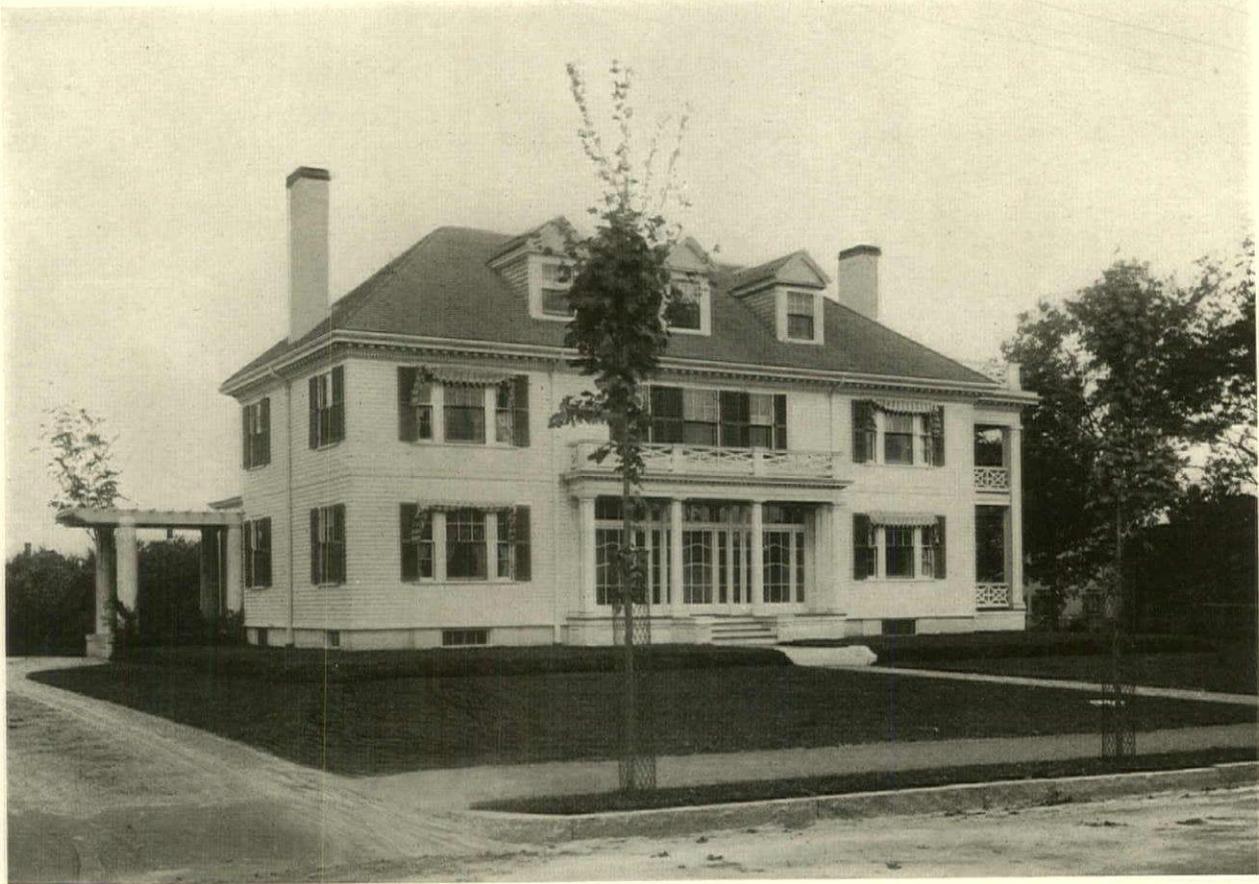
by reason of the delay of the work, the contract compels him to take no step and to absolutely refrain from terminating the contractor's employment until the architect makes his decision and expresses that decision in the form of a certificate.

The words "such refusal, neglect or failure" refer to a refusal, neglect or failure to supply a sufficiency of properly skilled workmen or of materials of the proper quality or to prosecute the work with promptness or diligence or failure in the performance of any of the agreements contained in the contract. The very words "sufficiency," "proper," "promptness" and "diligence" indicate that there must be an expression of opinion by somebody as to these matters, and the contract either means that the architects are the chosen arbiters to decide these questions or it means nothing. Having shown that it is unreasonable to contend that this provision means nothing, then what does it mean? What is the jurisdiction of the architects and what is the effect of their decision as expressed in their certificate. If it is not final and conclusive, it is futile. What is the use of the architects rendering a decision, unless that decision is to bind the parties, for if such a decision can be disregarded by either owner or contractor, the provision in the contract becomes mere surplussage and a waste of words. It is only where the architects, in rendering their decision and giving their certificate, have acted in bad faith, maliciously, collusively or fraudulently that their decision can be avoided.

Such in substance was the argument advanced by the counsel for the Oxford Realty Company on the appeal.

The Appellate Division, having heard the arguments of opposing counsel, expressed the following opinion:

"The case was tried upon the theory that, without showing either fraud or bad faith upon the part of the architects, the plaintiff was at liberty to ask the Court and jury to disregard the action of the architects in determining that he did not proceed with the work with due diligence and did not furnish a sufficient number of men to insure the completion of the work within the time specified by the contract, and to decide those questions *de novo* and award him damages if they reached a different determination on those questions of fact. The learned counsel for the respondent contends that, although the architects and the defendant acted in good faith in making the certificates and in terminating the employment of the plaintiff, still the question is open to review *de novo* as to whether the contractor did refuse or neglect to supply a sufficient number of properly skilled workmen or materials of proper quality, or did fail in any respect to prosecute the work with promptness and diligence, or did fail in the performance of any of his obligations under the contract. No case is cited in this or any other jurisdiction which is decisive of the question. At the outset it is important to bear in mind that the construction for which the plaintiff contends would render the provisions of Article V. of the contract of practically no value to the owner but of great advantage to the contractor. Without such a provision, where the contract requires the work to be performed with such diligence as to insure its completion within the time specified, the owner might at any time exclude the contractor from the premises and finish the work himself, and in that event, if he should be able to establish that the contractor was guilty of a breach of the contract in that he was not proceeding either with respect to the number of men employed or otherwise to insure completion on time, he would defeat a recovery by the contractor for any balance unpaid on the contract, and he



RESIDENCE, H. B. RUSSELL, BROCKTON, MASS.

H. B. Russell, Architect.

might counterclaim for any damages sustained; and should he be benefited by having the work cost less, he would be under no obligation to account to the contractor for the difference between the balance unpaid on the contract and the cost to the owner to complete the work. This provision, if construed as it has been on the trial of this action, is in effect a trap for the owner and gives the contractor an advantage which he would not ordinarily have without such a provision. According to the construction for which the respondent contends, he practically runs no risk in failing to perform his contract. He may employ one man where it is manifest that it would require twenty to complete the work, as required by the contract, and rest on the assurance that the owner must submit to his unreasonable conduct; or, if it become unbearable, all that the owner may do, at most, is to take charge of the work, which will leave the contractor in a position to contend, in the first instance, that he is entitled to damages on account of the wrongful termination of his contract, which would be the balance unpaid on the contract less the amount it would have cost the contractor to have completed the work; and if he failed in that, the owner must account to him for the difference between the balance unpaid on the contract at the time of his discharge *and the cost to the owner of completing the work*, which would give him in effect profits practically the same as if he had completed the work himself, for he would not be bound by the amount which the owner had expended in completing the work unless the expenditures were made in good faith and in the exercise of reasonable care. We are of the opinion that this provision of the contract was

intended by the parties to make the certificate of the architects conclusive on this question in the absence of evidence from which an inference might fairly be drawn that their action was fraudulent or so unreasonable and arbitrary as to indicate bad faith or fraud."

The Appellate Division then orders that the judgment which the contractor had obtained should be reversed and a new trial granted.

Architects are certainly to be heartily congratulated on the view taken by the appellate court as to their powers, duties and responsibilities. This decision not only tends to promote the business of architects from a commercial standpoint, and to lead owners more readily to enter into building contracts and to pursue building operations; but the effect of this decision is to enlarge and, as it were, to ennoble the profession of architecture. It makes the office of the architect a court room of first as well as final resort, wherein the questions of the quality and progress of the work done by the contractor will be tried and determined. It gives to the architect a quasi judicial capacity, and while it imposes upon him considerable responsibility it adds dignity and power to his profession. This decision conferring or rather confirming the judicial attributes of the architect will doubtless have the effect of leading owners to look carefully not only into the skill of the architect but into his qualities as a man. Is the architect a man of judgment? Is he just and fair-minded? These are questions an owner will ask concerning an architect before employing him, because owners will want to make contracts with high class contractors and high class contractors will require that the power of termin-

ating their contracts shall be lodged in a fair, impartial man possessing sound judgment who cannot be influenced by any corrupt or unworthy motive.

Character will be a positive asset to an architect. His reputation as a man of honesty and sound business judgment will directly promote his business interests.

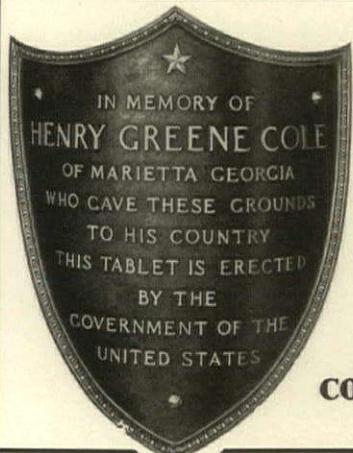
Hereafter, to greater extent than heretofore, the supervision of important building enterprises will be entrusted to the architect who combines with architectural skill, in the common acceptation of the term, those mental and moral qualities that fit him to be an acceptable arbitrator between owner and contractor.

PROFESSIONAL COMMENT.

HEREAFTER all architects practising in California must have certificates from the State Board of Architecture, or they will be subject to prosecution under a decision recently rendered by Judge Willis of the Superior Court. He sustained the police court conviction last year of Otto H. Neher, on whom a nominal fine was imposed at the time. Neher had a shingle out, and was doing work without a certificate. While his appeal was pending, he took the required examination and secured a certificate. Judge Willis's decision establishes for the first time the right of the State Boards to prosecute architects not holding proper credentials. Neher's attorneys had sought his acquittal on the ground that the Act calling for certificates is unconstitutional, and that it grants special privileges.

A STUDENT of Sibley College, Cornell University, inquiring as to how much credit he would obtain for shop work done during the vacation, was told that it was the practice to give one hour's credit for every two hours devoted to actual work in a shop or foundry, provided the latter were approved by the faculty as a proper place for gaining useful experience. Asking if the Yale & Towne Works at Stamford, Conn., would fit this description, he was informed that double credit would be given for any time spent in these works, as, in the opinion of the faculty, it was the full equivalent of the instruction given at the college, and that in this respect it ranked with a very few of the leading industries of the United States.

MR. DAVID KNICKERBOCKER BOYD, President of the Philadelphia Chapter of the A. I. A., recently delivered an address before that body in the course of which he remarked that Philadelphia is becoming a center of architectural education. The atelier system has taken a very promising turn in the city. This year they have three architectural ateliers: The T-Square Atelier, under the direction of Mr. Zantzinger; the University Atelier, under the direction of Mr. Cret; and the Drexel Institute Atelier, under the direction of Mr. Paul A. Davis. "These ateliers," he added, "give an excellent architectural education in so far as design is concerned. The lack of general education of many of their pupils is a serious problem, and it seems difficult to do more than convince the pupils that they need this general education."



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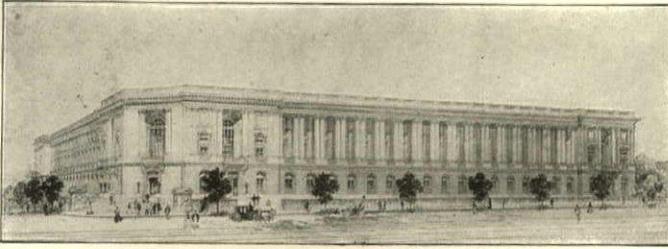
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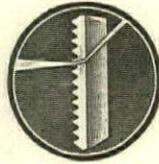
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HOUSE OF WATER WITCH CLUB, HIGHLANDS OF THE NAVESINK.
Ernest Green, Architect.

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ARCHITECTURE

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CHARLES FOLLEN MCKIM
September 14th, 1909

ARCHITECTURAL CRITICISM.

MODERN bank buildings in large cities are either tall office buildings or enclosures of a single room, and the exceptions to this general statement are so few that they can be counted on the fingers of one hand.

The bank of California, Bliss & Faville, architects, (plates lxxxix-xc) is of the single room type and a most admirable example. The exterior is a Corinthian order of tremendous scale, the front treated as a portico, the sides as engaged columns and antae. Between the columns the entire space is filled with windows of great height, the sash divided by metal bars in a geometrical pattern.

The whole design is of the most extreme simplicity, both on the interior and exterior, but it is the sort of simplicity indicative of knowledge. The entire order is beautiful in proportion and although adhering very closely to the book forms does not have the dryness often associated with them. It is much the sort of thing that McKim, Mead & White would have done with the same problem and lacks nothing of the refinement that the older firm would have shown.

The photograph seems to indicate a certain amount of color in the architrave and cornice; to know whether color is actually used or not would be of interest. If such is not the case the architects have produced by their ornament precisely the desired effect.

There can be no exception taken to any portion of the exterior although possibly the coping above the cornice seems a trifle too simple. It seems as if the restraining hand had been laid a little too heavily upon this feature although whether or not this might have been improved by a different treatment is another question.

The same quiet intelligence noticeable in the exterior is also to be seen on the interior. There has been no striving after effect, no attempt at new and dashing forms, but by excellent and quiet treatment of the detail a room at once lofty and noble has been produced—such a room as at once suggests the best traditions of our banks. The details of the banking screens, of the desks, and of the tables and benches are all in excellent harmony, and while the upper portion of the room is kept quiet in color except for the gilded capitals in the lower portion, an astonishing richness of appearance has been obtained by the use of colored marbles and bronzes without departing in the least from the dignity and sincerity of the whole design. As a whole the building presents nothing different from the stereotyped form, and yet the traditional motives are handled with so much subtlety and refinement that the bank of California, like Tracy & Swartwout's New Haven bank, will take a very high place in American architecture.

IF we are still using in America many styles of design hardly on speaking terms with each other, at least for New York City houses we have found a style at once

characteristic, suitable and beautiful, and most of the larger houses recently erected in this city have been designed in this style. It has its genesis in the French of the periods of Louis XV and XVI, and is strongly affected by the admiration for the Italian Renaissance ever present in American architects of to-day. These influences have resulted in a style which at first glance appears to be French, and upon closer inspection evidences its American genesis.

The residence for Mr. George J. Gould, 67th Street and Fifth Avenue, Horace Trumbauer, architect, (plates xcix-cii) exhibits these qualities in their best expression, a restrained, refined and educated piece of design. The coigns and decorative members, the panels and window architraves are kept very flat, with the result that the surface has sufficient play of light and shade to keep it from being tiresome without the exaggerated lines which result in restlessness. The separation of the vertical surface into three portions by use of a heavy belt course at the top of the first story and a simply decorated band between the third and fourth story windows is excellent, in that the proportions of the enclosed spaces both on the narrow end and wide front are satisfactory. The fifth story with the copper roof is barely visible above the balustrade, and had the dormers been suppressed even further it is entirely probable the result would have been improved. Except for this point there is little to which exception could be taken. The windows on each story are good in proportion and the relation between those of different stories is admirable. The entrance doorway is sufficiently emphasized without being obtrusive. The detail of this doorway is traditional to a degree, both in the stone work and in the iron work, but is both well conceived and executed. Altogether the house without being in any sense epoch making is representative of the best of the modern spirit of design.

THERE were published in ARCHITECTURE some months ago photographs of the Royal Insurance Company's building in New York, Howells & Stokes, architects, and that company has employed for this building at the other side of the United States the same architects, and erected a building of similar design in San Francisco. (Plates lxxxvi-lxxxvii). The first three stories are delightful. The motive is well chosen and the detail exquisite. Detail like this, half English and half Italian, has been used by Howells & Stokes with great success in many of their buildings, and possesses one of the best possible qualities—personality. It is neither hackneyed nor cut and dried, but really designed.

Placed upon a base so quiet and restful the upper stories seem somewhat uneasy. The balconies might better have been omitted, and the escutcheons in the frieze story of the building seem over-scaled by comparison with the flat detail of the order in the first two stories. The white key blocks and skewbacks of the brick arches over the windows have a tendency toward "spottiness," although this is probably more apparent in the photograph than in the building itself, and the circular-headed arches of the upper story, seen from the position at which this photograph is taken, tend to confuse the strong horizontal lines of the termination. The cap piece of the vertical brick piers, seen from this angle, suggests some curious sort of column capitals, because of the projection of the pendant ornament, and the use of this ornament on one side of the corner and not on the other seems open to question.

These points are all, however, of minor character in comparison with the extraordinarily delightful detail of the first three stories and the general excellence of the design. Where such delicacy and refinement is displayed it is usually at the expense of strength, and the architects of this building evidently felt that were the portions of the building far from the eye carried out in the same manner, the result would be indecisive and weak. Such may be the case, but the experiment would have been well worth trying.



DETAIL, ENTRANCE, COUNTRY HOUSE, ARDSLEY.
Oswald C. Hering, Architect.

THE country house for Daniel Bacon, O. C. Hering, architect, (plates xciii-xciv) is a piece of interesting and spirited design quite away from the beaten track. While in a measure it recalls Spanish architecture the detail is much more refined than that ordinarily recognized as Spanish. The rough surface of the stucco contrasts well with the smoother texture of the copings and ornaments and brings the exterior in accord with the surroundings. The house, by the way, is placed to get the best out of its position, and the tremendous trees in front of the loggia give scale and domesticity to the design. The treatment of the openings of the loggia is an interesting one and the second story porch upon the rear is handled so skilfully that it adds to, rather than detracts from, the pleasing quality of the whole design.

The entrance door and the windows above, which evidently open on the landing, are combined into a single motive in a way neither trite nor forced, and the great freedom with which the decoration above the windows is managed without conflicting with the classic design of the casing shows how study brings success. Iron balconies placed two feet below the window sills, as they are here, seem

somewhat forced, and as they are impossible of practical use, their employment is decorative only, and the same effect might have been better produced by some less structural motive.

The living room is, in general, simple in treatment, the beautifully decorated mantel concentrating the attention on the most important feature of the living room, the fireplace.

A simple bedroom, also illustrated, is admirable. The decorations are in good taste and of home-like character without any loss of unity of design. Bedrooms are too apt to be altogether neglected or else immensely over-decorated, and one fault is quite as bad as the other. This strikes a note that is evidently fitting for a private room without being in the least confused or unarchitectural.

In most country houses the architect retires from service, often involuntarily when questions like the treatment of the bedrooms arise. Most men would like to keep on and assist and advise up to the day of occupancy; and their advice would stave off many of the evil consequences of a client either "over-artistic" or entirely lacking in taste. When an architect succeeds in persuading a client to let him continue in his position until the house is really complete he has rendered both the client and the profession a real service; judging from the result that was here the case.

IT is unfortunate that more of Messrs. Taylor & Levi's architecture has not been illustrated. We seldom see work of theirs in any of the architectural magazines, and although much of it has been of the highest quality their names are little known outside of New York. They are men of unusual inspiration, quite outside conventional lines and of insistent quality. While it is possible to object to much of their work as outré and unsuited to its surroundings, its sheer cleverness cannot be denied.

It is in this frame of mind that one approaches the Erdmann residence, (plate lxxxv) a piece of architecture both unique and capable, but conceived in so different a vein from most New York houses that its propriety can be questioned. Whether it is better to be dull and follow the usual line of work (thereby escaping criticism), or by a design so daring as this, to invite it, is and will ever be an unsettled point, but there is much in this house to awaken an intelligence lulled to sleep by monotonous repetition of classic forms. Most architects will prefer the scholarly dignity of the Gould house to the intrepid originality of the Bacon; the future alone will decide if they are right.

Messrs. Taylor & Levi probably appreciate as well as any one that there are certain points of scale and composition where the Erdmann house is susceptible of improvement. They are self evident and need not be discussed further than to point out that the same scale is not preserved throughout the façade. Yet how many architects are there who, although capable of greatly improving the Erdmann house, have the imagination or the nerve required to design it?

CLUBHOUSE FOR THE RUMSON COUNTRY CLUB, RUMSON, N. J.

GEORGE A. FREEMAN AND FRANCIS GEO. HASSELMAN, ARCHITECTS.

IN designing this building the architects have endeavored to convey the idea of a large country private house rather than a clubhouse, and to get away as far as possible from any suggestion of a hotel or public appearance. On account of the location and the absence of any fine effects in the background in the way of trees, etc., the building will

have to depend largely upon itself for shadow effects; therefore, the style of an English or Elizabethan house has been chosen rather than that of Colonial style. The design admits of large overhangs, projections, etc., and diversity of treatment which could not be had in a formal classical design.

The house will face on the Shrewsbury River, and, as the plans of the grounds show, looks out upon the polo field, and will be approached from the Rumson Road and Buena Vista Avenue through a large porte cochere. Upon entering the main door, there will be found on one side the office and upon the opposite side the coat room; these come under the landing of the stairs. On the left will be found a passage leading to a ladies' reception room, which is about 21 by 27 feet. On this passage open the ladies' coat room and telephone booth. There has been provided a special entrance for ladies, which opens into the private hall adjoining the ladies' reception room. From this hall open the toilet rooms, and private stairs lead up to the ladies' locker room on the floor above.

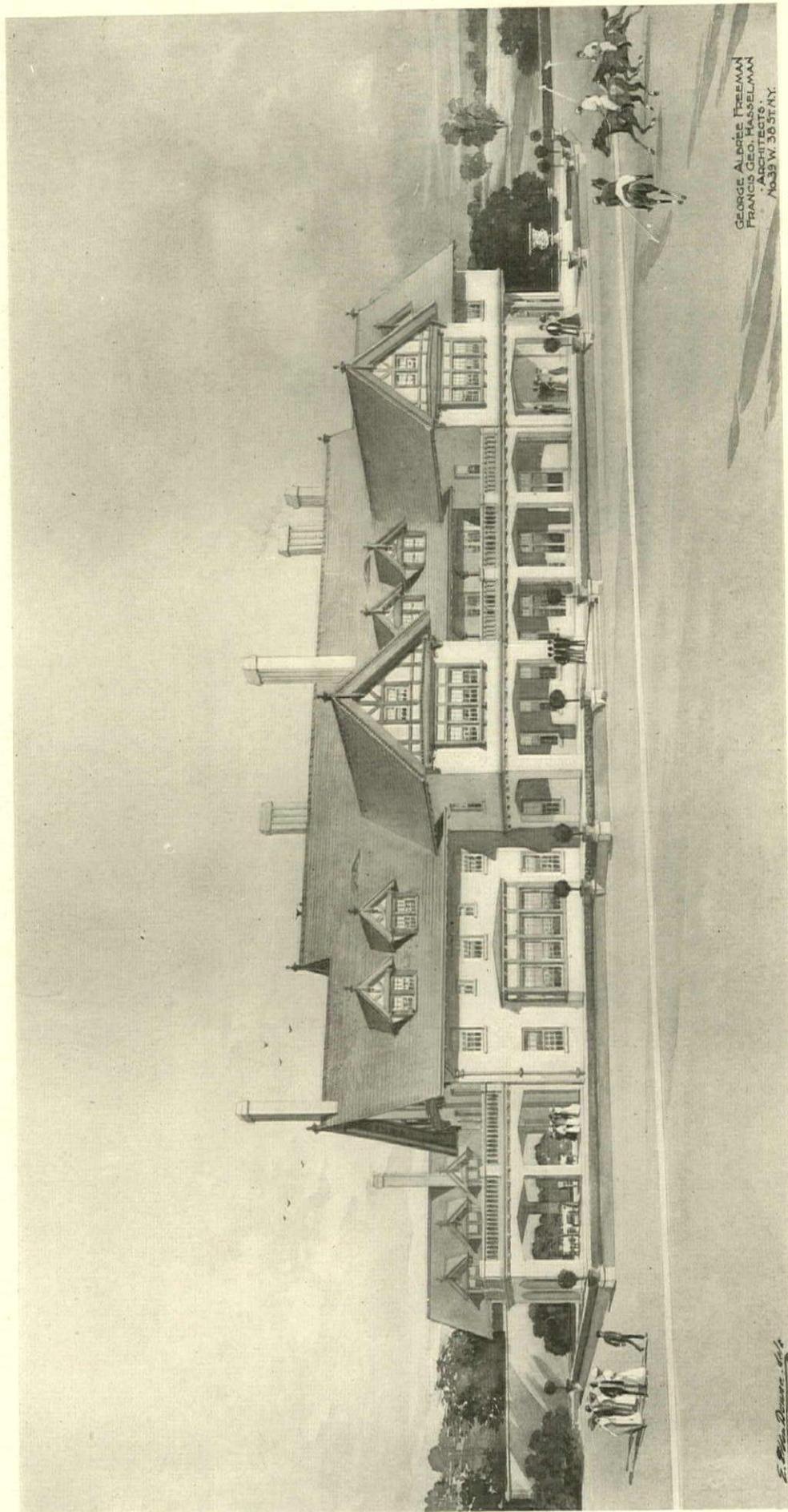
The lounging room and main hall have been thrown into one by the introduction of columns, so that these rooms may be converted into a ballroom, giving a space of about 60 feet long by 34 feet wide. From the main hall and facing the river front there will be found two private dining rooms 18 by 22 feet, exclusive of the bay. The partition between these two rooms will be so arranged that it can be folded back, forming one large room, which may be used as a private dining room or as a general club dining room during the winter months, at which time the main dining room may be closed. There is a good-sized hall, about 10 feet wide, leading to the main dining room, which is on the westerly end of the building. This room is 32 by 35 feet, exclusive of the bay, which is 13 by 20 feet. Opening from the dining room on the river side is an outdoor dining room for summer use. To the right of the passage leading to the dining room is a large room which has been devoted to the use of the grille and billiard rooms; the grille being 22 by 27 feet and the billiard room 14 by 23 feet. This room may be reached by a men's separate entrance, which corresponds with the ladies' entrance on the opposite end of the house. From this entrance hall there is a men's toilet and also private stairs going up to the men's lockers, which are on the floor above. This point of a separate entrance for ladies and men, independent of the main entrance, is considered a very desirable one, for after playing golf, tennis, etc., access to the house may be made through these entrances without going through the main entrance and into the main hall.

On the extreme easterly end of the building is the palm room or sun parlor. It is from this that the ballroom or casino, which may be built at some future time, will be approached, and this room will then make a very pleasant rendezvous for members going to the ballroom. The piazza on the right side of the ballroom it is proposed to enclose in glass during the winter and have the same properly heated.

In the service wing at the western end of the structure are located the serving rooms, kitchens, servants' hall, etc.

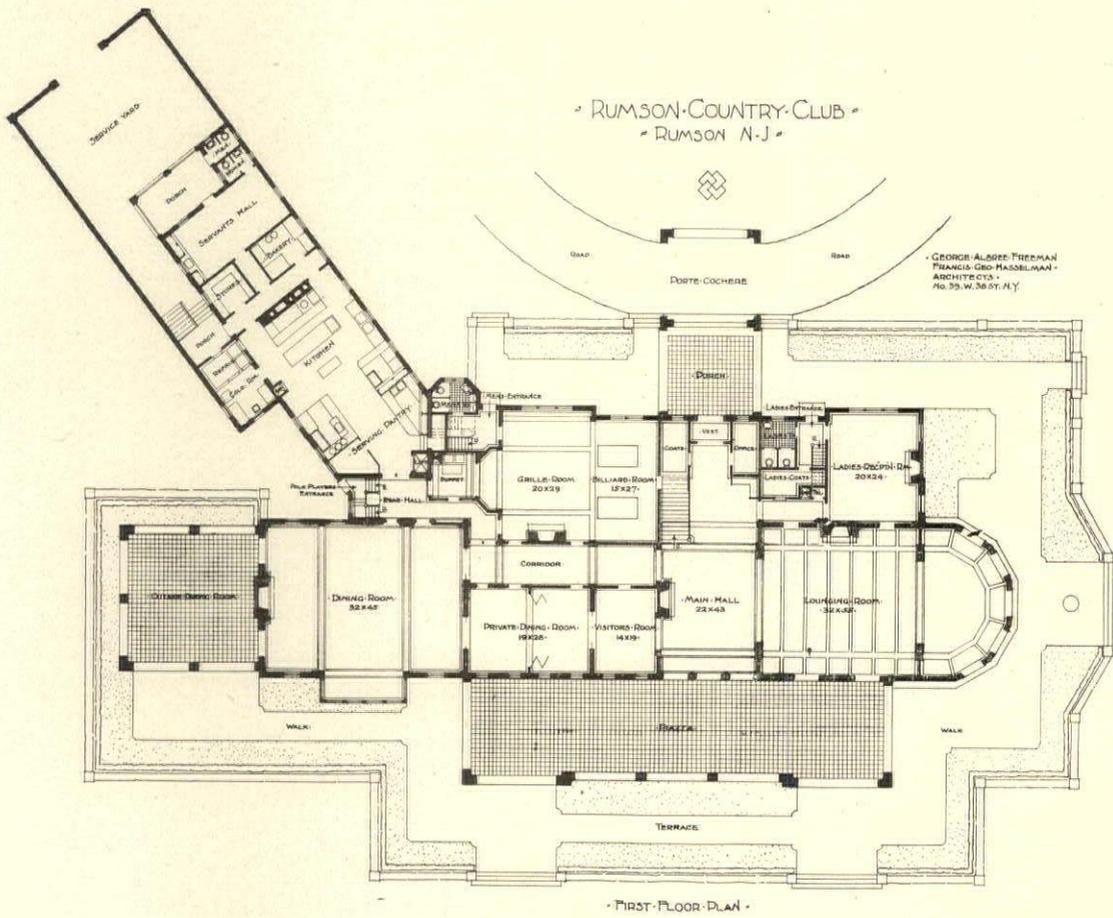
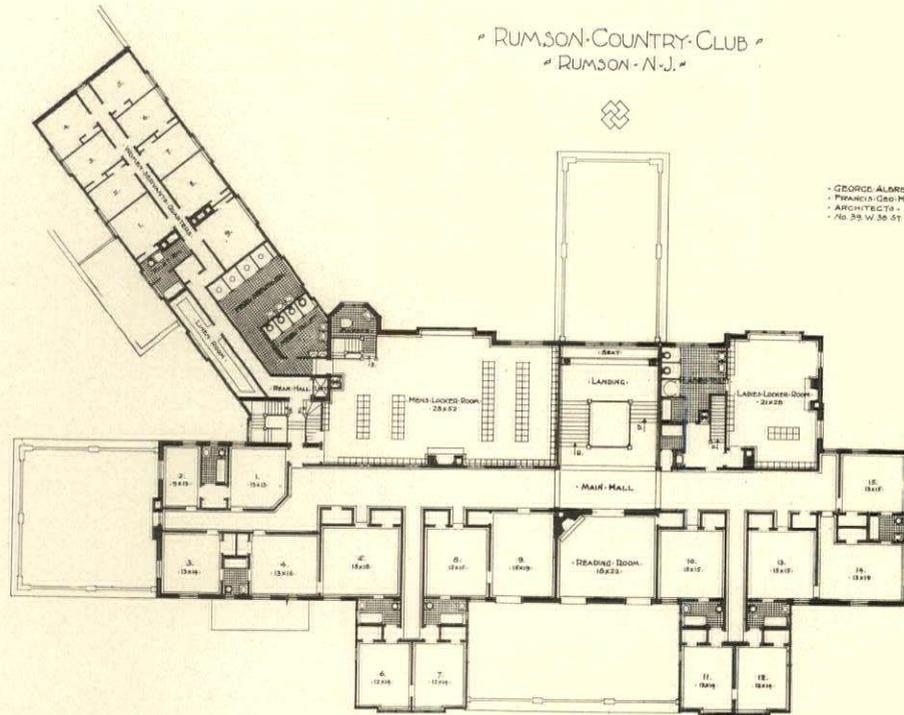
It has been suggested to finish the dining room, lounging room and main hall in hard wood, and the ladies' reception room, private dining room to be painted wood in light colors. The building will be surrounded by terraces, as shown on the perspectives, which will give a large amount of space for seeing the polo games, tennis, golf, yachting,

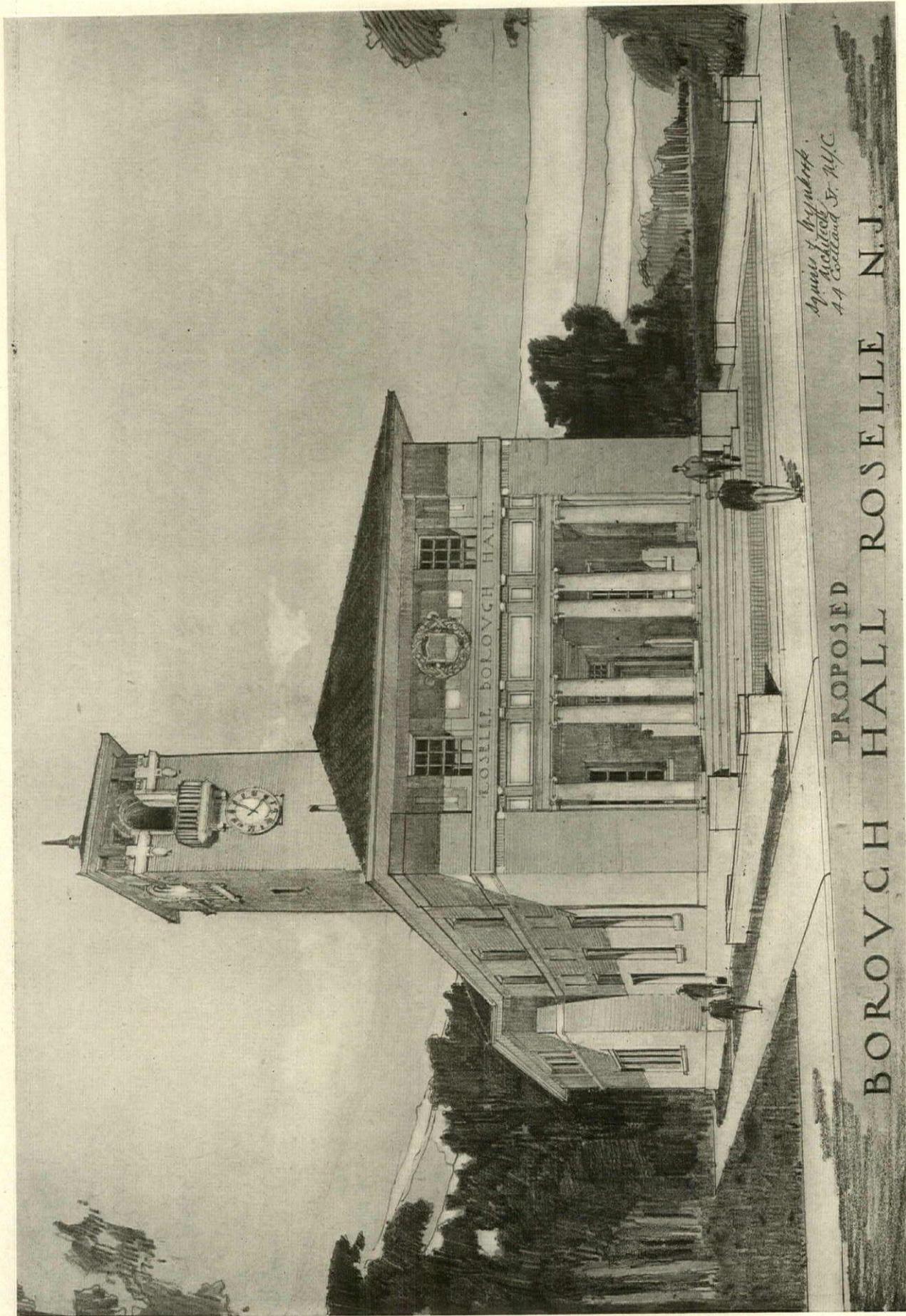
(Continued page 156)



ACCEPTED DESIGN, CLUB HOUSE, RUMSON COUNTRY CLUB, RUMSON, N. J.

George Albree Freeman, Francis Geo. Hasselman, Architects.

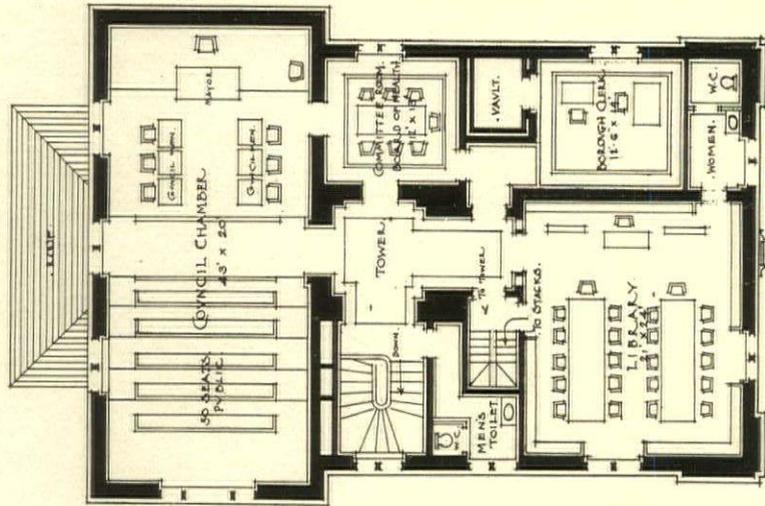




ACCEPTED DESIGN, BOROUGH HALL, ROSELLE, N. J.

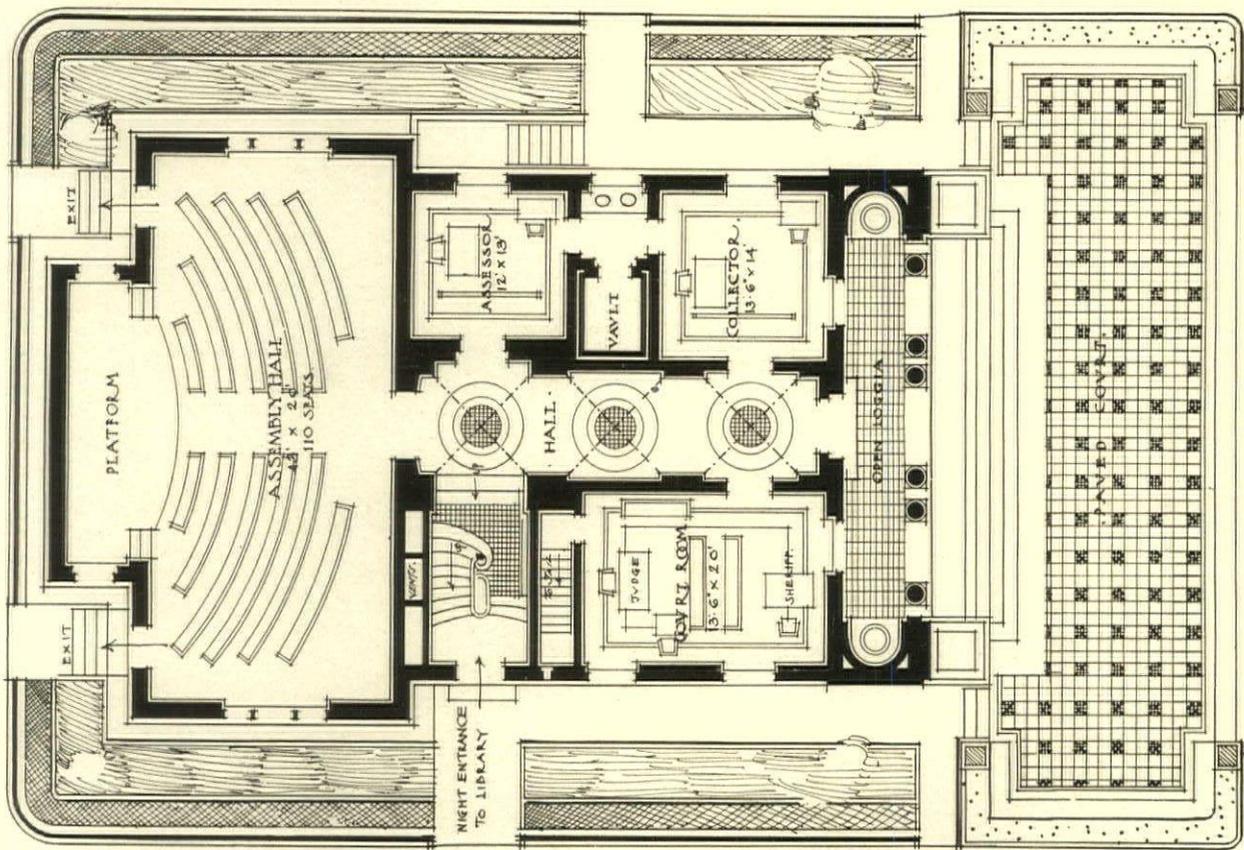
Squires & Wynkoop, Architects.

BOROUGH HALL ROSELLE N.J.



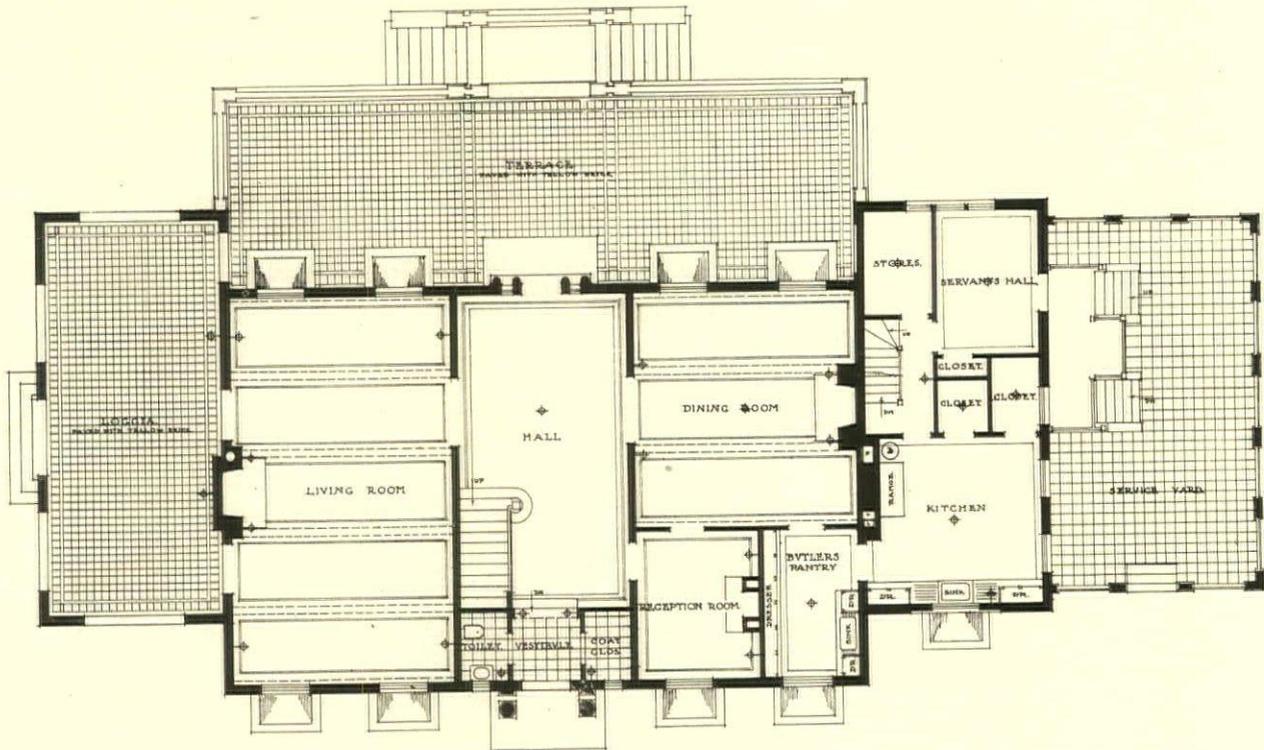
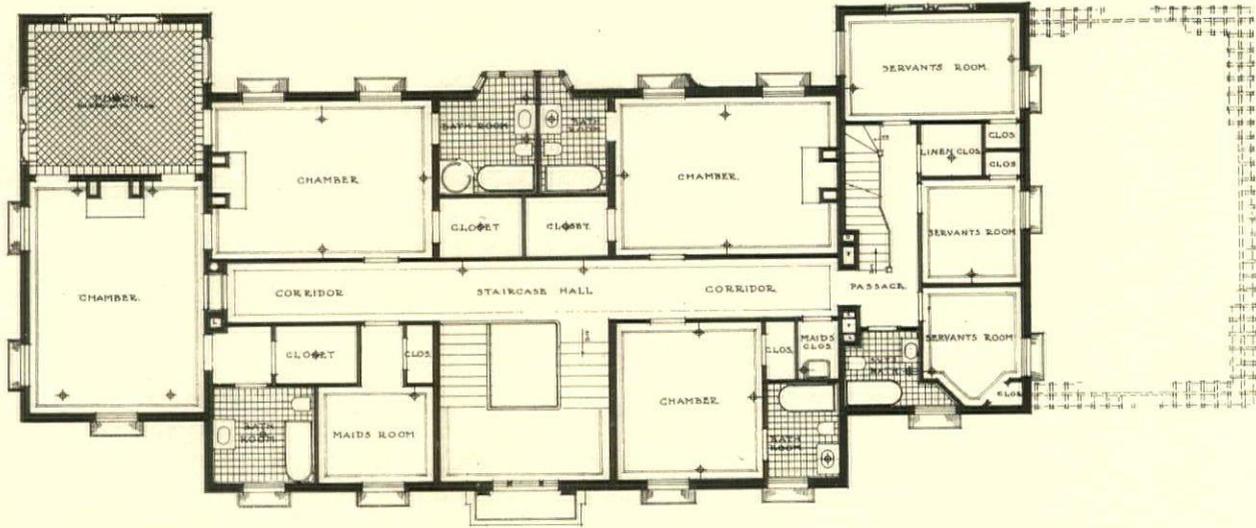
SECOND FLOOR PLAN

Squires & Wynkoop Architects
44 CALLENS ST. N.Y.C.



PLANS, BOROUGH HALL, ROSELLE, N. J.

Squires & Wynkoop, Architects.



PLANS, COUNTRY HOUSE, DANIEL BACON, ARDSLEY, N. Y.

Oswald C. Hering, Architect.





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American Radiators. Russwin Hardware.

TAYLOR & LEVI, ARCHITECTS.
Wurts Bros. Photo.

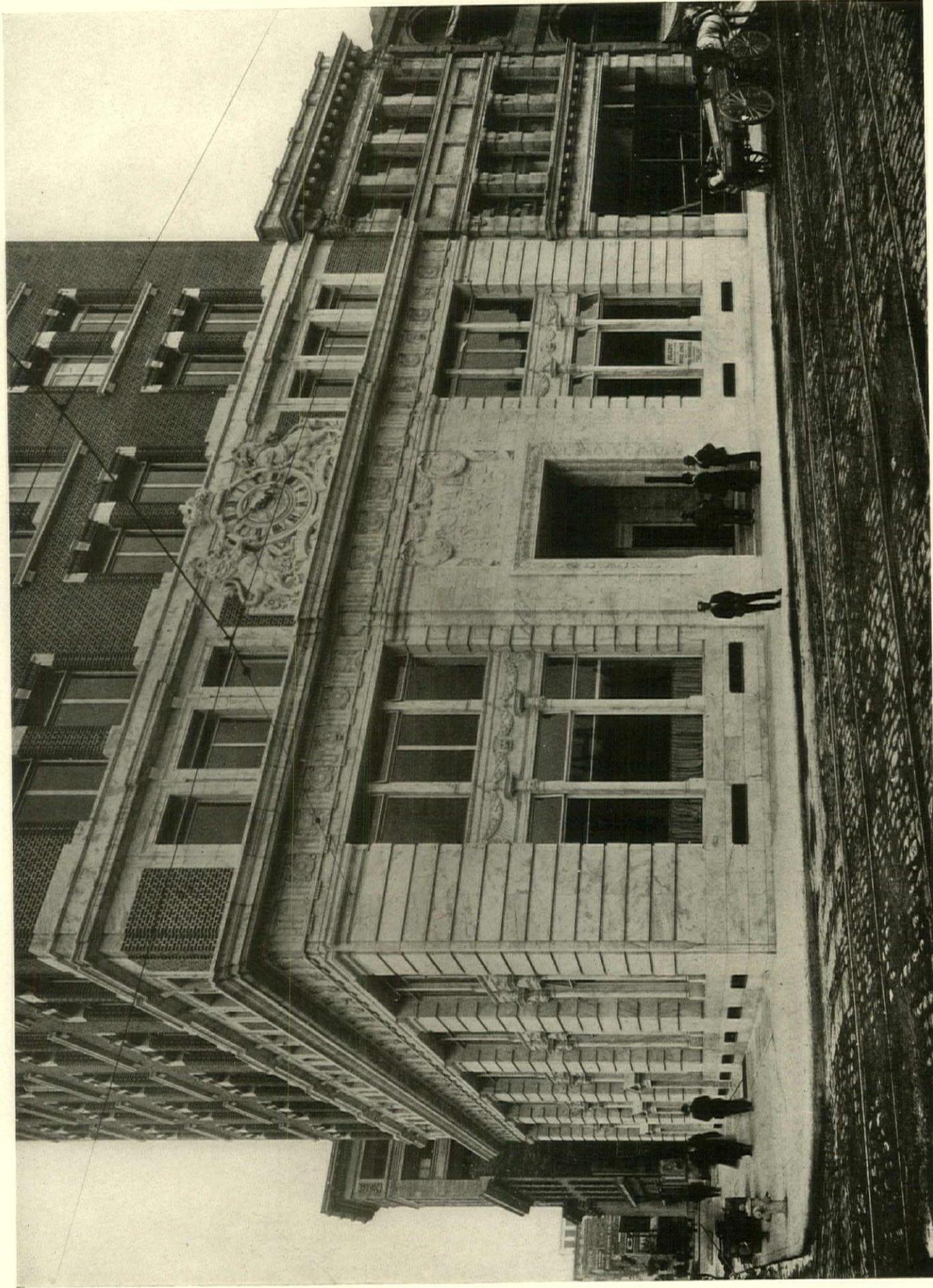




ROYAL INSURANCE BUILDING, SAN FRANCISCO.

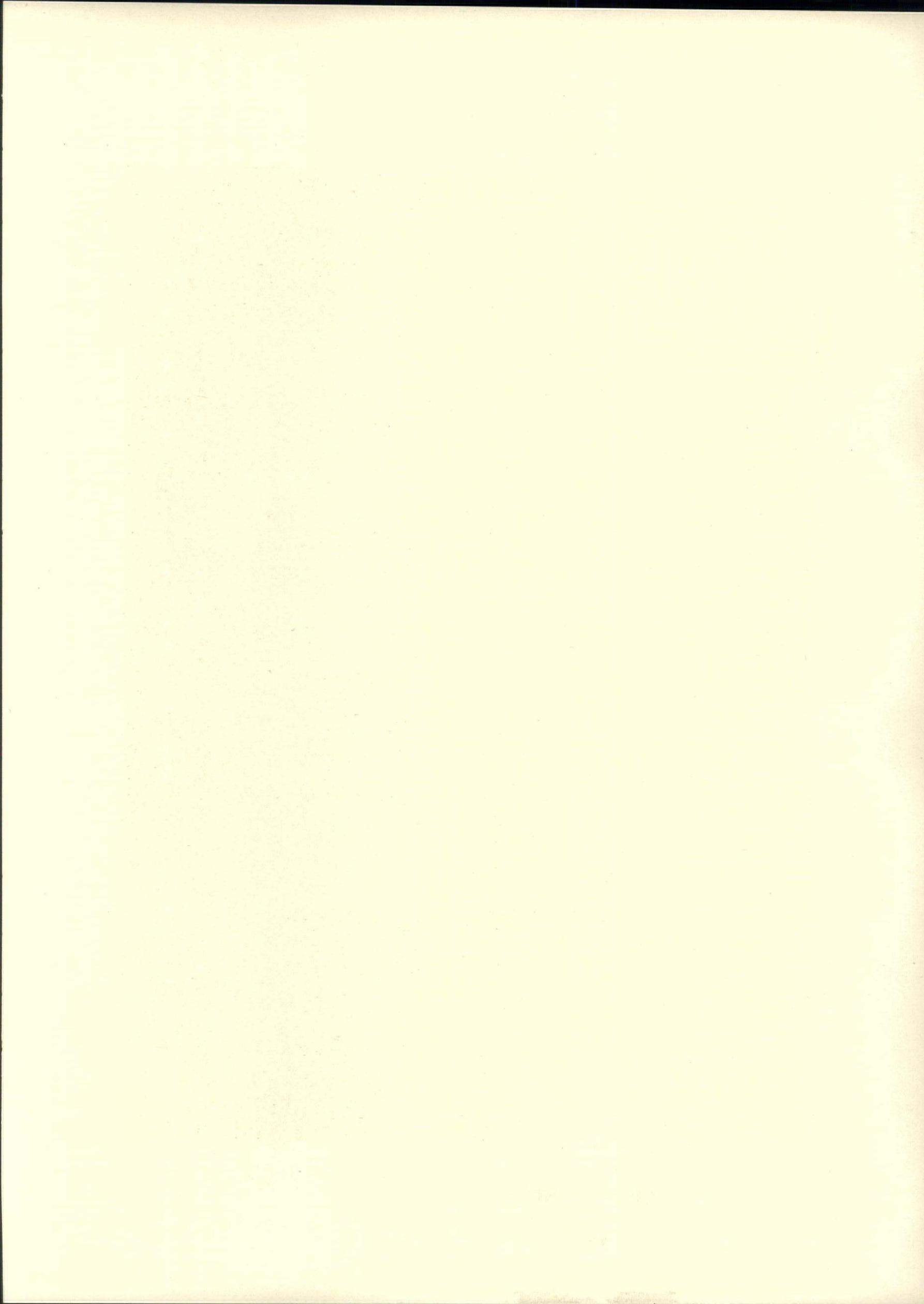
HOWELLS & STOKES, ARCHITECTS.





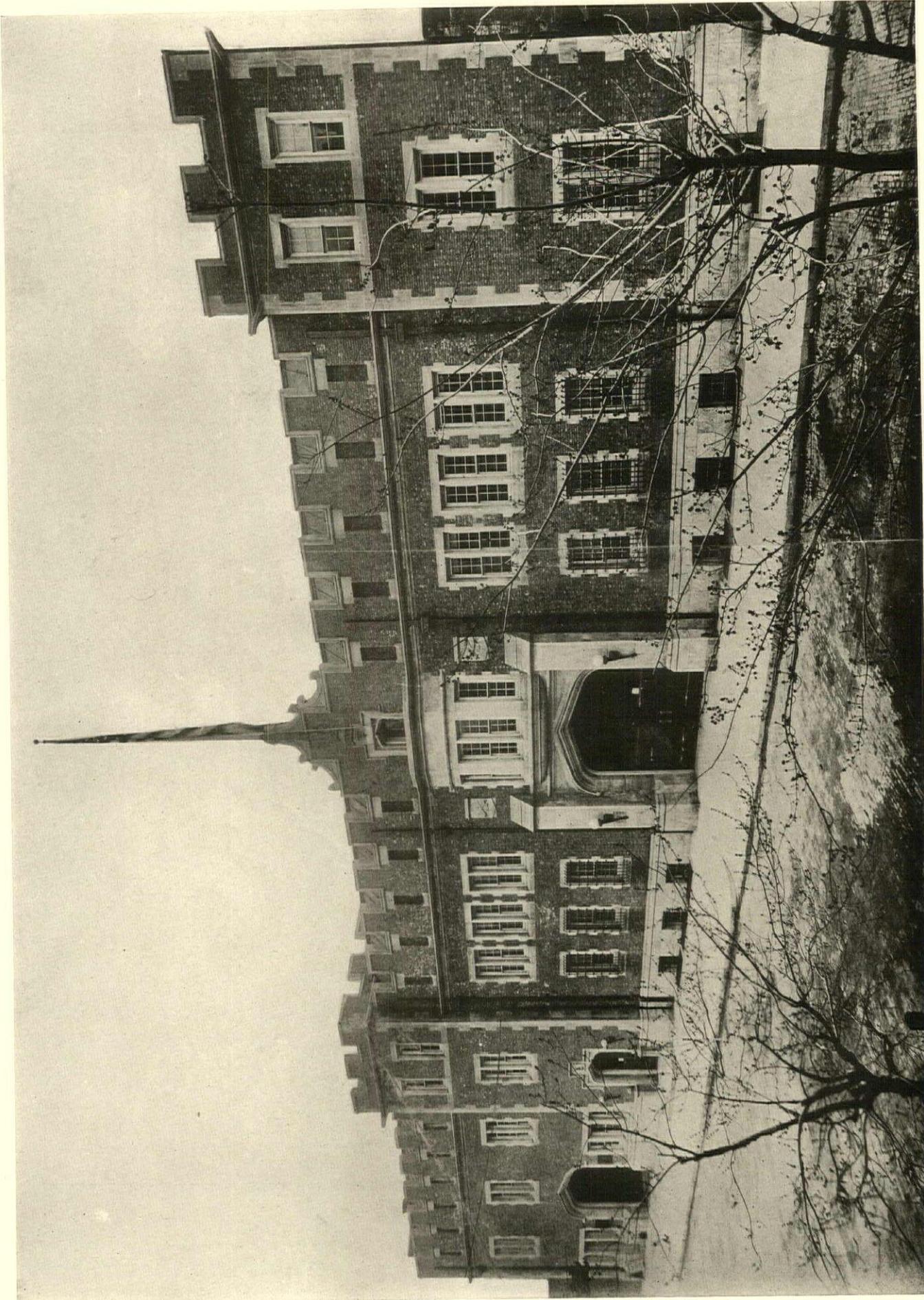
DETAIL, ROYAL INSURANCE BUILDING, SAN FRANCISCO.

HOWELLS & STOKES, ARCHITECTS.



ARCHITECTURE

OCTOBER, 1909.



ESSEX TROOP ARMORY, NEWARK, N. J.

Kinnear Pressed Radiators.

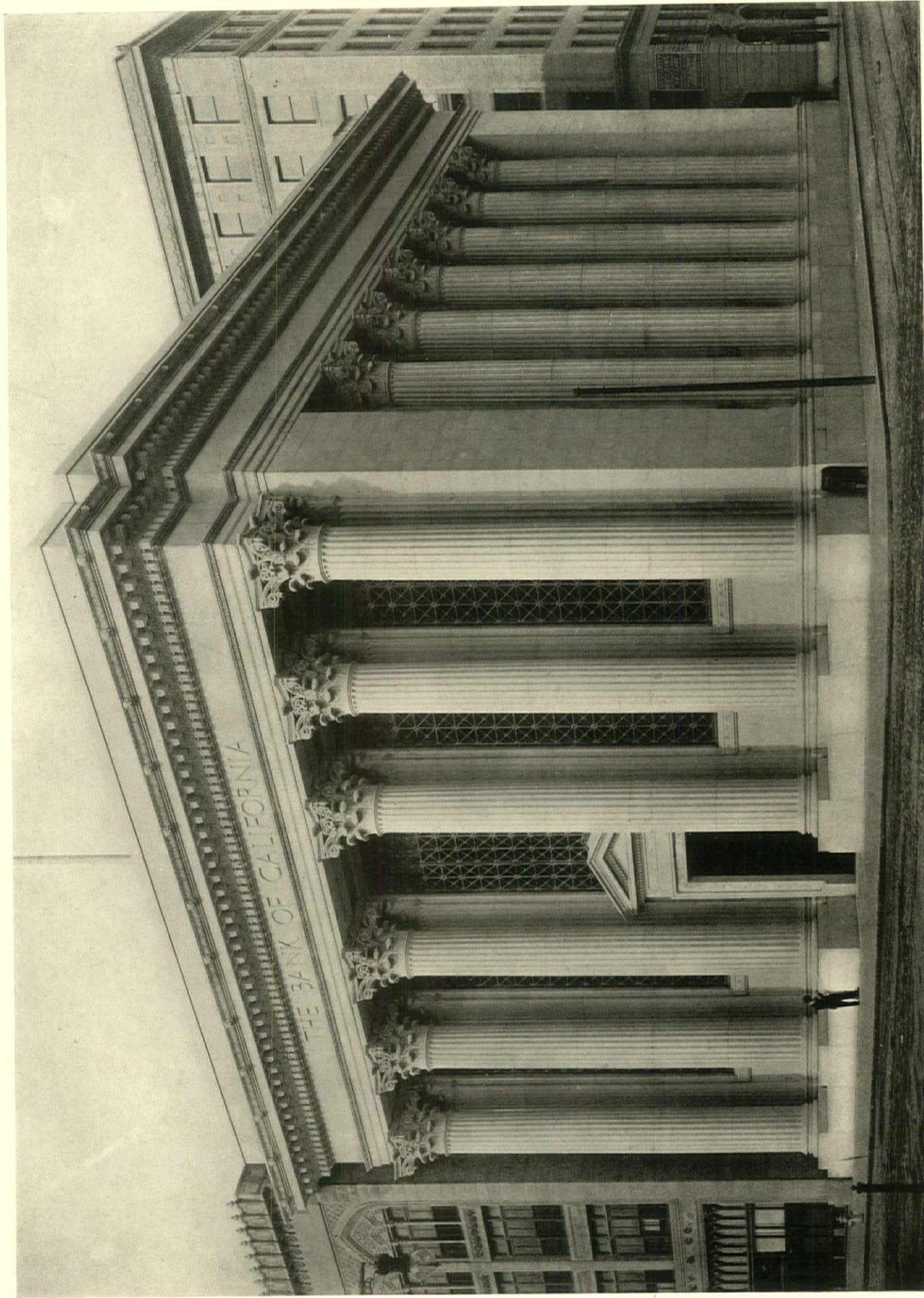
GEO. E. POOLE, ARCHITECT.



OCTOBER, 1909.

ARCHITECTURE

PLATE LXXXIX.



BANK OF CALIFORNIA, SAN FRANCISCO.

BLISS & FAVILLE, ARCHITECTS.

OCTOBER, 1909.

ARCHITECTURE

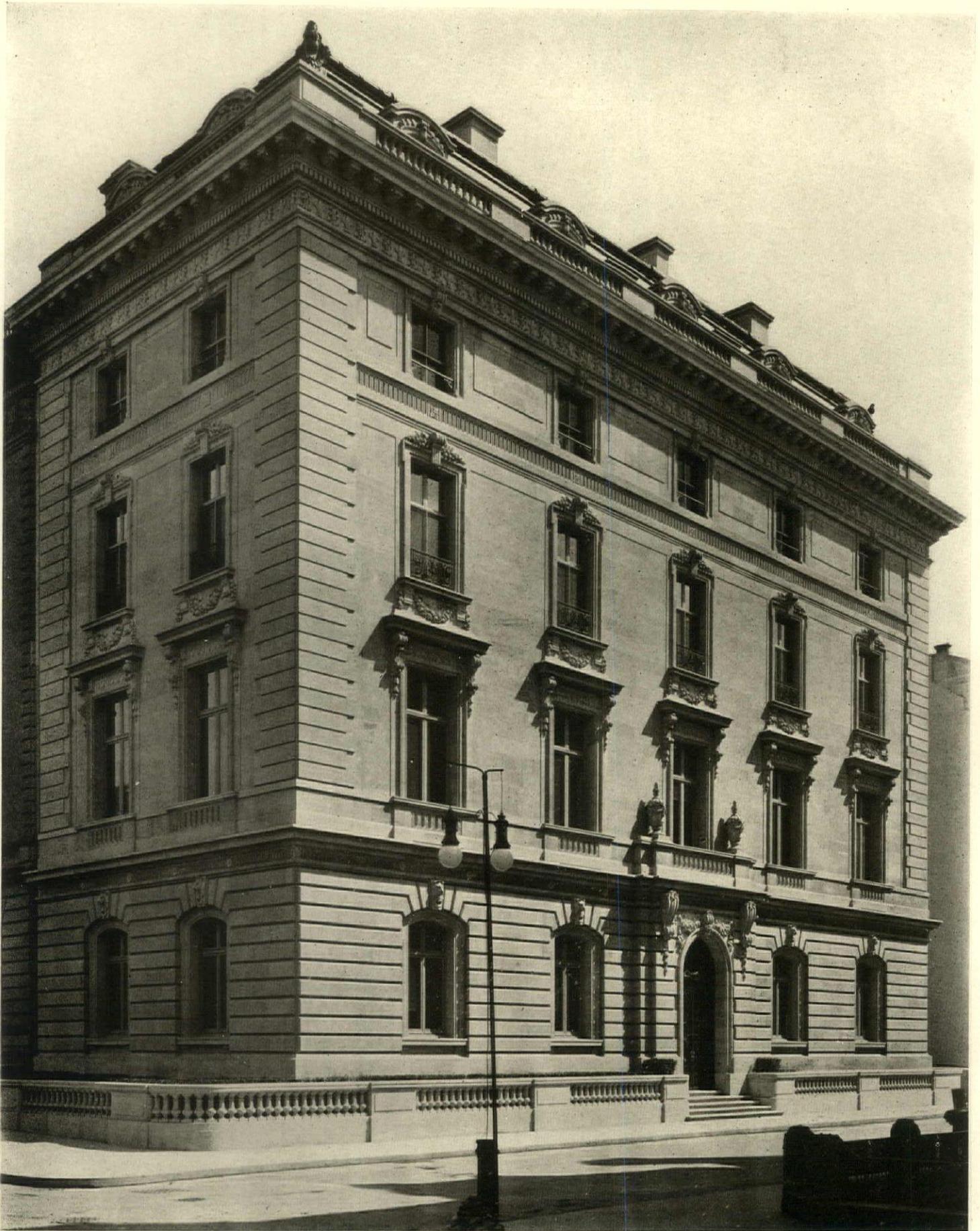
PLATE XC.



BANKING ROOM, BANK OF CALIFORNIA, SAN FRANCISCO.

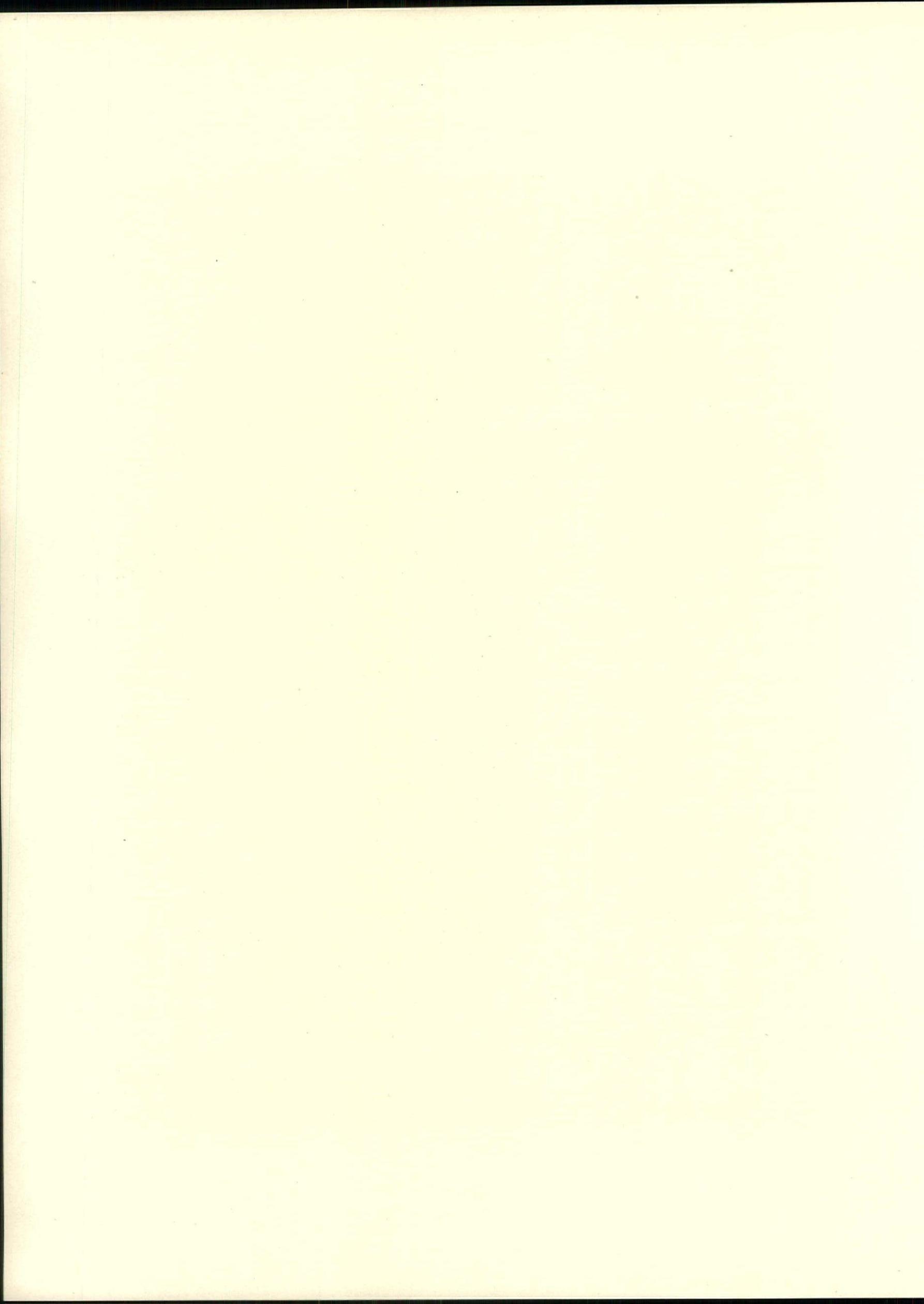
BLISS & FAVILLE, ARCHITECTS.





RESIDENCE, GEORGE J. GOULD, FIFTH AVE. AND 67TH ST., NEW YORK.
American Radiators. Otis Elevators.

HORACE TRUMBAUER, ARCHITECT. Wurts Bros. Photo.
Yale & Towne Hardware.





ENTRANCE, RESIDENCE, GEORGE J. GOULD, FIFTH AVE. AND 67TH ST., NEW YORK.
Wurts Bros. Photo.

HORACE TRUMBAUER, ARCHITECT.





COUNTRY HOUSE, DANIEL BACON, ARDSLEY, N. Y.

Yale & Towne Hardware.

OSWALD C. HERING, ARCHITECT.

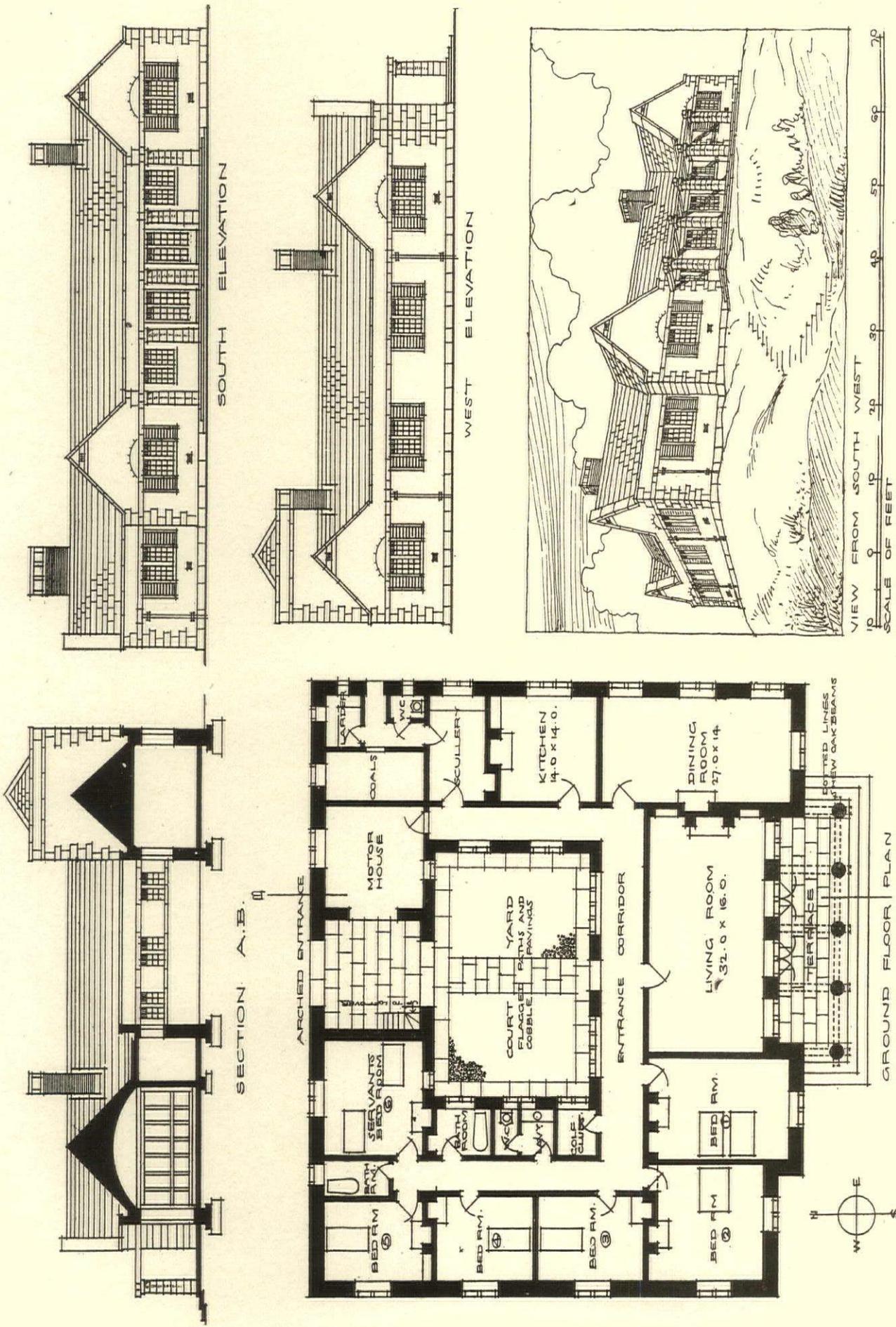




INTERIORS, COUNTRY HOUSE, DANIEL BACON, ARDSLEY, N. Y.

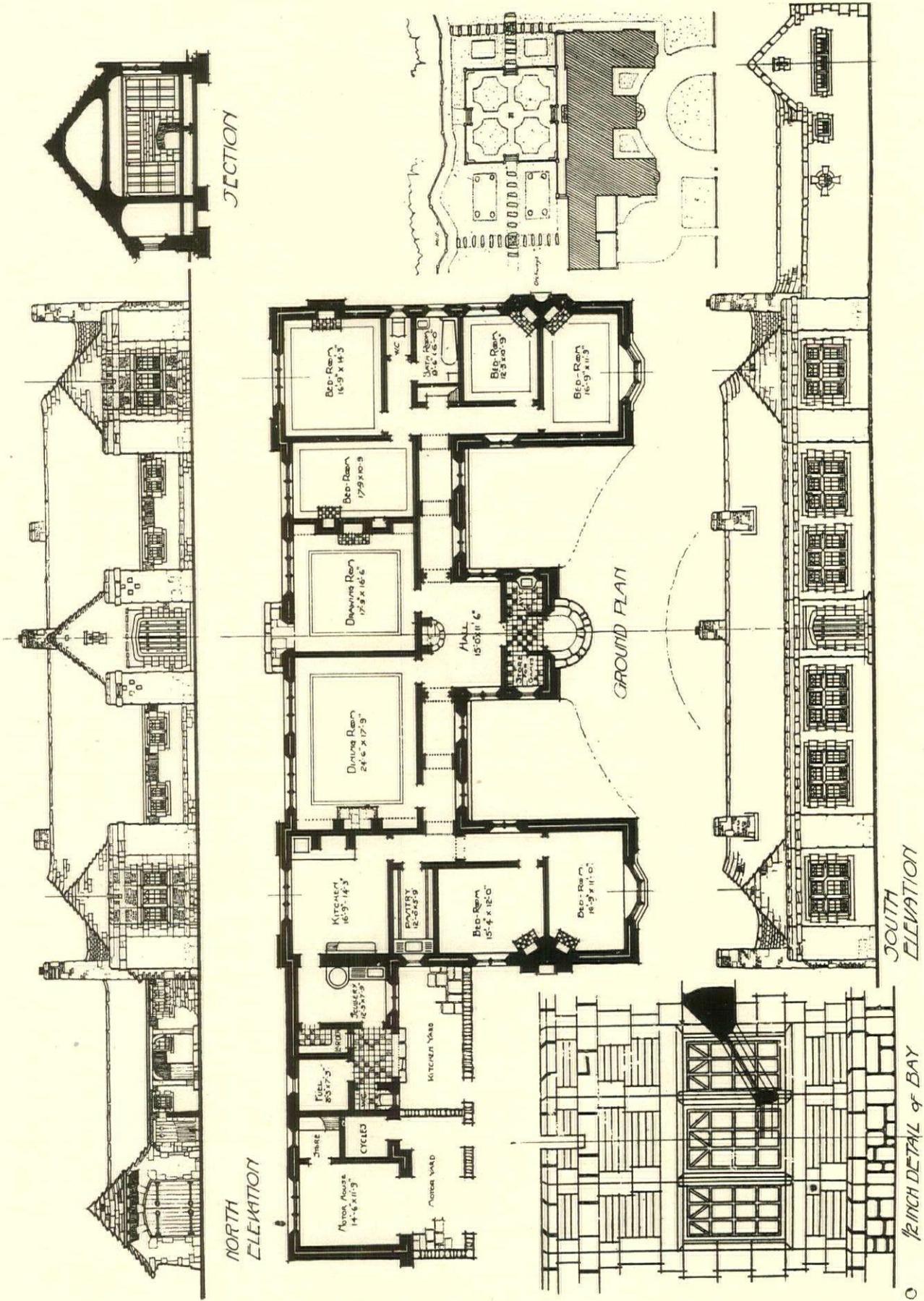
OSWALD C. HERING, ARCHITECT.





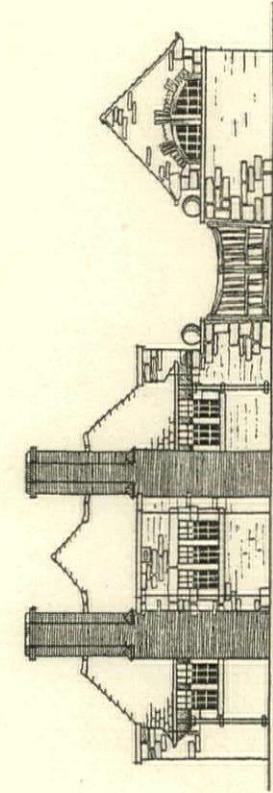
"Simon" B. N. Designing Club.

DESIGN FOR A ONE-STORY HOUSE OVERLOOKING THE SEA.

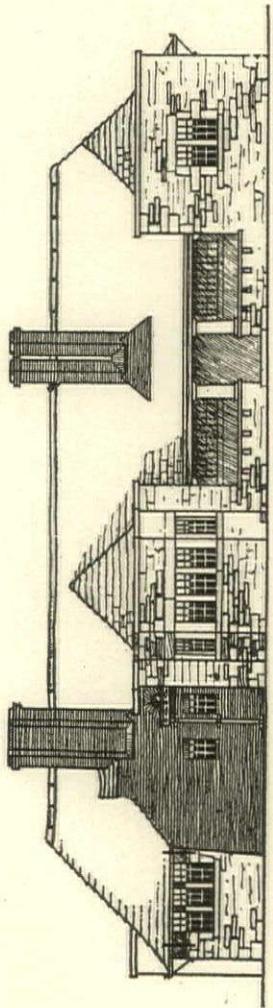


"Cygnus" B. N. Designing Club.

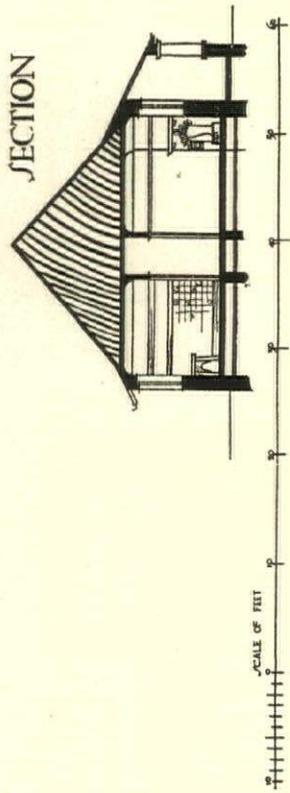
DESIGN FOR A ONE-STORY HOUSE OVERLOOKING THE SEA.



EAST ELEVATION

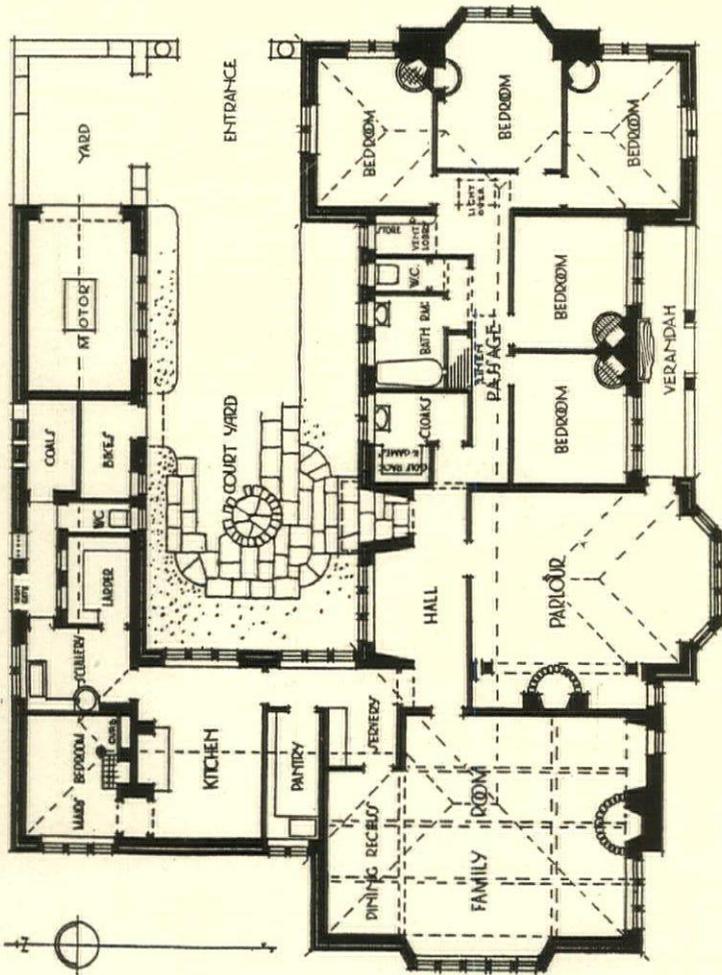
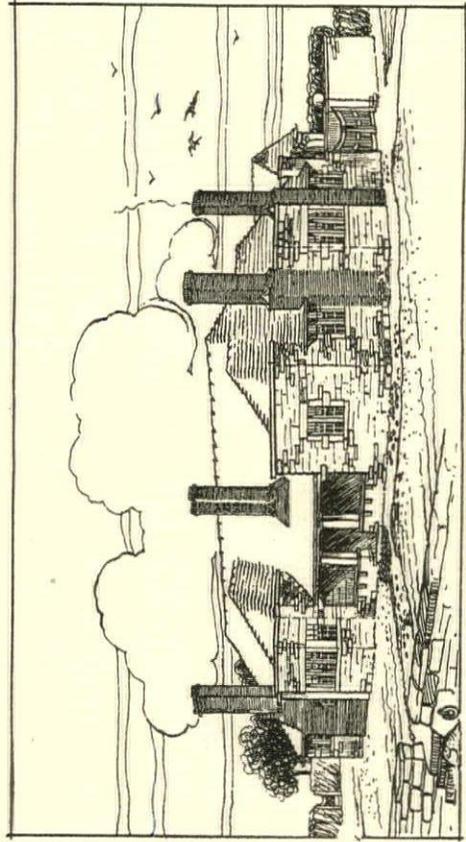


SOUTH ELEVATION



SECTION

SCALE OF FEET



PLAN

"Wrenay" B. N. Designing Club

DESIGN FOR A ONE-STORY HOUSE OVERLOOKING THE SEA.

(Continued from page 147)

shooting, etc., which will be concentrated in the vicinity of the clubhouse.

The second floor has been devoted to sleeping rooms and locker rooms for the ladies and men; each of these locker rooms are reached by a private stairway. From each of these rooms opens a toilet room. In conjunction with the men's locker room there is a barber shop. There are fourteen good-sized bedrooms, with seven baths; each of these rooms has a large closet; and the rooms are all so arranged that they can be rented either singly or en suite. There is a large room on the front overlooking the polo field which may be used for a directors' room, card room or additional bedroom, as may be desired. From this opens a large balcony for viewing the polo games and yachting. The women servants of the club are placed in the service wing over the service department.

The third floor is devoted to men's dormitories, with a few rooms for private servants, which latter can be reached from the service portion of the house only.

Owing to the low ground it has been found advisable not to attempt to place the locker rooms in the basement on account of dampness. They have, therefore, been placed on the second floor, where they may be made most attractive and comfortable.

A NEW TYPE OF TRAIN SHED.

ONE of the recent, most radical and decided departures from accepted standard types of railroad structures, has been in the design of train sheds. For many years the sheds built for large railway terminals have consisted of mammoth structures with comparatively long span roof trusses supporting high roofs.

The magnitude of these structures has had at least a part of its origin in an effort to locate the steelwork and skylights a considerable distance from the direct effects of engine gases and smoke, and to make an impressive structure from an architectural standpoint.

The original cost of these mammoth structures, the large and continuous expenditures for their maintenance, dating practically from the day of their completion, the unsatisfactory results obtained with them as a railroad structure, and their comparatively short life, are facts quite as well known to the railroad officials as the many discomforts from their use are known to the traveling public.

The departure from this old type of train shed construction is found in the new train sheds built by the Delaware, Lackawanna and Western Railroad Company at Hoboken, N. J., covering fourteen tracks, and at Scranton, Pa., covering four tracks. This same type of structure is now being built by the Chicago and Northwestern Railway Company to cover sixteen tracks at its new terminal in Chicago.

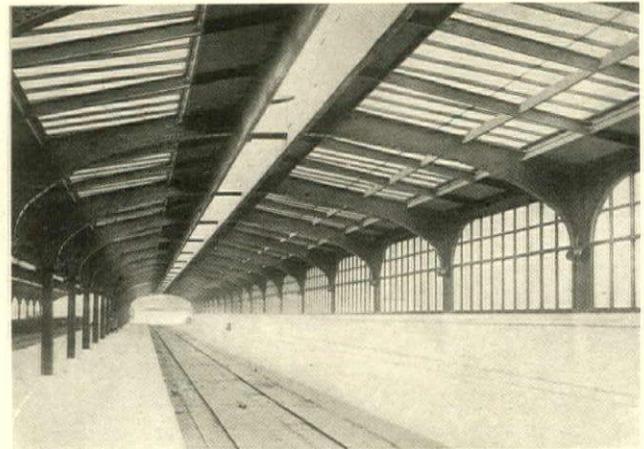
The two new train shed structures now in use by the Delaware, Lackawanna and Western Railroad Company, have proven very satisfactory to the railroad company's officials and patrons. In comparison with the old type of train shed, it has been generally conceded as superior from every standpoint and a description of this new design with accompanying illustrations will be of interest.

The new train shed structure at Hoboken was completed in 1906 and has fourteen tracks under cover. It consists of a connected series of short span, low arched sheds, with the roofs which span generally two tracks brought down close to the smoke stacks of the engines and with a continuous open smoke duct for the full length of the shed

over each track. The columns which support the main arched rafters are located on the center of the platforms and are spaced 27 feet apart longitudinally.

It will be seen from the illustration and arrangement of tracks in the shed, that the smoke stacks of the engines are close to the high portions of the roof which is a very desirable arrangement; for the reason that should any gas, smoke or heated air not get out immediately through the open smoke ducts, its distance to travel is very short in reaching the ventilated ridge on the center line of the shed at the extreme high point of the roof.

It has been found that where one train is discharging passengers on one side of a platform and another train receiving passengers on the opposite side of the same platform, that the columns on the platforms facilitate the movements; the lines of travel in opposite directions dividing themselves



INTERIOR VIEW OF TRAIN SHED, LACKAWANNA RAILROAD TERMINAL, HOBOKEN, N. J.

naturally on each half of the platform. The columns are about 12 inches in diameter and consume less space from a given available area than they would if located between the tracks, with the necessary spreading of tracks for clearance and safety. The columns are well protected from collision in the event of a train being derailed in the shed.

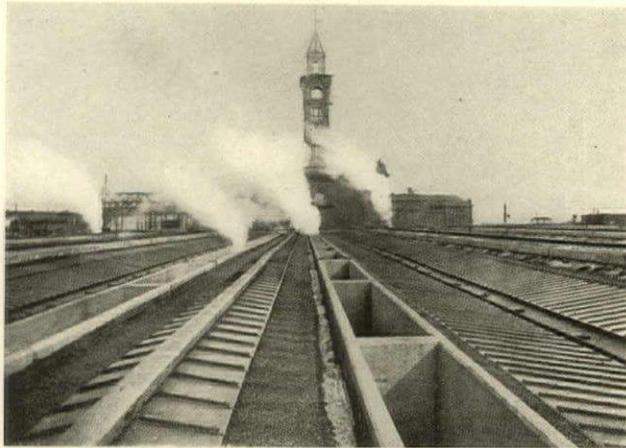
It will be noticed that there is a small skylight 3½ feet wide with a ventilated ridge located on the center line of each roof bay which provides reasonably good light to the sides of the cars farthest from the platforms. There are also two lines of large skylights of the "Anti-Pluvius" steel putty-less type, each 7 feet 10 inches wide, over each platform and which are located near the lower portions of the roof. This location of the skylights is an advantageous one from the standpoint of cleanliness and protection from engine gases, smoke and dirt. The shed has been in service three years without any cleaning of the skylight glass and the glass at present has a clean appearance.

The roof slab is concrete, 2½ inches in thickness, reinforced with 3-inch number 10 expanded metal, and the roof surface is a 4-ply slag.

The main arched rafters at their crossing of the open smoke ducts and the latticed steel purlins which form the sides of the open smoke ducts and support the sub-rafters, are encased with reinforced concrete. This prevents the engine gases and smoke from coming in contact with any part of the steelwork and thus the destruction of the metal work is prevented.

There is no wood construction of any kind in the structure and the necessity for carrying fire insurance is eliminated.

With the steelwork protected from the engine gases, as it is in the Hoboken shed, and with ordinary care given to maintenance, the life of this structure would seem indefinite. It is a well-known fact that the life of the old high type of train shed is limited by the destructive effect of engine gases



ROOF OF TRAIN SHED, LACKAWANNA RAILROAD
TERMINAL, HOBOKEN, N. J.

on the steelwork to a period of about eighteen or twenty years even with extraordinary expense and care exercised in its maintenance. The weight of metal work per square foot of area covered is about 40 per cent. less than the weight of metal work in the standard type of old style high shed.

The ventilating features of this new type of shed have been very carefully and efficiently designed. The open smoke ducts have sides about 4 feet high with a clear opening of 2½ feet. A part of the side walls of the ducts extend above the roof and the balance extends below the roof. The tops of the smoke ducts are as high as the roof ridge and the depth of the sides of the ducts and their width apart are such that a driving snow or rain storm cannot reach the platforms.

This design of open smoke duct produces a natural upward draft of air from beneath the shed, similar to the draft of a chimney, thus keeping the volume of air under the shed free from gas, smoke and heat. About one-tenth of the total area of the shed, consists of open smoke ducts. The top of these ducts being as high as the ridge of the roof and their depth being such as to produce a natural upward draft, prevents down drafts of smoke and gas into the shed. The gas and smoke from the exhaust of engines within the old type of train shed has been the greatest source of annoyance, discomfort and damage to the structure, while the exhaust of engines into the open smoke ducts in this new type of shed, serves in a very material degree to produce a circulation of new and wholesome air into the shed. There is a large amount of heated air that originates under train sheds, due to the heat from the sun which passes through the skylights, as well as smoke, gas, heat and escaping steam which comes from engines standing in the sheds. A free passage at all times for these elements through the open smoke ducts above the tracks for the entire area of the shed, has proven a most satisfactory and efficient means of ventilation and cleanliness in the sheds at Hoboken and Scranton.

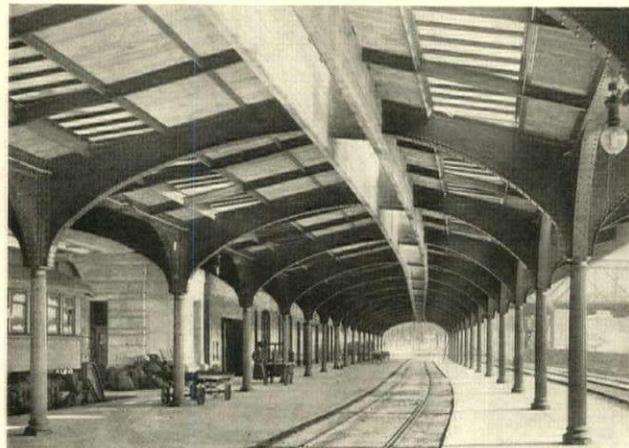
It has been found that there is always a tendency of gas and heated air to accumulate behind beams and other projecting parts of train shed structures directly under the roof. In order to take care of this condition behind the

sides of the smoke ducts which project below the roof, small openings 2 inches high and 14 inches long, pitched downward towards the open ducts and extending through the sides of the ducts have been provided. These openings are located as close as possible to the under side of the roof. A test made with ignited material producing smoke, showed that there is a strong natural draft through these small openings into the open ducts. Such a free draft would not occur with a simple slot cut through the roof slab or with a shallow depth of duct. Any type of cover or shutter over the open ducts would materially retard the free circulation of air over each track which now takes place throughout the entire area of the shed, and would also intercept a large amount of direct light that now comes through the open ducts. Such covers and any operating mechanism connected with them would interfere with the direct and free passage of gas, dirt and smoke thrown directly upward and out of the shed by the exhaust of the engines and would cause cinders and dirt to be projected back into the shed. They would also be destroyed and eaten away in a short time by the engine gases and the blasting effect from the engine exhaust.

A series of thermometer readings were taken at the same hours for a period of six weeks, in the summer of 1906, in the new Hoboken train shed and in a large high shed similarly located; the results showing that the Hoboken shed averaged four degrees cooler than the high shed.

The track centers are so located in relation to the edges of the platforms that water dripping from the roof of cars clears the platform and drops on the track ballast. In very heavy rain storms some dampness along the edges of the platforms is caused by water dripping from the car eaves and striking the projecting window sills of the cars thus producing a sort of fine spray, but this is inappreciable to anyone walking along the platforms close to the cars and is of such minor importance in comparison to the preservation of the structure, cleanliness, pure air, comfort and perfect ventilation due to the continuous open smoke ducts that it is a negligible quantity.

The snow fall for the winter of 1906 in New York City was the heaviest that had occurred in twenty years. During the winter four very heavy snow storms occurred,



INTERIOR VIEW OF TRAIN SHED, LACKAWANNA RAILROAD
STATION, SCRANTON, PA.

the weather bureau's reports showing a fall of 10½ inches of snow in one storm which lasted 30 hours and was accompanied by a high wind. As a result of this storm only a very small amount of snow reached the platforms; the maximum depth of snow at a few points on the platforms

did not exceed one-half of an inch. No snow has ever been shovelled from the skylights or roof of the Hoboken shed and even with 10½ inches of snow covering the skylights, the interior of the shed was as well lighted by the open smoke ducts as the lighting found in the old type of shed on a dark or cloudy winter's day. Should it ever be found necessary to remove snow from the roof of shed it can be very readily and conveniently done through the open smoke ducts.

The drainage from the roof is carried down through separate drain pipes located inside of the cast-iron columns. These drain pipes are thus insulated from freezing by means of an air chamber between the inside of the cast-iron column and the outside of the drain pipe and are not exposed to view nor subjected to damage from baggage trucks.

The noise and annoying echoes which exist in the high sheds are very much reduced and are much less annoying in this low type of shed.

At a large railway terminal the station proper generally has its upper stories utilized for office facilities and with the high sheds reaching to a height of sometimes eighty feet or more, the admission of natural light into the main waiting room even with high ceilings and other rooms at the track level as well as portions of the office rooms is intercepted by the high shed. With the low type of shed used at Hoboken the train shed structure can be carried clear back to the face of the station proper without causing any material interception of natural light.

The erection of the steel work was handled expeditiously and economically with an ordinary derrick car and without the use of any falsework. In this erection work it was necessary to take possession of only two tracks at a time in

the terminal and divert travel from the train shed bay where the erection was in progress, no covering to protect traffic being necessary.

In the Hoboken shed the large skylights over the platforms of the "Anti-Pluvius" puttyless type were glazed with sheets of ⅜-inch wire glass, the sheets being 27 inches by 86 inches. These sheets of glass were larger than they should have been on account of breakage and provided more light than is usually necessary. In the Scranton shed the same type of skylight and glass have been used, but the sheets of glass were cut down in size to 20 inches by 60 inches. This reduced size of skylight glass has been adopted for the new train shed of the Chicago and Northwestern Railway Co., at Chicago, and is believed to be the best size for large skylight work. The skylights over the platforms are located about ten feet from the car windows and are close to the platforms. Being free from contact with gas and smoke, the smaller sized glass and skylight 5 feet wide will furnish an abundance of light for the interior of the shed.

In designing the skylights, if a raised type of skylight is not used, proper care must be taken in the design to prevent pitch and slag from running down over the glass or some other type of roof cover other than slag should be adopted.

For an important railway terminal or station the ordinary canopy covers, extending over the platforms only, do not provide adequate and satisfactory protection from the elements.

From an architectural standpoint this new design of train shed, known as the Bush type, is superior to the high vaulted shed, and for various reasons it is destined to replace it.



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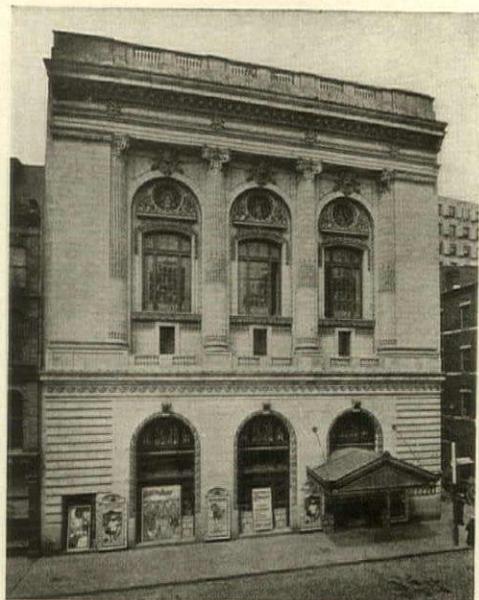
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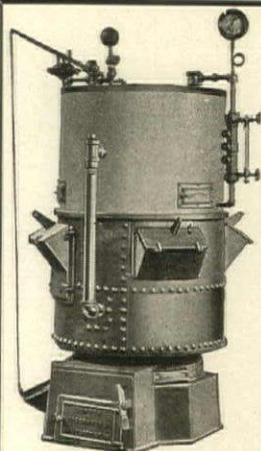
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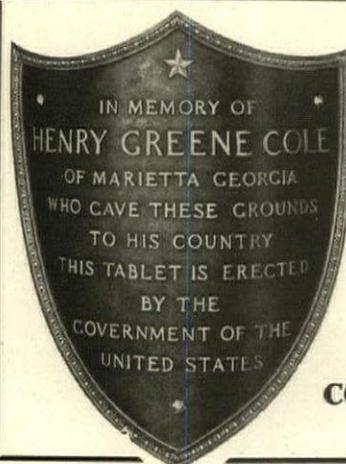


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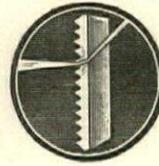
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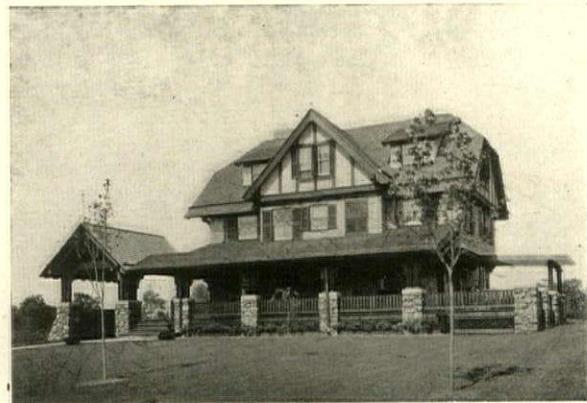
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ARCHITECTURAL CRITICISM.

IT is very rarely that one sees so many interesting interiors brought together in a single building as in the Masonic Temple, H. P. Knowles, architect. Only in the largest club houses and hotels have so many rooms been possible, and in such cases the rooms are of various sizes and the large ones broken up by columns, so that interiors like these have been impossible. It has always seemed to me desirable to keep the treatment of the interior of the building in con-

formity with the exterior, and that the rooms, at least those opening from each other, should be done in the same style, or one so closely related to it as to insure harmony. Unhappily this is by no means the usual method of handling a building. A large hotel has always its "Louis Quinze" room; generally a café in German or Mission, and the other rooms in a confused jumble of styles without order or logic, often designed by different decorators who work without regard to the color or scale of the man doing the next room.

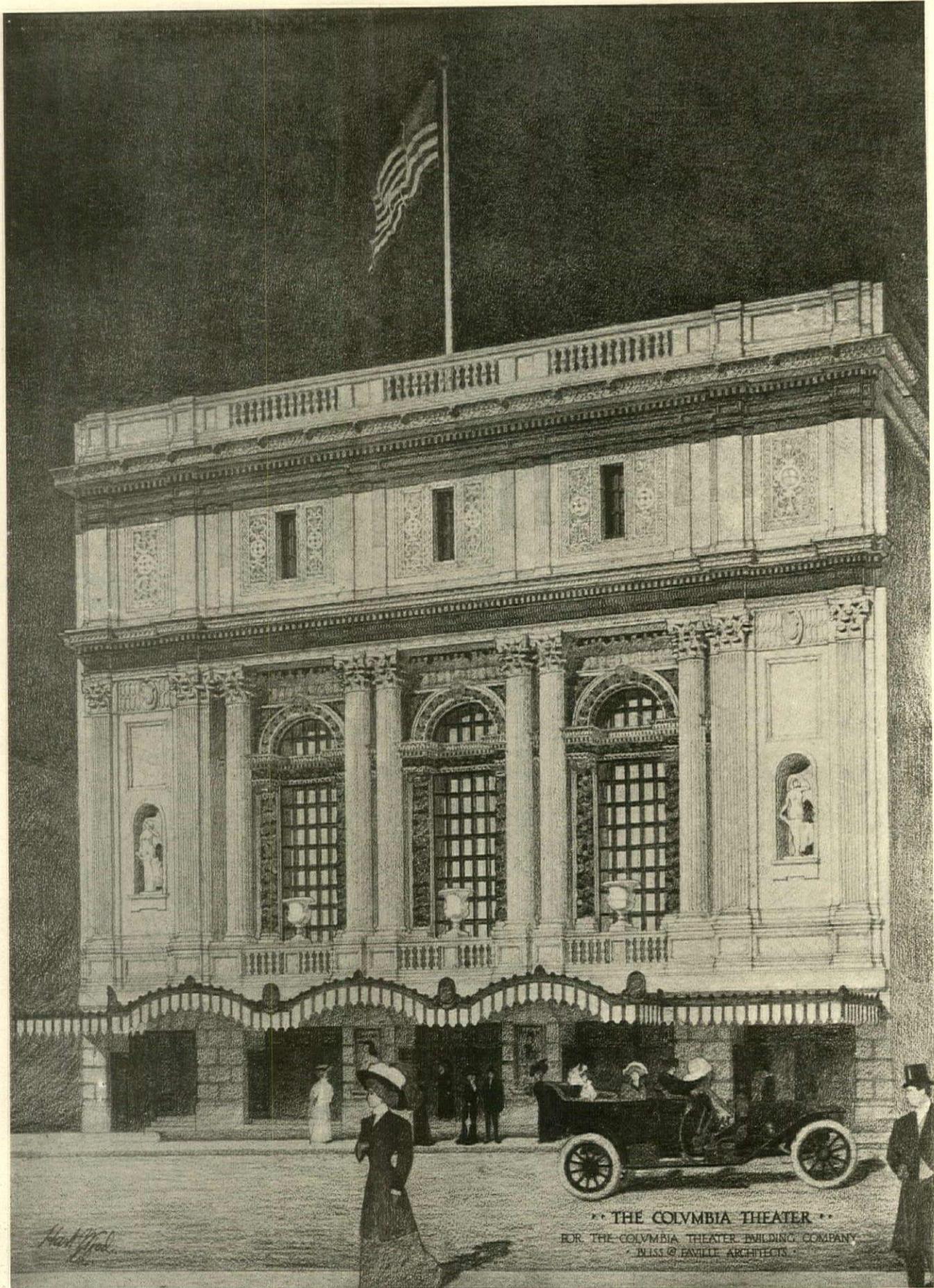
Very charming single rooms are often obtained by this method. To those of us who are New Yorkers the Café Elysée at the Breslin, the Tap Room at the Prince George, the Bar Room at the Knickerbocker, and the Palm Room at the Astor will at once occur as rooms beautiful in themselves but without much relation to the other portions of their respective buildings. My idea that a certain type of design should be observed throughout is very possibly a false one, but it does seem that sufficient interest could be obtained by different treatments in one style without recourse to a series of so-called "period" rooms especially when they are not all of them designed by the architect. Sherry's and the Hofbräuhaus, while at the very extreme of architectural design, are each consistent throughout and do not suffer by comparison with buildings of their respective classes where the single style of treatment does not prevail.

The case of the Masonic Temple is different. There is something about the building of a great secret order which demands the bizarre, and the treatment of the eleven lodge rooms of similar dimensions and character of furnishing in the same style would result in an appalling monotony. The architect has very wisely chosen to write in an enduring way a brief history of architecture as seen from his standpoint, but the fact that they are all considered from an individual angle, and that the same mind has dominated the styles, (instead of being dominated by them) has resulted in a series of rooms quite different in design, of every period, and yet of singular unity of character.

Because of the supposed antiquity of the Masonic order, the Egyptian style has been much employed in its buildings, and this is the one here used for the Chapter room with such excellent effect. A large part of the decoration is in color and the whole treatment shows considerable knowledge of Egyptian combined with the strength of design necessary to handle it in a manner not purely Egyptian. The manner in which the pylon is employed between the two columns with palm leaf caps, is distinctly a departure from Egyptian methods, but because of the excellent mass, this delightful detail appears in no way misplaced. It would be interesting to know if the sculpture has any symbolic meaning; and if it has, whether this meaning is expressed by ideographs really Egyptian, or by suggestions in the carving comprehensible to any one familiar with the ritual of the order.

The smaller lodge rooms shown here are those where the Grecian Doric and Ionic orders are used, the Roman Corinthian room, the Gothic, Renaissance and English Jacobean rooms and the later French Doric and Ionic, and the Colonial rooms. No label is necessary to identify them, yet each is, because of some subtle spirit, difficult to define, wholly and thoroughly modern, and not only that, but as has before been said, they are quite in character each with the other and adorn in a manner both rational and beautiful the building of which they are a part.

(Continued page 163)



ACCEPTED DESIGN, COLUMBIA THEATRE, SAN FRANCISCO.

Bliss & Faville, Architects.

(Continued from page 161)

The two Greek rooms, the Doric and Ionic ring especially true, although the styles are not easy to adjust to conditions of to-day. Their motives are few and unless handled with refined skill are apt to become ludicrous. Much alike in general treatment their differences are only those essential to the styles, yet they are by no means replicas. The manner in which the cornices are treated with the start of the coffered ceiling is especially interesting, that in the Ionic room being treated as an exterior cornice rather than as an interior. The Roman Corinthian room is also attractive but it has not quite the spirit of the other two.

The Gothic room is distinguished by its delightful ceiling treatment. Had the niches in place of the customary windows been decorated by mosaics or color the effect would be probably better, and the wainscot might have carried the Gothic idea further than was here done. At the same time these changes might have carried the room too far into the Gothic period, with a loss of that serene dignity which is its most notable characteristic.

The Renaissance room is the most elaborate of all, yet while exceedingly rich the quiet tones of the color scheme and the excellent scale of the detail assist in maintaining the integrity of the whole scheme. The lotus columns shown flanking the doorway of one of the two pictures must have a place in the ritual since they have none in design. Aside from these there is not a false note in the composition, and while the scale is somewhat smaller than that of the other rooms, owing to the lowering of the height of the order to permit the inter-sections in the ceiling, there is nothing trivial about the design.

The English Jacobean room is perhaps the weakest of them all. It could hardly be expected that the mind of an architect so thoroughly in accord with the austerity of Greek forms could sympathize with the quaint playfulness of fancy essential to complete success in English design of the Jacobean period. At that time the traditional instincts of the Gothic were making themselves felt through the half learned formulas of the Classic Revival, and the naive confusion of ideas which formed the English Renaissance, known as Jacobean, is almost impossible to an architect whose intellect has been trained in the clear and logical light of to-day. While the English Jacobean room is not so distinguished as some of the others it is still above mediocrity and forms a worthy part in the series.

The exterior of the building is designed in the Americanized French Renaissance so common in New York to-day, but it is handled with a restrained sincerity which raises it far above the ruck of present day French architecture. The same refinement visible in the exterior is evident in the French Doric and Ionic rooms. They are free from the over abundance of decoration which mars so much of our work in the French styles by confusing the basic motives, yet are free from bareness or any imputation of stinginess in their treatment.

The Colonial room, while in itself delightful, and hall-marked Colonial by the ornament, somehow fails to impress one as being truly a Colonial room. Just where this should be is hard to determine. Even with a pretty careful examination it fails to show any feature not usual in that period and in the matter of scale, the place where so much "modern Colonial" goes wrong, it is quite correct. To find where the fault lies one must seek the very point which makes the

series of rooms as a whole the strongest, that is the individual quality apparent and which has enabled the architect to bring these styles in themselves so greatly at variance into a series of harmonious compositions.

One notable point throughout all the rooms is that the furniture, electric lighting fixtures, and other minor details are all designed for their place and for no other. It is always a question as to whether or not the best work will not be spoiled by the introduction of extraneous elements by the owner. Here, fortunately, all furniture, etc., had to be bought anew, and with a display of unusual wisdom the building committee permitted this to be done under the supervision of the architect who was therefore able to get the best results.

A single criticism may perhaps not be amiss. The backs of the settees hide not only the bases of the rooms, but those of the columns, a thing which though perhaps unavoidable was nevertheless unfortunate. It seems as if by elevating the orders on plinths they might have been raised so as to give their full value, although perhaps this method was considered and rejected because of the consequent loss of scale. Another possible scheme would have been to have planned aisles terminating at the bottom of the pilasters that come down to the floor.

Of the other rooms the most interesting are the library and auditorium. In explanation of the peculiar design of the library, it may be said that it is not intended for use as a reading room but rather for the preservation of the records, etc. The ceiling treatment seems rather overwhelming. The auditorium is most attractive. The method of support of the balcony being especially good, since the material and strength of the columns is self-evident without their being so large as to interfere with the vision of those seated behind.

A more interesting collection of interiors I have never seen presented in one building, and while it may be urged that the chance was extraordinary it is not every architect who would have grasped his opportunities so completely.

THE IMPORTANCE OF ARCHITECTURE.

THE subject of architecture is, perhaps, of more vital importance than many people are aware, and we doubt whether it is possible for the ordinary man living amid his present surroundings to realize the part architecture had played in the lives of men in the past. Undoubtedly, we live in an age in which there was a sad want of interest in things artistic, and in our opinion indifference has had a disastrous effect on our national character. At least half of our present social and economic troubles would never have arisen had we been a nation who really loved the beautiful. If we possessed that love there would not be the terrible slums in our great cities, the degraded lives of many of our workers, or the aimless lives of many wealthy people. Architecture affords the best means of studying the character of a people, and a better medium could not be found when making comparisons between nations. Why should we not have in all quarters of our great cities things of beauty, so that every street, every corner, every square, and every house might be delightful to behold? After going round some districts it was not surprising to find that the people living in such surroundings had no interest in art. For these reasons they should take a real interest in architecture for its own sake, and for the sake of the advantages to which a knowledge of it might be applied.



ACCEPTED DESIGN FOR THE BERZELIUS SOCIETY BUILDING, SHEFFIELD SCIENTIFIC SCHOOL, YALE UNIVERSITY Donn Barber, Architect.

BOOK REVIEWS.

MODERN HOMES. T. Raffles Davison. London, 1909. The Macmillan Company, New York. Cloth. \$5.25 net.

The English practitioner and writer maintains a foremost position on the subject of homes and from him we have acquired much that is good in American work of domestic character.

Mr. Davison furnishes us with a delightful selection of examples of dwelling houses, described and illustrated, with a foreword by Sir Aston Webb. The book is well presented.

THE ARCHITECTS' DIRECTORY AND SPECIFICATION INDEX. William T. Comstock, New York, 1909. Cloth. \$3.00 net.

The ninth edition of a reliable and popular reference book which appears in this issue, with many changes and new features.

The additions include a special list of architects to Boards of Education and a list of Architectural Societies throughout the world.

ONE HUNDRED COUNTRY HOUSES. By Aymar Embury II, Architect. 1909. Century Company, Publishers. \$3.00.

This recent addition to the long list of books on country houses differs considerably from the usual type. It is not a compilation from the back numbers of any magazine, but an entirely new collection of subjects. Many of them have of course been illustrated before, but any book of country houses which endeavors to show the best work that has been done in the country necessarily must include considerable old matter.

Here, for the first time, country houses have been divided into styles so that an architect searching for something to help him may readily find what he is looking for.

The book's greatest strength lies in the fact that the material is not from any particular portion of the United States, but has been gathered from the entire country. Considerable work by California and Chicago architects is shown, as well as the work of the best of the Eastern men. The first introductory chapter on "The New American Architecture" may perhaps serve to clarify ideas on our modern development. It attempts to show that a new architecture is rapidly being developed here which is in itself a style as complete and distinct from others as the modern German. Also that this style is not local to New York or Philadelphia, but extends over the whole country and that such a style is rationally founded upon the European work. Also that any expectation of America producing an architecture without precedent is contrary to the laws which govern the development of all art.

The running criticism of every house, while it may not be useful to the architects of the larger cities will probably be worth the attention of those men who do not have the opportunity every day to exchange ideas with the well informed of their colleagues.

STRUCTURAL DETAILS. Henry S. Jacoby. 1909. John Wiley & Sons, New York. Cloth. \$2.25 net.

The title of this volume corresponds to a course of instruction conducted by the author in the College of Civil Engineering in Cornell University during the past nineteen years.

It comprises 368 pages, profusely illustrated, with figures in the text, six folding plates and 34 full-page plates.

POWER, HEATING AND VENTILATION. Charles L. Hubbard, B. S., M. E. 1908. The Technical Press, Brattleboro, Vt. Cloth. \$5.00.

Mr. Hubbard is a consulting engineer whose ability and experience fit him for the work of preparing a most comprehensive treatise for engineers, architects and students. His book is published in one volume and includes much practical data taken from notebooks on various problems which actually had to be worked out.

LIGHT AND HEAVY TIMBER FRAMING. Fred T. Hodgson, F.A.I.C. 1909. Frederick J. Drake & Co., Chicago. Cloth.

Being a copious treatise on the modern practical methods

of executing all kinds of timber framing, from the simple scantling shed or lean-to, to the heavy complicated timber bridges, centers, needling and shoring, roofing and railway work, tank frames and taper structures. Published with over four hundred and fifty illustrations and diagrams.

THE DECORATION AND FURNITURE OF ENGLISH MANSIONS DURING THE 17TH AND 18TH CENTURIES. Francis Lenygon. 1909. Imported by Charles Scribner's Sons, New York. Cloth. \$10.00.

The study of the arts of the Renaissance in England has been facilitated and benefited by the results of recent research and the publication of valuable data and examples. This book seeks to be of special service since it aims at the treatment of walls, ceilings, floors and furniture—in short, the development of the whole scheme of interior decoration of the period. It is a handsome book, well printed, substantially bound in cloth and elaborately illustrated.

FRENCH CATHEDRALS. Elizabeth Robins Pennell. 1909. The Century Co., New York. Cloth.

This is a travel story with such a wonderful amount of study and information that it might also be classed as a text book. The cathedrals of France form a foundation for much that has been accomplished in really good American ecclesiastical work and architects in this country are aware of its value.

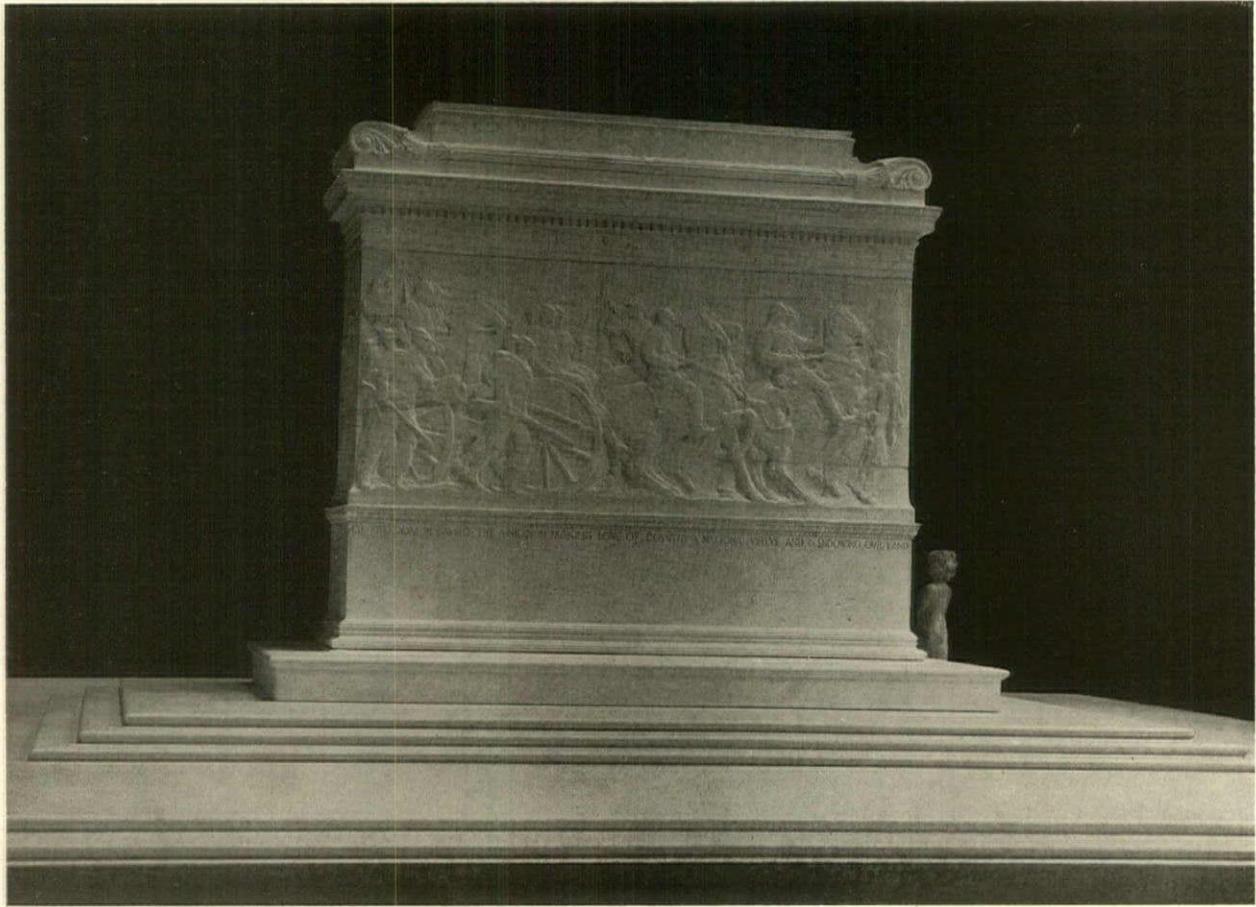
The book is attractive in blue cloth binding and illustrated with beautiful tint plates.

HOW COMPETITIONS DEMORALIZE.

S. C. NEWMAN.

ALMOST every architect enters for an occasional competition. It is the recognized method of filling up spare time and of keeping a staff together when there is nothing else to do. It is also the recognized way by which he who is engaged ordinarily in quite a commonplace practice keeps himself in touch with better things. Besides these two classes of competitors, and saying nothing of the young man who enters for the sake of the experience he may gain thereby, there yet remains a body of men who do nothing else but compete, trusting entirely to their successes—which may average, with the exceptional man, perhaps one in every twenty efforts—for their livelihood. Necessarily, those who adopt this method of securing work, to the exclusion of all others, are clever architects, good planners, and excellent designers, possessing the knack of showing all the good points of their schemes with comparatively little effort, and often gifted with the power of adapting themselves to the known idiosyncrasies of any particular judge. These men really set the standard of competition work. They are well known to one another and to the judges, as well as to the general rank and file of the profession, and it is not too much to say that any judge of experience could pick out the work of this, that, or the other of these architects, whatever precautions may be taken to prevent the disclosure of identity. They form a clique; but it is a clique of merit, entry into which is to be obtained by any capable man who has it in him to produce work of equal calibre with theirs. Almost all the open competitions in the country are carried off by one or other member of this small circle. Amongst them it is little more than a gamble as to who shall win—if that can properly be called a gamble which is in its very essence a game of skill. If the problem set is an easy one on a simple site, many men of less note are encouraged to enter, and may stand an equal chance; but large and difficult problems can only be dealt with properly, it seems, by those who have had experience in competition work on a large scale.

(Continued page 167)



ACCEPTED DESIGN, SOLDIERS AND SAILORS MEMORIAL, ALBANY, N. Y.

Lord & Hewlett, Architects.

(Continued from page 165)

So far the state of affairs is well understood and is perfectly legitimate—except in this respect, that the public are led to imagine that architects must be excessively overpaid in the ordinary way if they are willing to spend an immense amount upon drawings, in competitions with others, in order to obtain what, after all, is only the ordinary commission if they succeed in securing the work. At one time the conduct of competitions was a constant source of trouble, particularly in the days before the appointment of a professional judge was a recognized necessity. With his advent one source of trouble has disappeared; but several others remain, the most prominent amongst these being a feeling, justified by many an award, that strict compliance with the conditions is not merely a non-essential, but is likely to be an absolute bar to success. There is one well-known competing firm which invariably puts aside the question of cost entirely and submits an ideal scheme. In several cases the result has justified their action. They have been able to show that a much better building could be produced if only the cost-limit were waived, and they have put their arguments so forcibly as to induce the judge to recommend the adoption of their scheme. As a matter of strict honesty, this cannot be considered to be right; but the judge's position has in every case been probably a difficult one: he has felt it his duty to advise the promoters that they would secure much better value for their money by spending a certain amount in excess than by adopting the plans of some other competitor who had literally complied with the conditions. The result has been good for the promoters and for architecture, but bad for the morality of architects.

There is always a temptation, when a cost-limit is fixed, to take the advice of some near relative of Ananias when compiling the approximate estimate, and this temptation becomes almost irresistible when it is known that time and again successful designs have in execution largely exceeded the stipulated cost. The matter is not greatly altered when a competitor honestly states that his building will cost more than the sum named, while pointing out the additional advantages secured by the extra expenditure, thereby securing an award in his favor, while as a matter of fact his design should have been disqualified. Most commonly, however, competitors will prepare elevations out of all proportion to the money which there is to spend, trusting thereby to win the competition, and having somewhere at the back of their brain a scheme for reducing the cost, in the event of success, by cutting away this feature or that—substituting, perhaps, eaves for a stone parapet, and brickwork for stone facing down side roads and flank walls, in order to bring down the estimate eventually, caring little that the building erected will then bear but a faint resemblance to that the design for which the promoters of the competition were so proud to approve on the advice of their skilled judge.

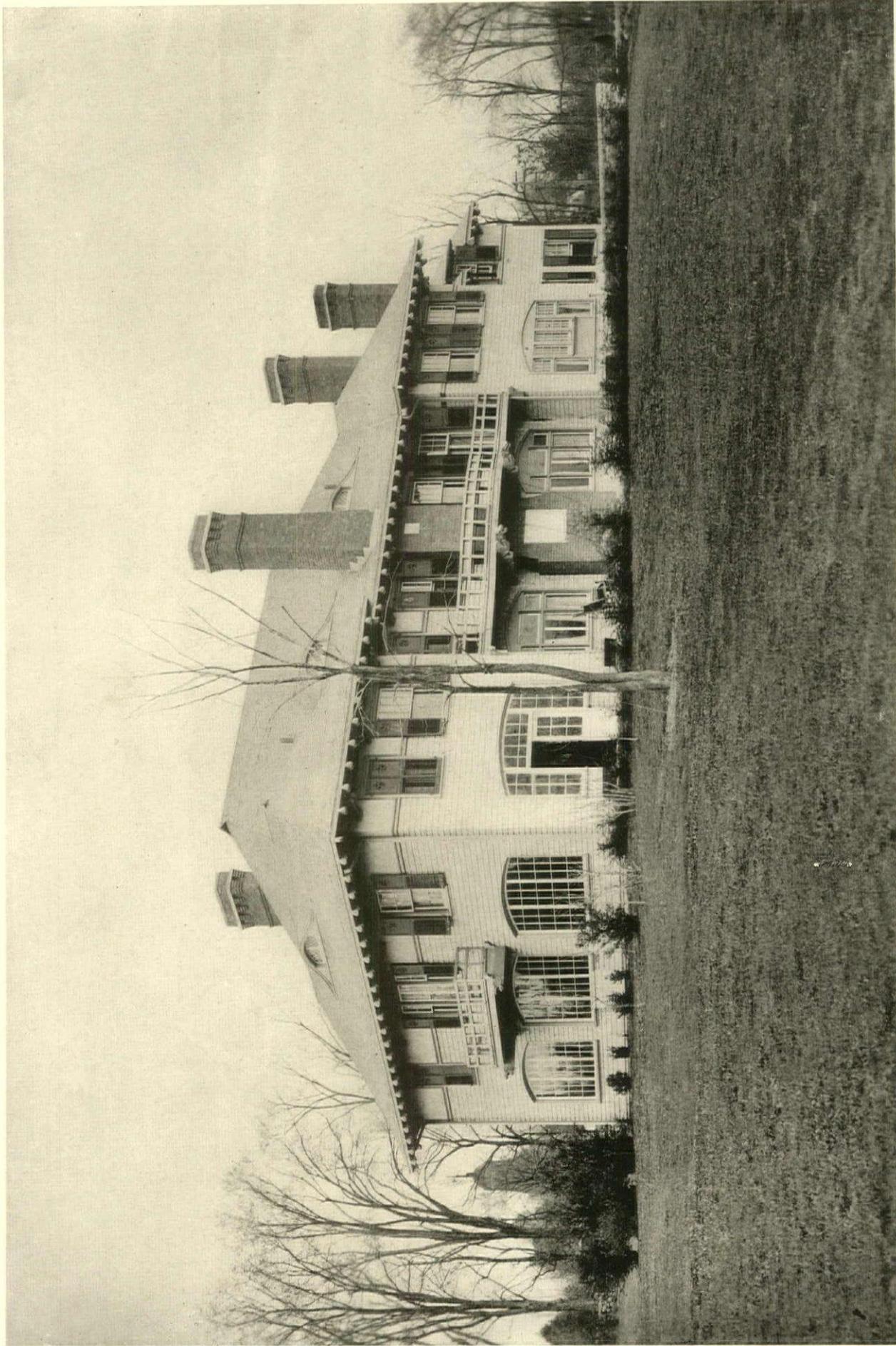
Besides these, there are other well-known tricks—for they can be called nothing else—which are practiced by the less scrupulous competition architects. Perspectives are produced in which no notice is taken of intervening buildings, or they are "fudged," altering the proportions and improving the design, bringing out the more beautiful features, and hiding or omitting those which would be less satisfactory. Occasionally, careful examination will disclose the fact that plans do not agree with sections, nor sections with elevations. "The drawings have been prepared in a hurry, without thinking out all details." This is a very convenient excuse for one

who has deliberately set aside the practical requirements of his plan when he has been designing his elevation; but as often as not it is untrue. The want of correspondence between drawing and drawing has been well-known to the author; but he has allowed his desire to secure the work to overmaster his regard for rectitude. As for conditions laying down precise scales for certain drawings, or stipulating that there shall be no shading and no washes upon the elevations, these are all made to be disregarded more or less, and it is even sometimes extremely difficult to say whether conditions of this sort have been contravened or not. When, for instance, a competitor outlines his prominent features with a broad ink-line, while using a fine line for the minor features, it can hardly be said that he has shaded his drawing, though the effect of shading is produced. When a color wash is prohibited, it is difficult to say whether a flat wash of light Indian ink is permissible. In a recent case it was stipulated that there should be no color washes except on the floors, and that the elevations should be in black ink only: a wash of diluted black ink was introduced—by one competitor only—over the roofs, in the windows, and to mark the recessing under a portico, two different shades being used? Was this honest or was it not? The matter must be left to the consciences of the competitor who thereby emphasized his design and the judge who accepted it. On the same occasion another competitor spent two hundred dollars in having wash perspectives made in light ink, and he was disqualified—most justly.

The net results of all these considerations is that competitors are bound to see that strict honesty does not pay, while at the same time they are always in doubt as to how far they may go in their dishonesty with impunity. Nothing could be more demoralizing than this. By means of strenuous effort the nomination of a professional judge has been secured in almost every important competition; but the judge selected is almost invariably an old competitor himself, tainted by many years of contact with that which is scarcely right, and, without knowing it, he has lost an appreciation of the difference between what is strictly honest and what is not. Even when the most flagrant injustice has been done, the judge has probably thought that he has acted rightly. We are not, of course, speaking of cases where the only fault to find has been lack of judgment, or of those others in which a judge has apparently made a bad award in order to create trouble and eventually secure the work himself, but of the many in which the successful competitor has in some way or other travestied the conditions—to use the mildest word possible to explain our meaning. We have sought a cure from the flagrant dishonesty of the olden times, when wirepulling was the rule, and the local committee gave the work to him who had most friends; and the remedy is as bad as the disease, for the professional judge, even with the best intentions in the world, is apt to be uneven-handed in his justice.

There is a general, but erroneous, idea that the best architects are necessarily the best judge, and that the President of the Institute must, from his small acquaintance, be able to select the right man for adjudicating every competition. As a matter of fact, he distributes his patronage, during his term of office, as fairly as he can amongst the best-known competition-winners and the most prominent men in the Institute, regardless of their fitness to act the part of judges in the ordinary legal and impartial sense. What is

(Continued page 173)

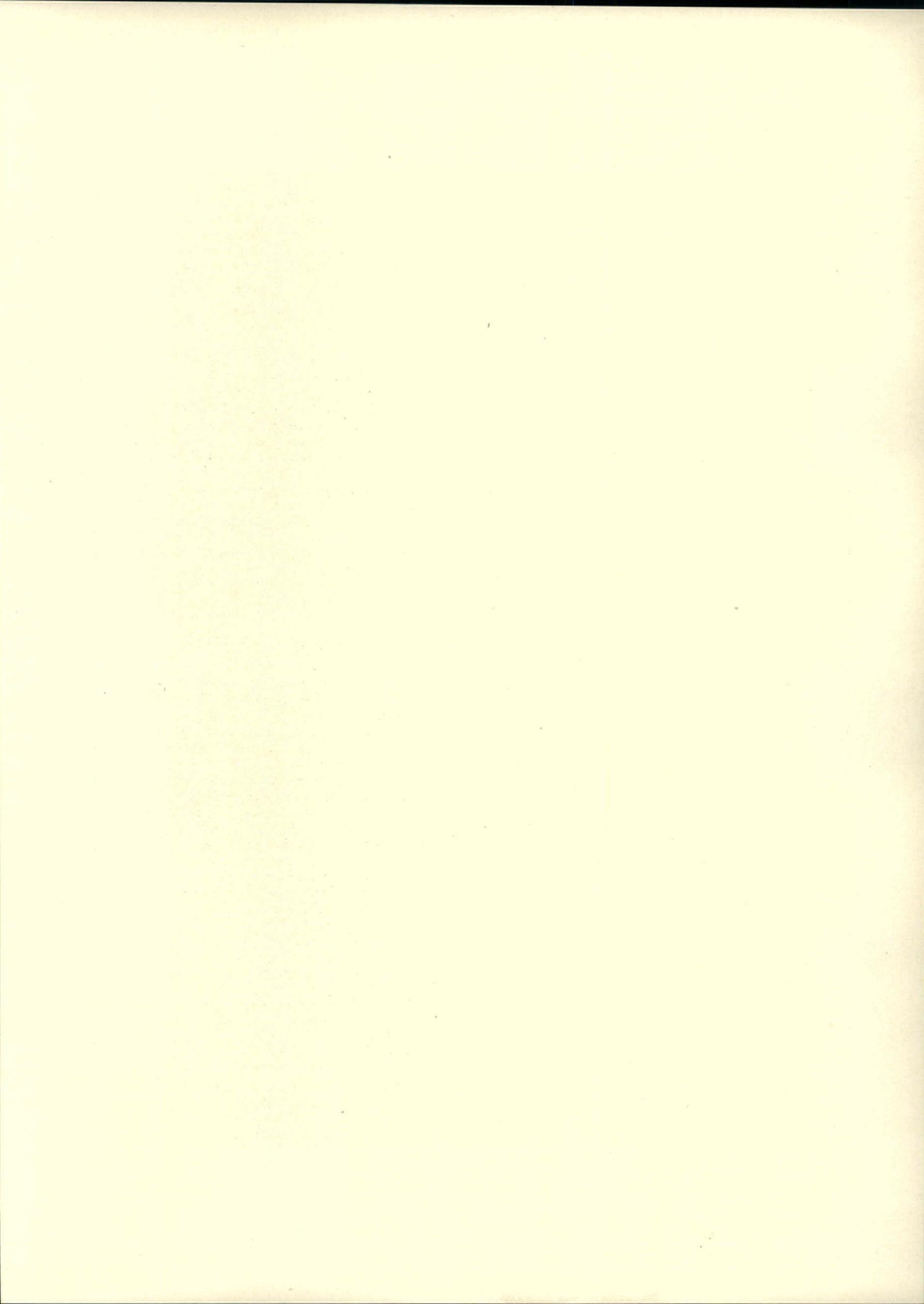


COUNTRY HOUSE, W. B. TUBBY, GREENWICH, CONN.

Kinnear Pressed Radiators.

Yale & Towne Hardware.

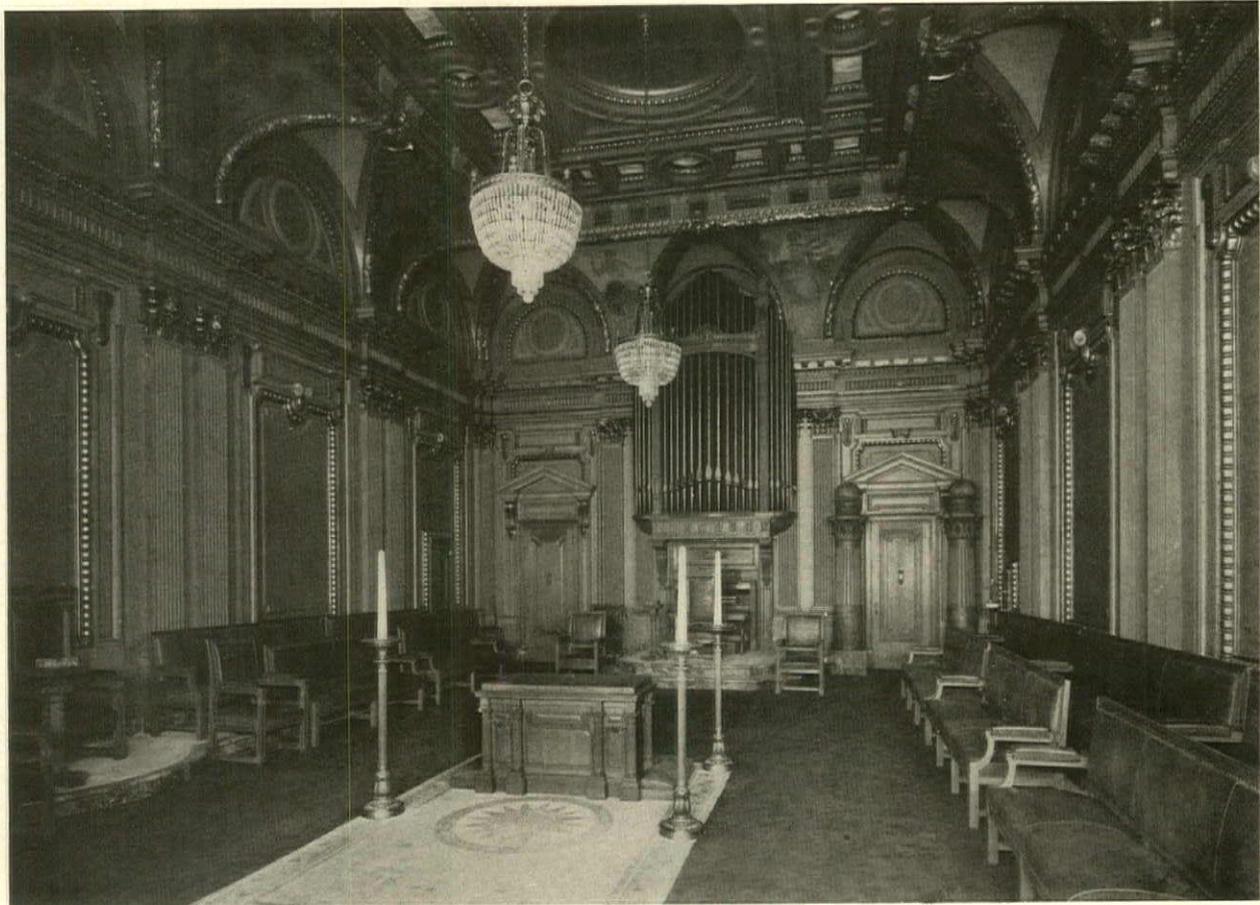
W. B. Tubby, Architect.





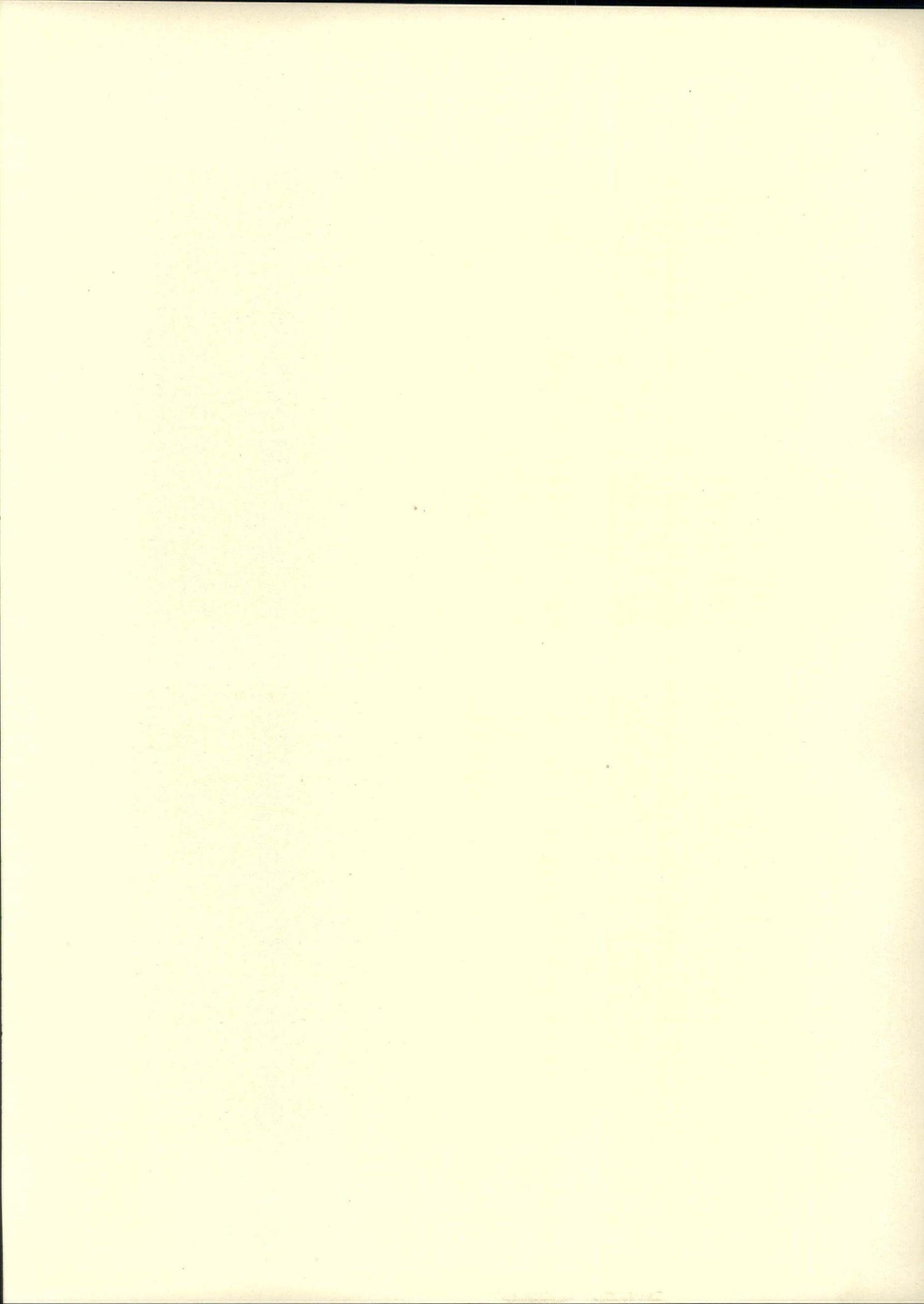
THE RENAISSANCE ROOM, LOOKING NORTH, MASONIC TEMPLE, NEW YORK.
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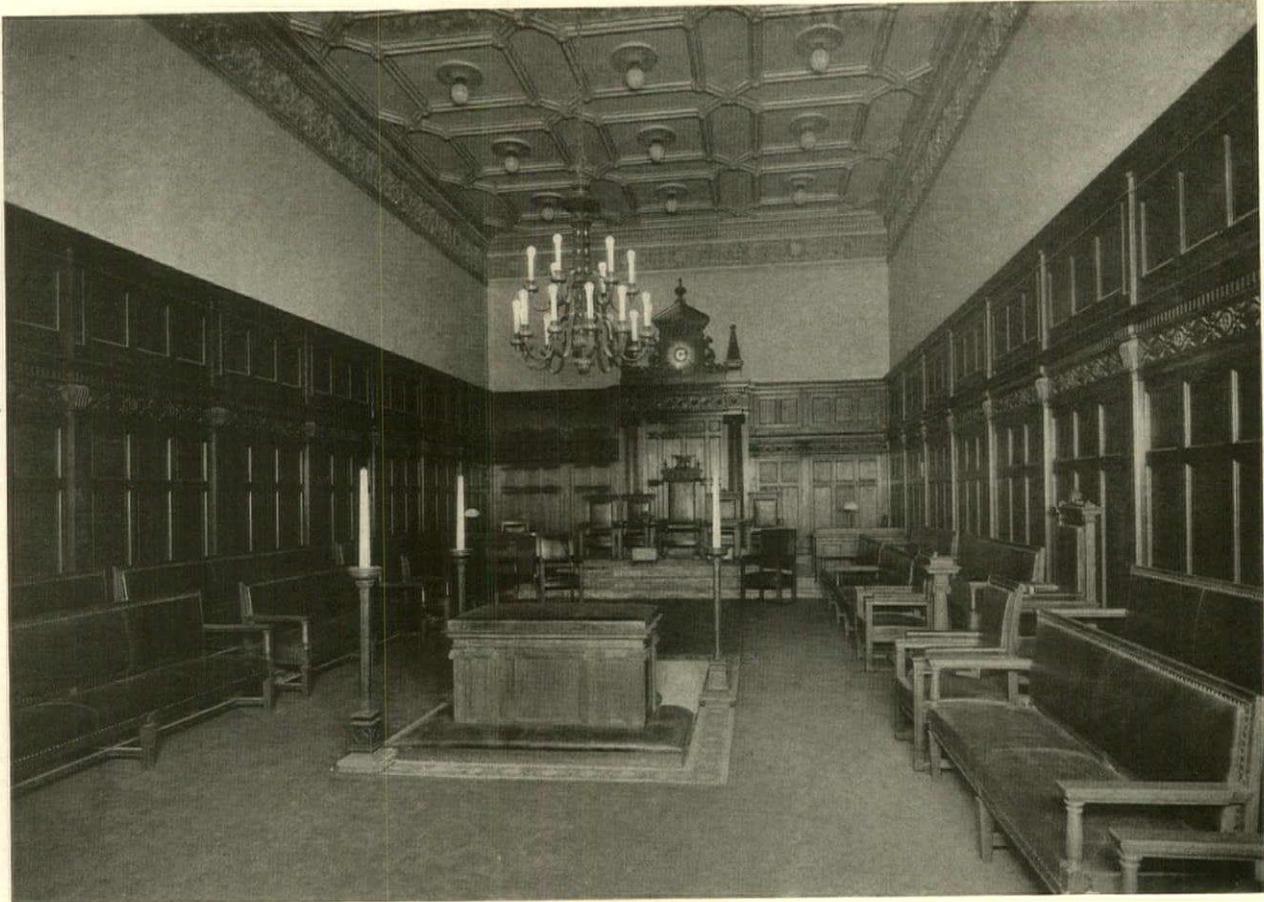
H. P. KNOWLES, ARCHITECT.



THE RENAISSANCE ROOM, LOOKING SOUTH, MASONIC TEMPLE, NEW YORK.
Pottier-Stymus Cabinet Work and Furniture.
Chas. Snell Allen, Mural Decorations.

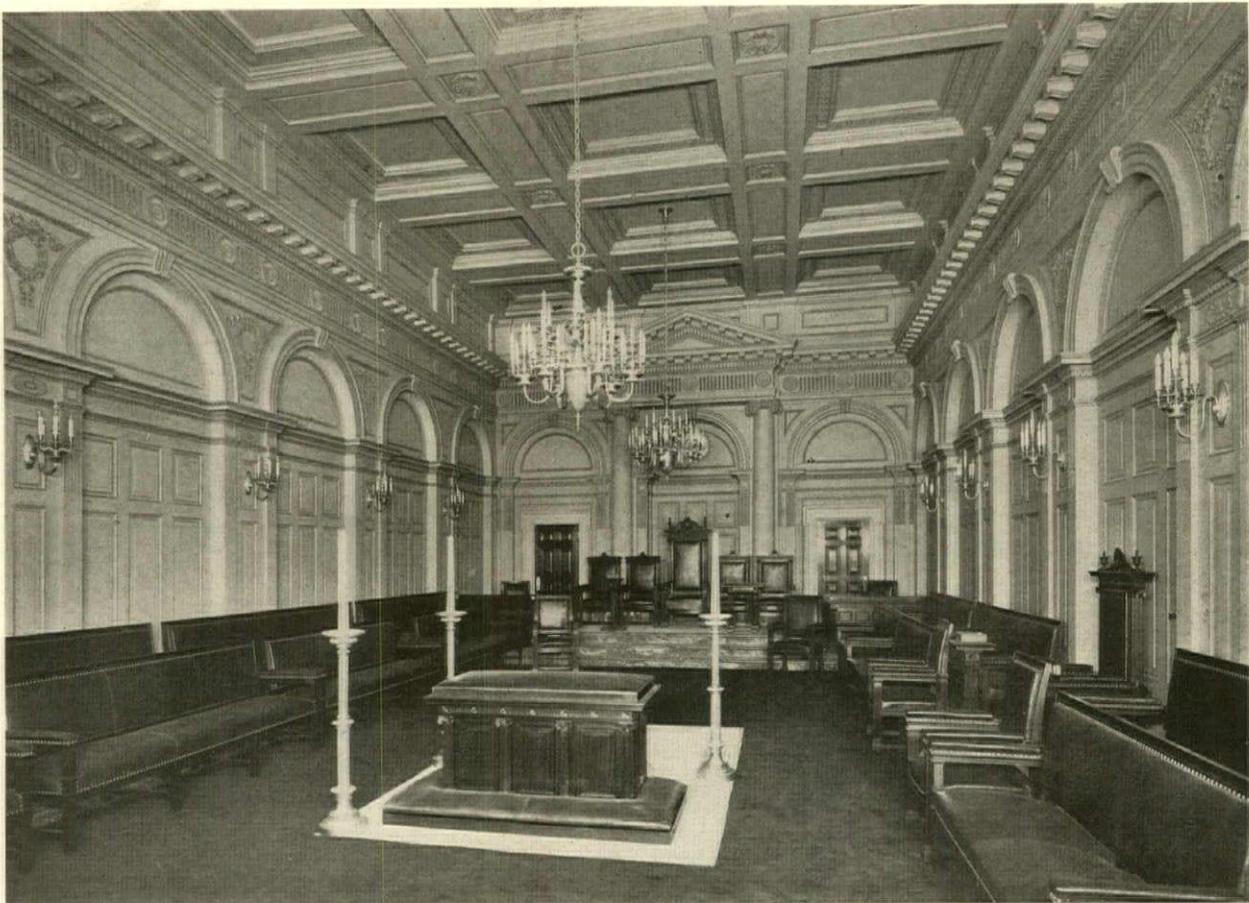
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THE ENGLISH JACOBAN ROOM, MASONIC TEMPLE, NEW YORK.
Pottier-Stymus Cabinet Work, Furniture and Decorations.

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THE COLONIAL ROOM, MASONIC TEMPLE, NEW YORK.
Pottier-Stymus Cabinet Work, Furniture and Decorations.

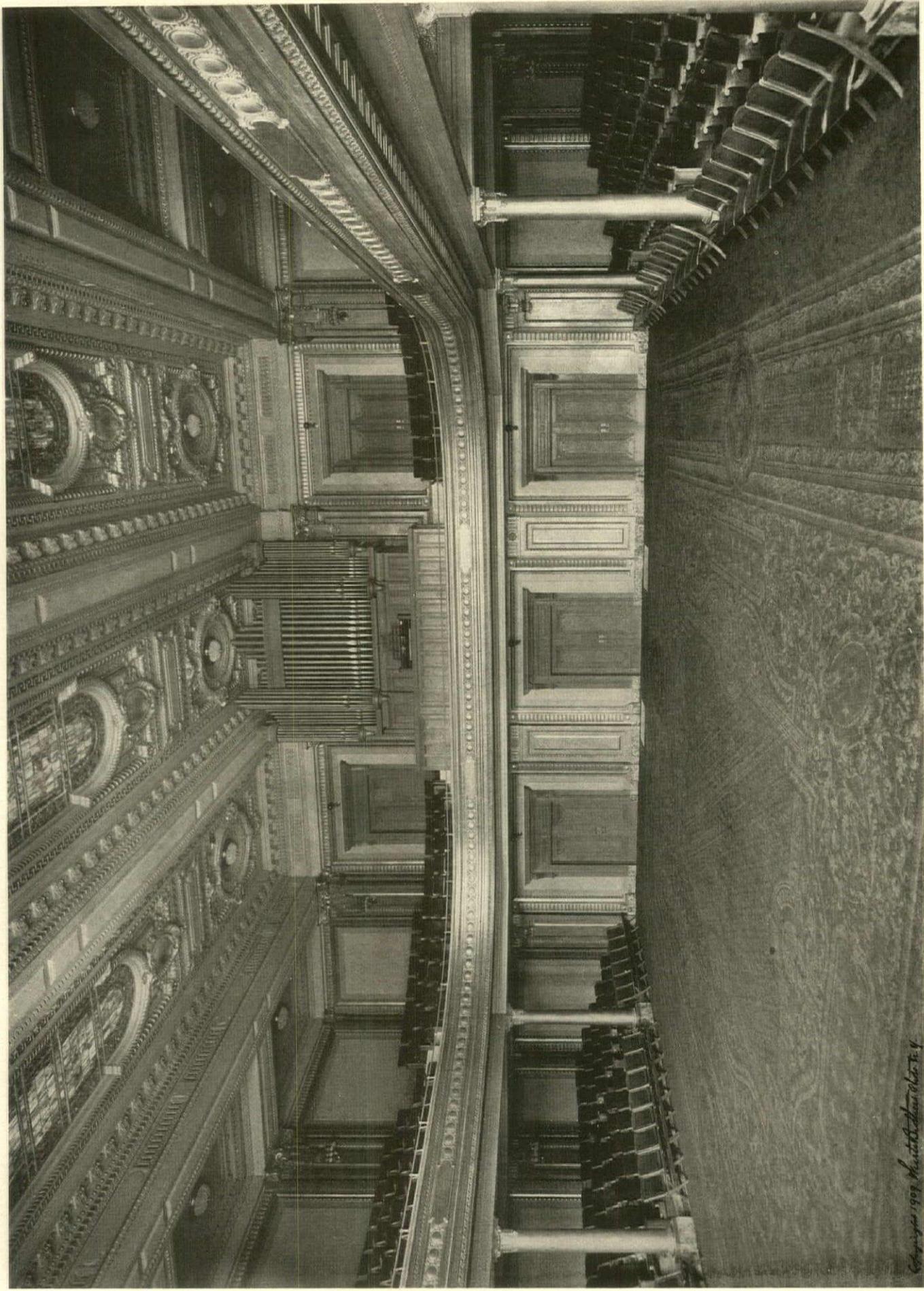
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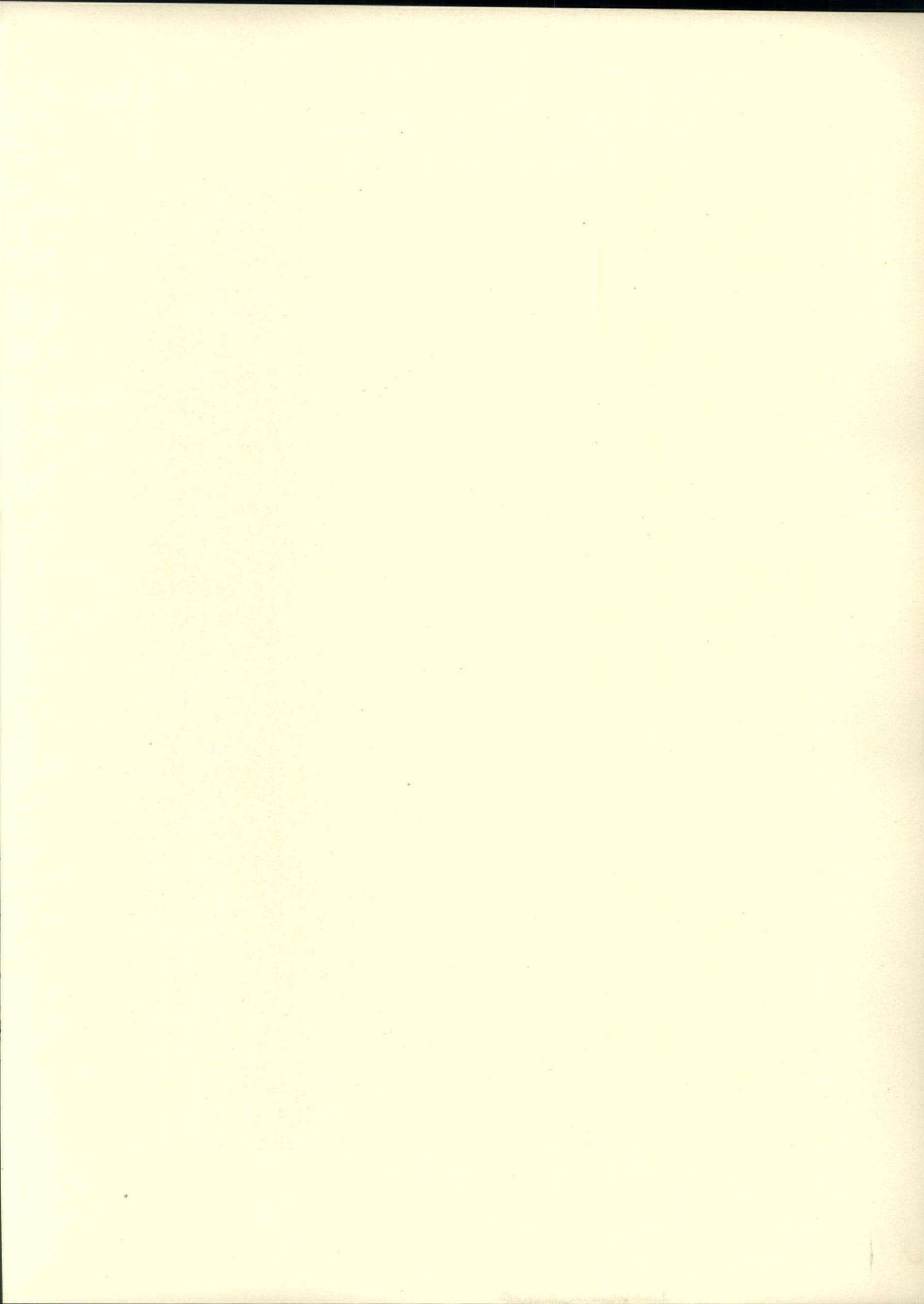




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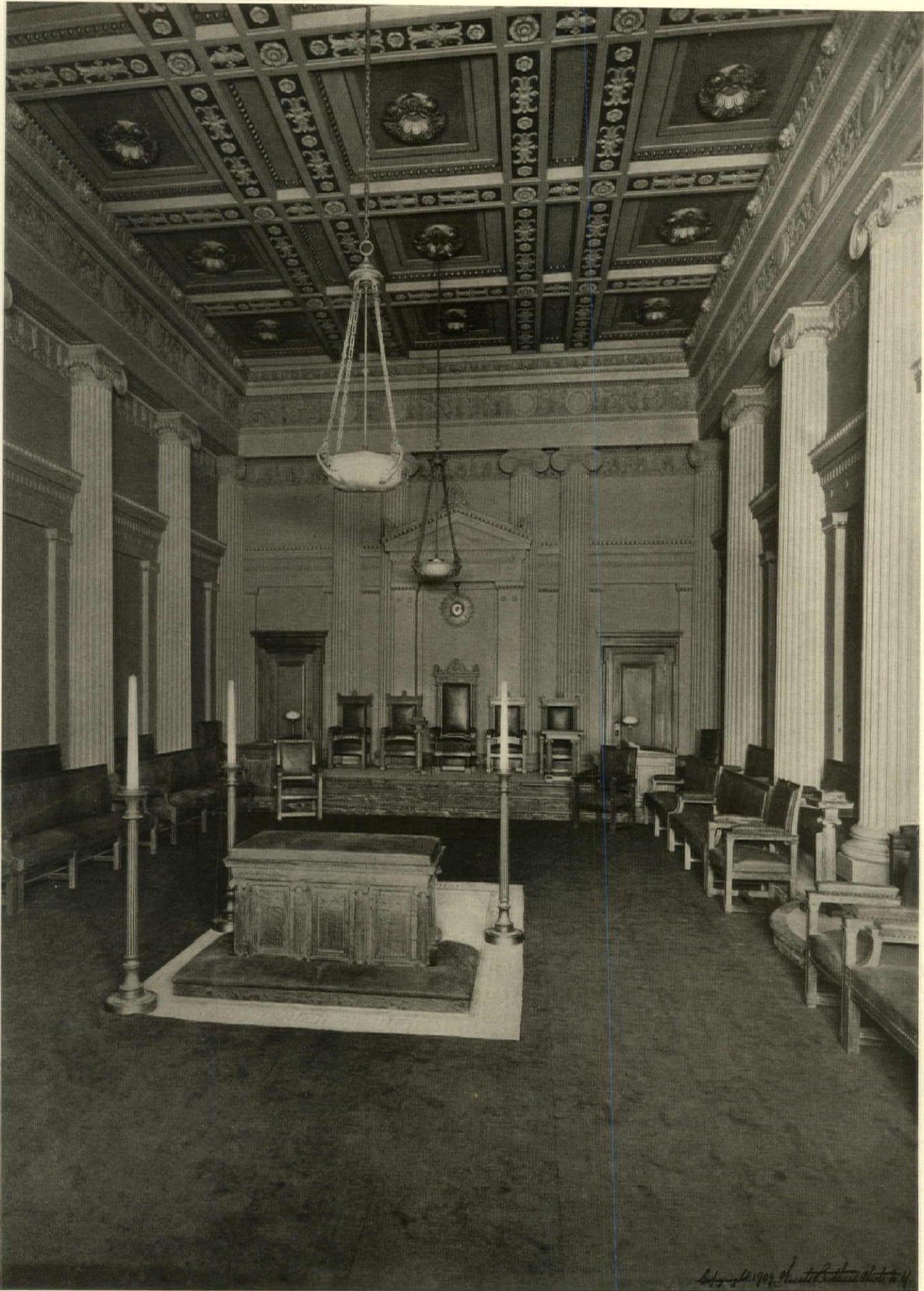




THE LIBRARY, MASONIC TEMPLE, NEW YORK.

Pottier-Stymus Cabinet Work.

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THE GRECIAN IONIC ROOM, MASONIC TEMPLE, NEW YORK.

Pottier-Stymus Cabinet Work and Furniture.

H. P. KNOWLES, ARCHITECT.





THE GOTHIC ROOM, MASONIC TEMPLE, NEW YORK.

Pottier-Stymus Cabinet Work, Furniture and Decorations.

H. P. KNOWLES, ARCHITECT.



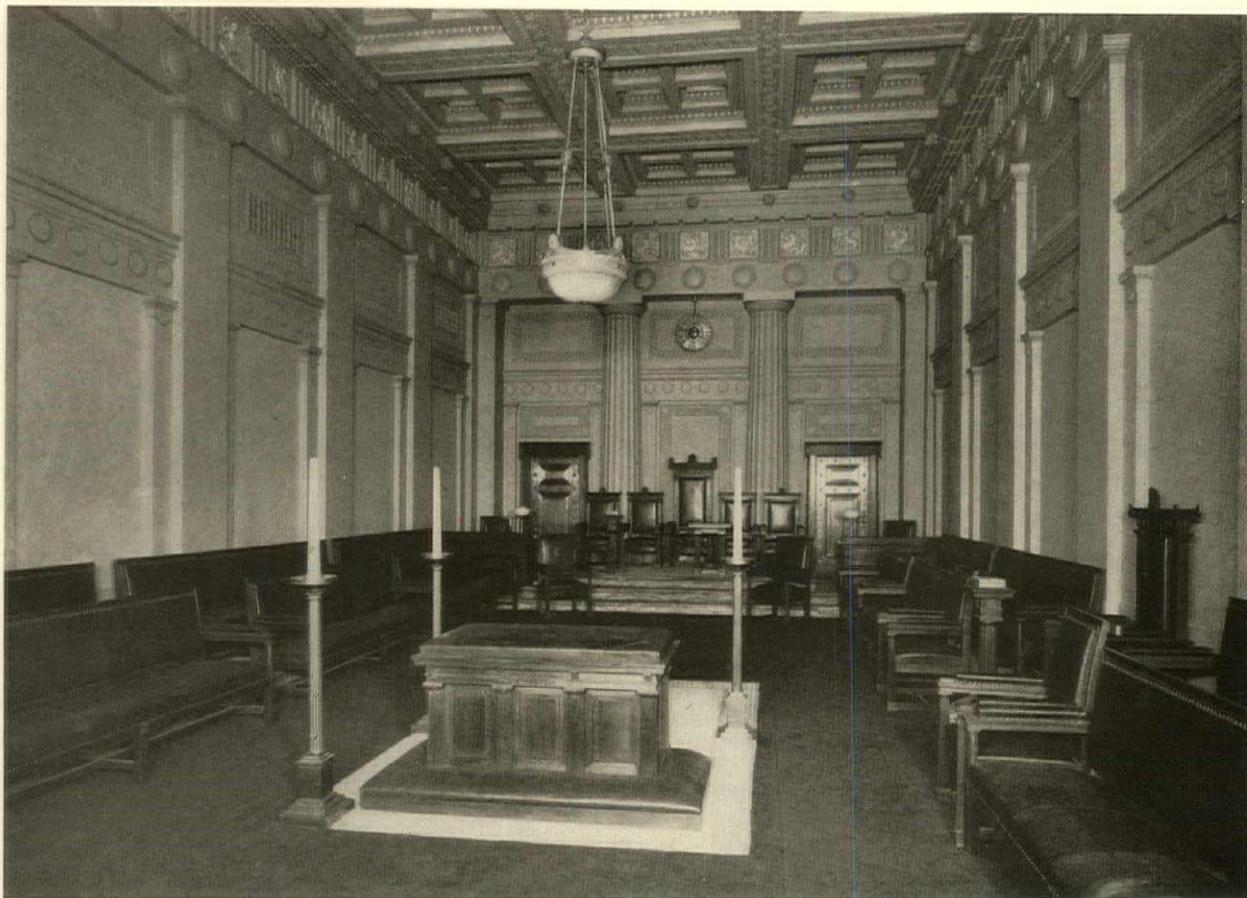


THE CHAPTER ROOM, MASONIC TEMPLE, NEW YORK.

Pottier-Stymus Cabinet Work, Furniture and Decorations.

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THE GRECIAN DORIC ROOM, MASONIC TEMPLE, NEW YORK.
Pottier-Stymus Cabinet Work, Furniture and Decorations.

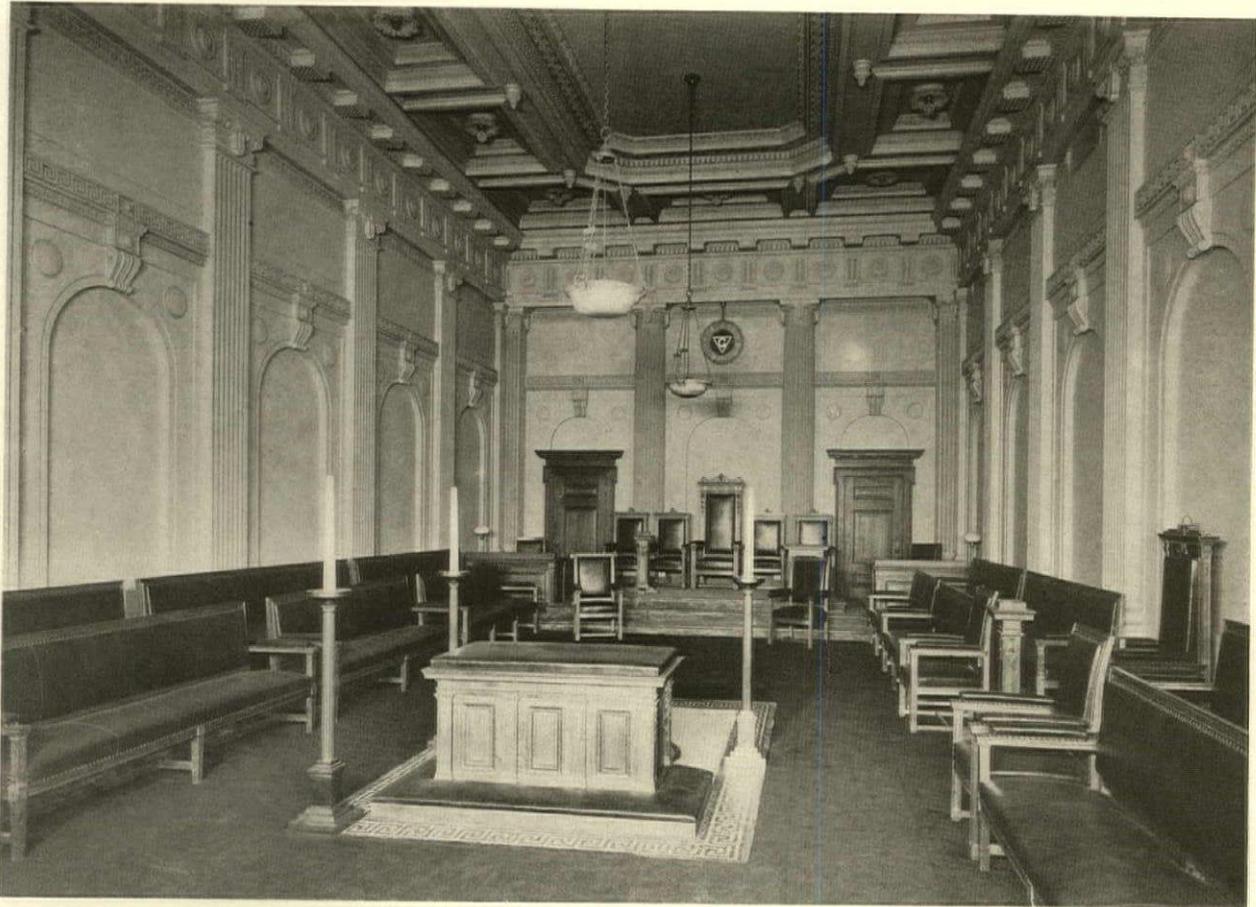
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THE FRENCH IONIC ROOM, MASONIC TEMPLE, NEW YORK.
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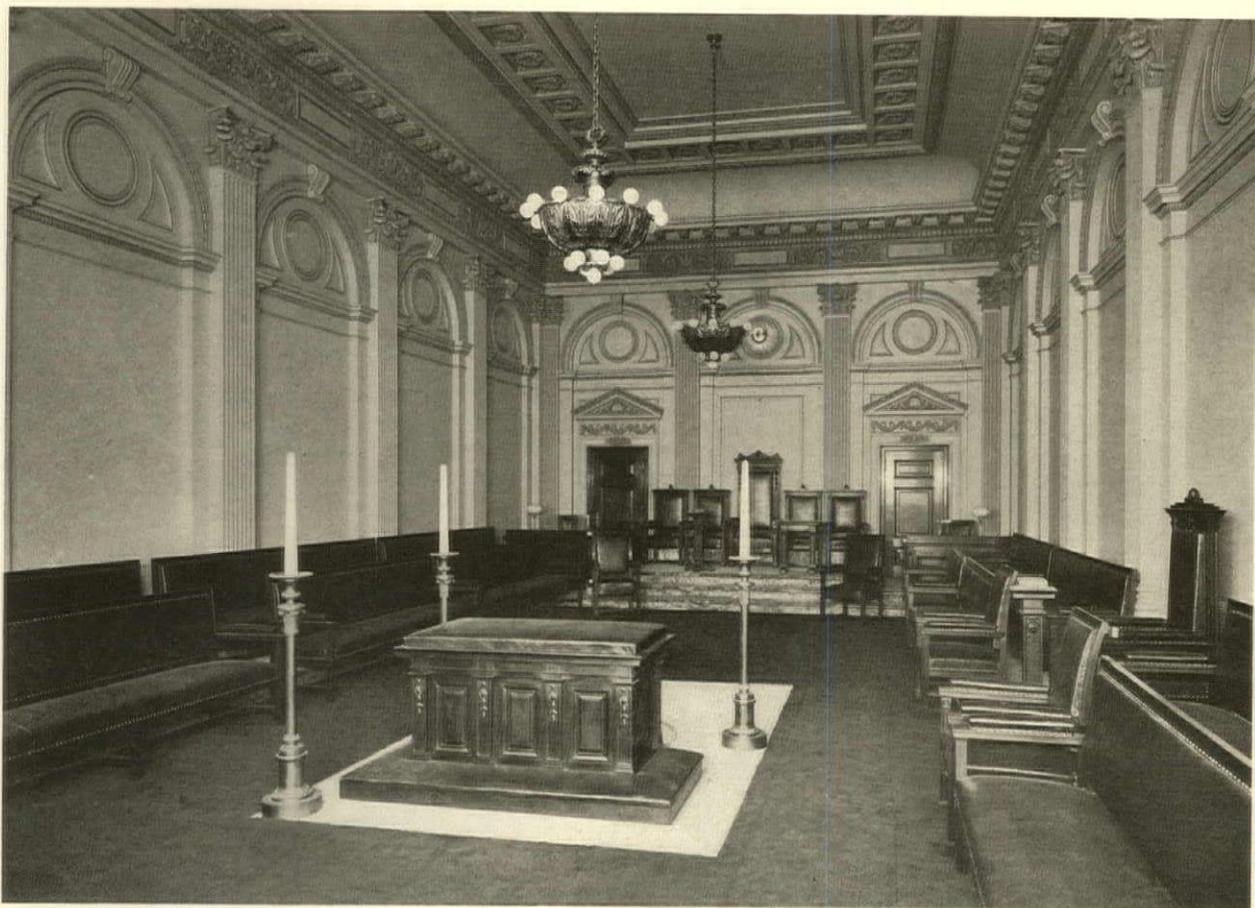
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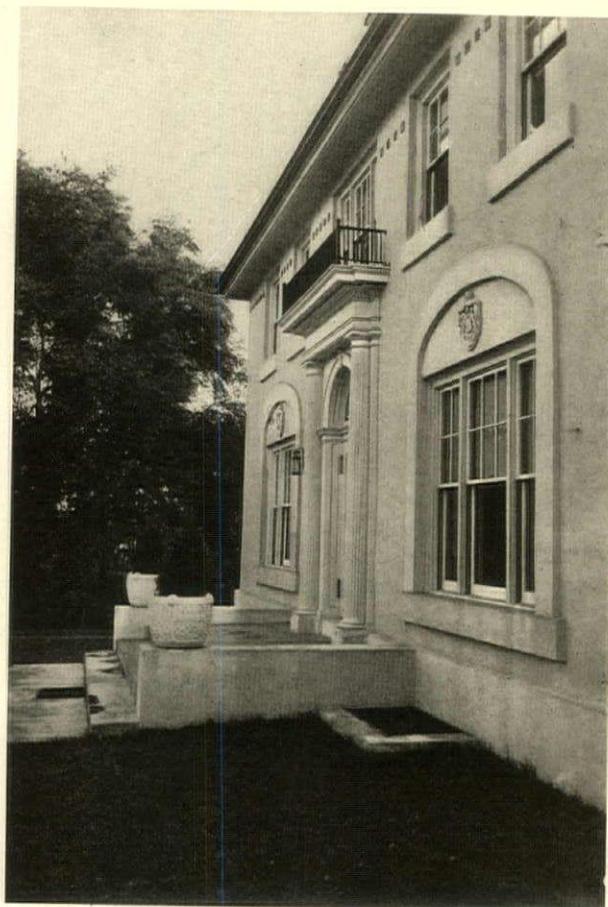
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THE CORINTHIAN ROOM, MASONIC TEMPLE, NEW YORK.
Pottier-Stymus Cabinet Work, Furniture and Decorations.

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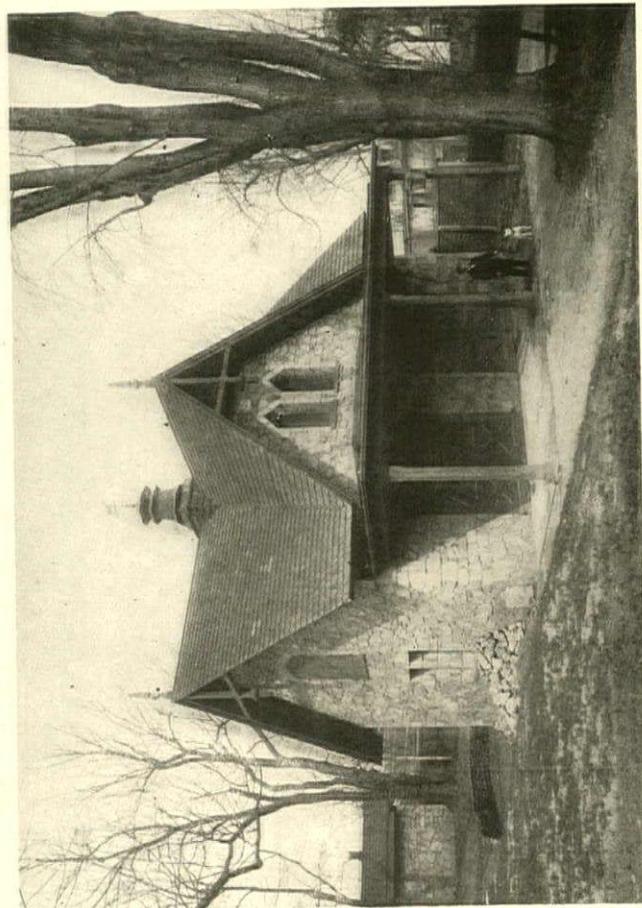
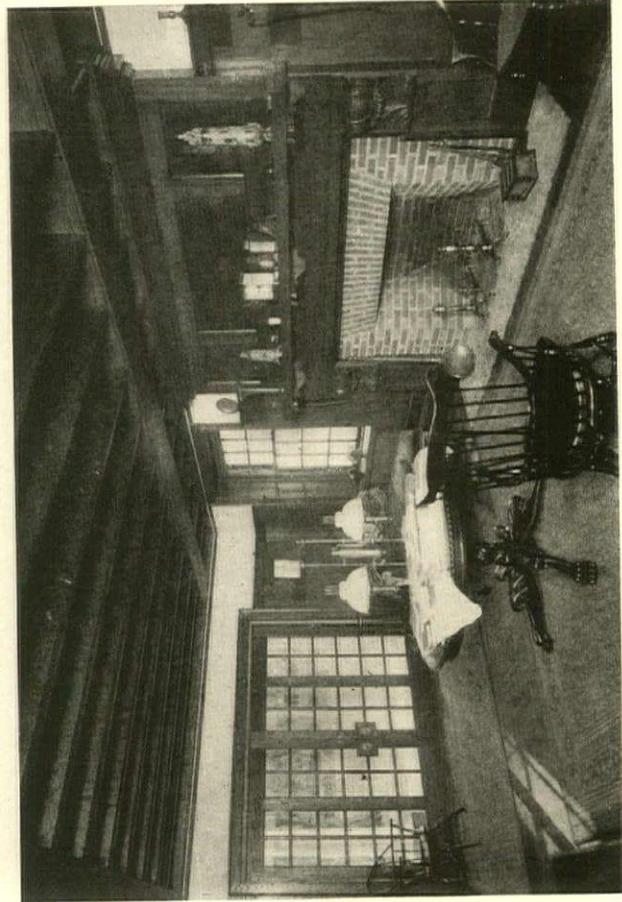
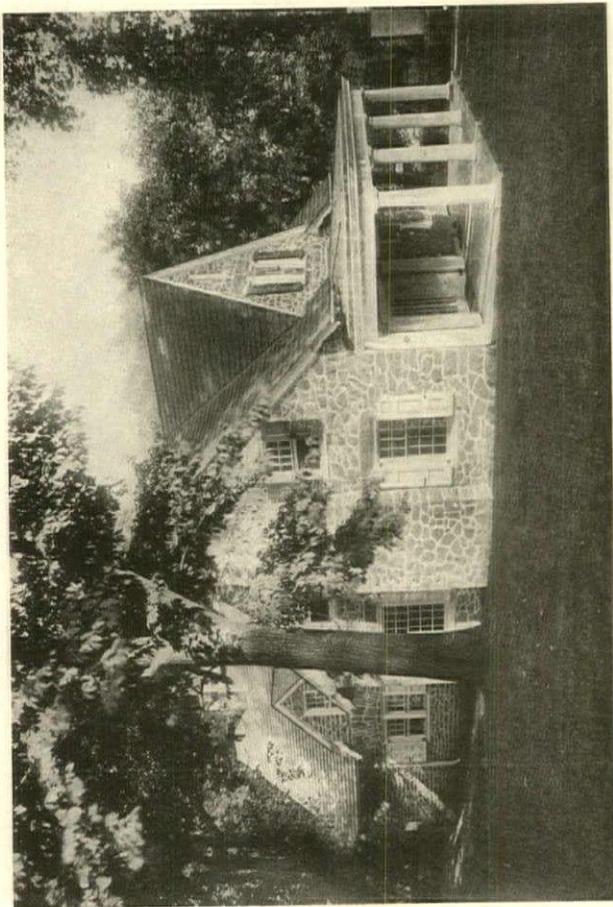
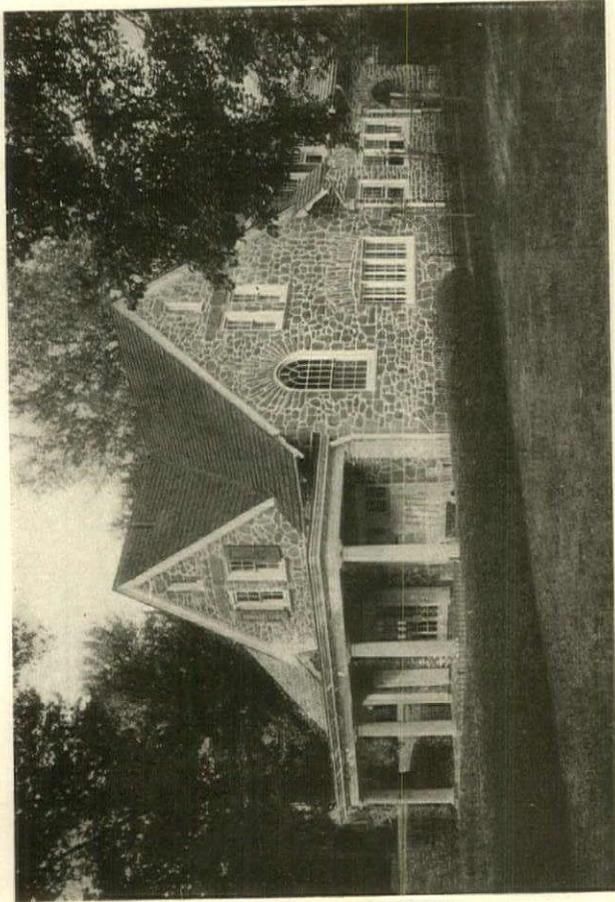




COUNTRY HOUSE, MILTON SEE, CORCORAN MANOR, MT. VERNON, N. Y.

(Plans page 175).

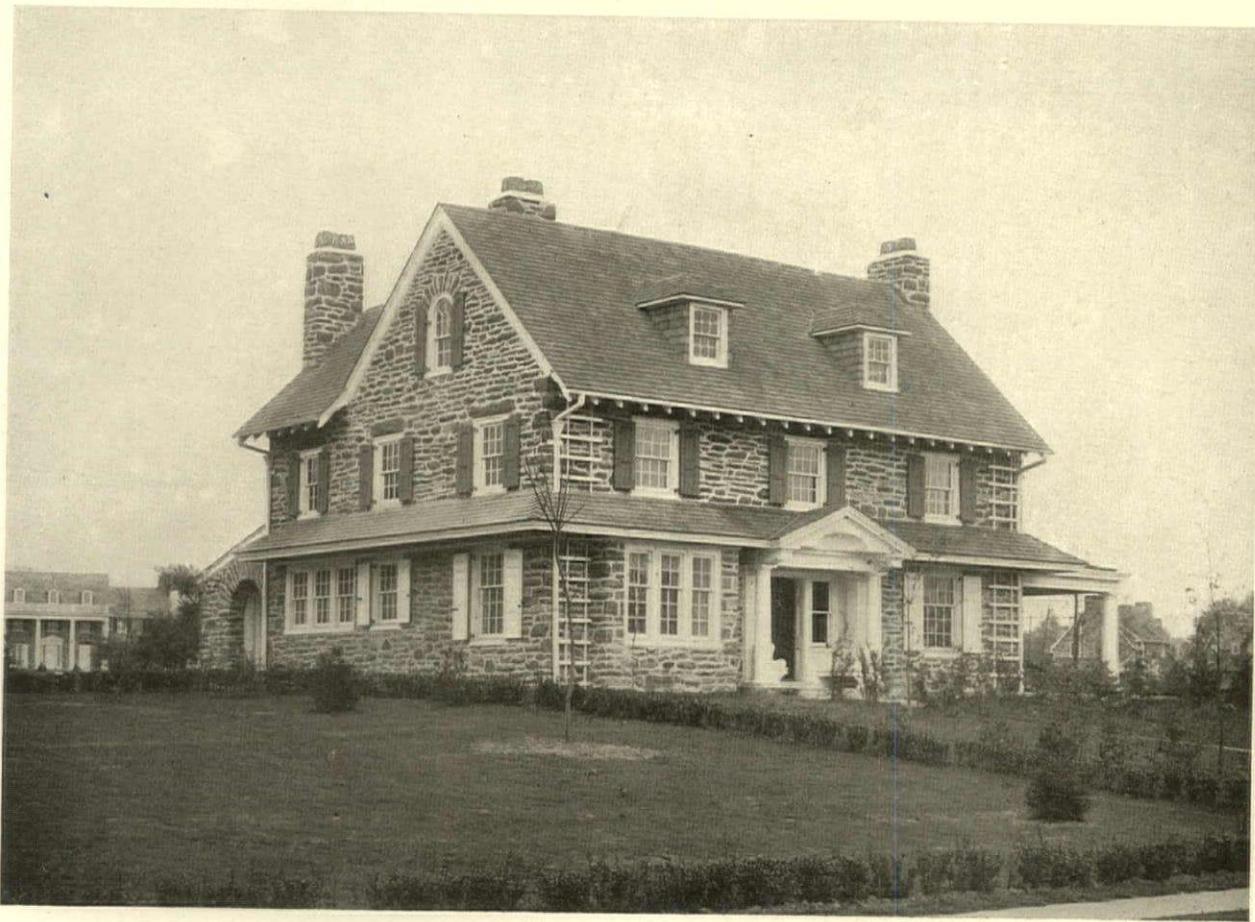
Milton See & Son, Architects.



Mellor & Meigs, Architects.

(Plans page 173).

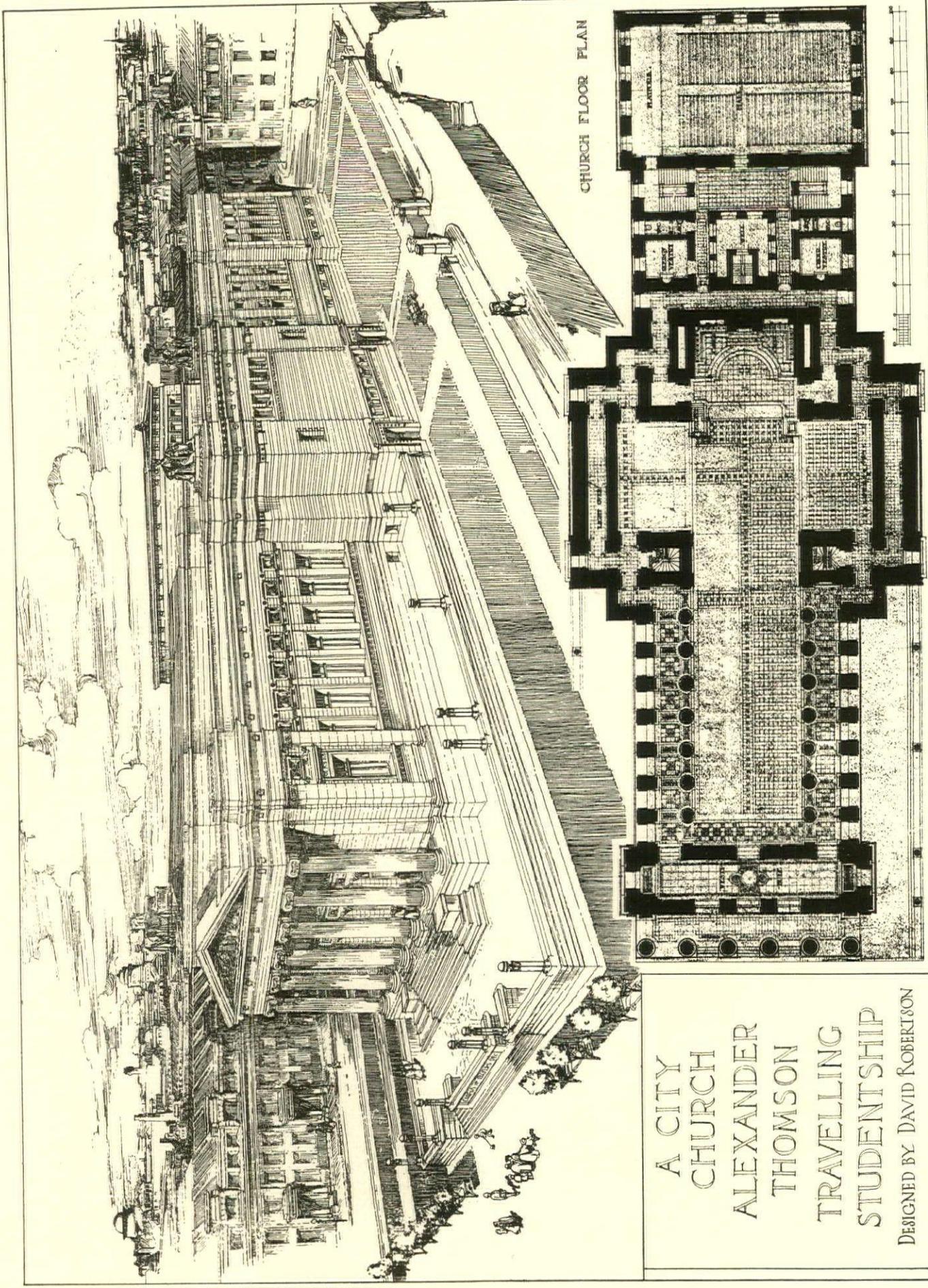
ALTERATION OF STABLE TO A RESIDENCE, ALFRED MELLOR, GERMANTOWN, PA.



RESIDENCE, EDWARD DALE TOLAND, WYNEWOOD, PA.

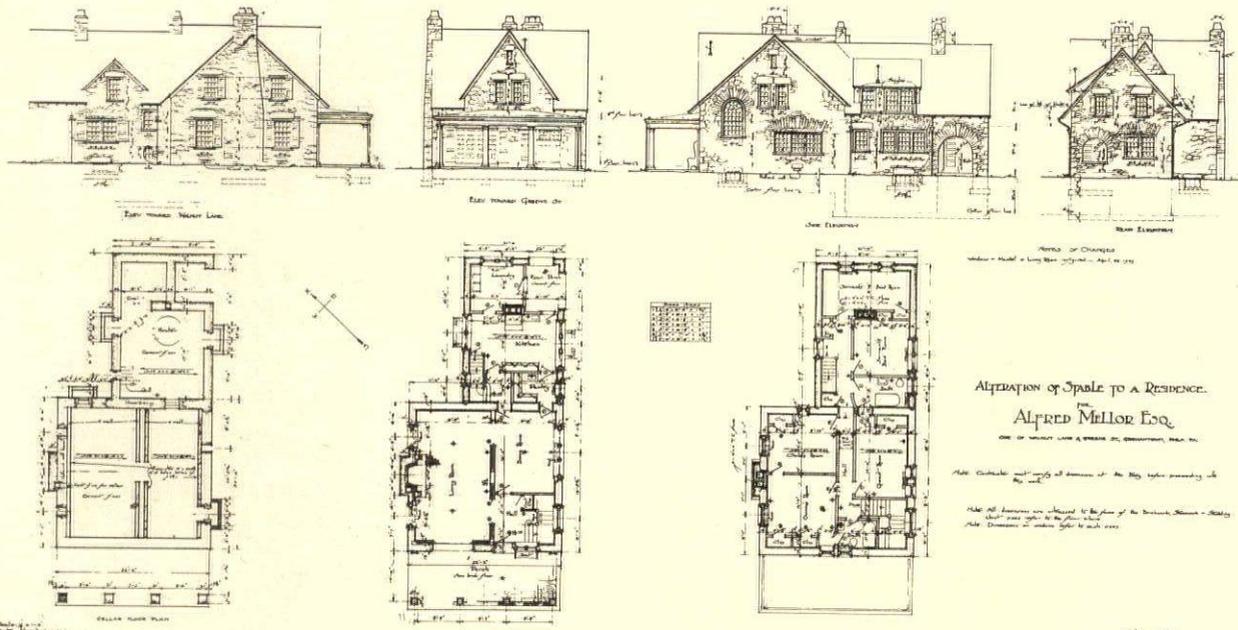
(Plans page 173).

Mellor & Meigs, Architects.



A CITY
CHURCH
ALEXANDER
THOMSON
TRAVELLING
STUDENTSHIP

DESIGNED BY DAVID ROBERTSON



PLANS, RESIDENCE, ALFRED MELLOR, GERMANTOWN, PA.

(See page 170).

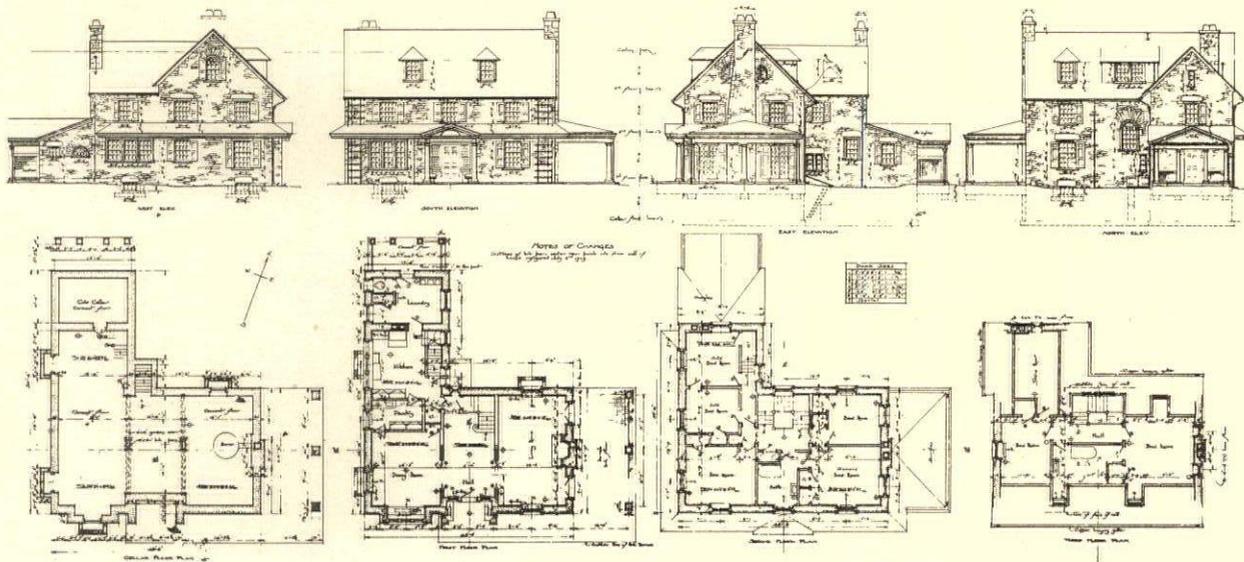
Mellor & Meigs, Architects.

(Continued from page 167)

wanted now is to do away entirely with this patronage system of appointment, and to replace it by the life appointment of retired architects of known integrity, preferably acting on all large works as a jury of three, but occasionally working single-handed, always adopting one uniform system, and letting it be known that the slightest infringement of definite conditions will result in disqualification. Conditions are often too strict; but here again the judge is as much at fault as anyone else, for it is he who draws up the conditions, or, at any rate, approves of them. He ought to allow plenty of laxity where laxity is possible. At the same time, once having fixed limits in any respects, they should be most absolutely enforced. Competitors would soon come to know what they had to expect, and there would be very few attempts indeed to win by trickery of draughtsmanship, by

mis-statement of cost, or by improper finish of drawings if once it were understood that these things would inevitably meet their punishment. It is the fact that, while some judges are strict, other are lax, and that few know whether strictness or laxity is to be expected in any particular case, which leads to the present deplorable state of affairs. The canker of dishonesty has entered into competition work, and needs to be dealt with as drastically as dry-rot in a building.

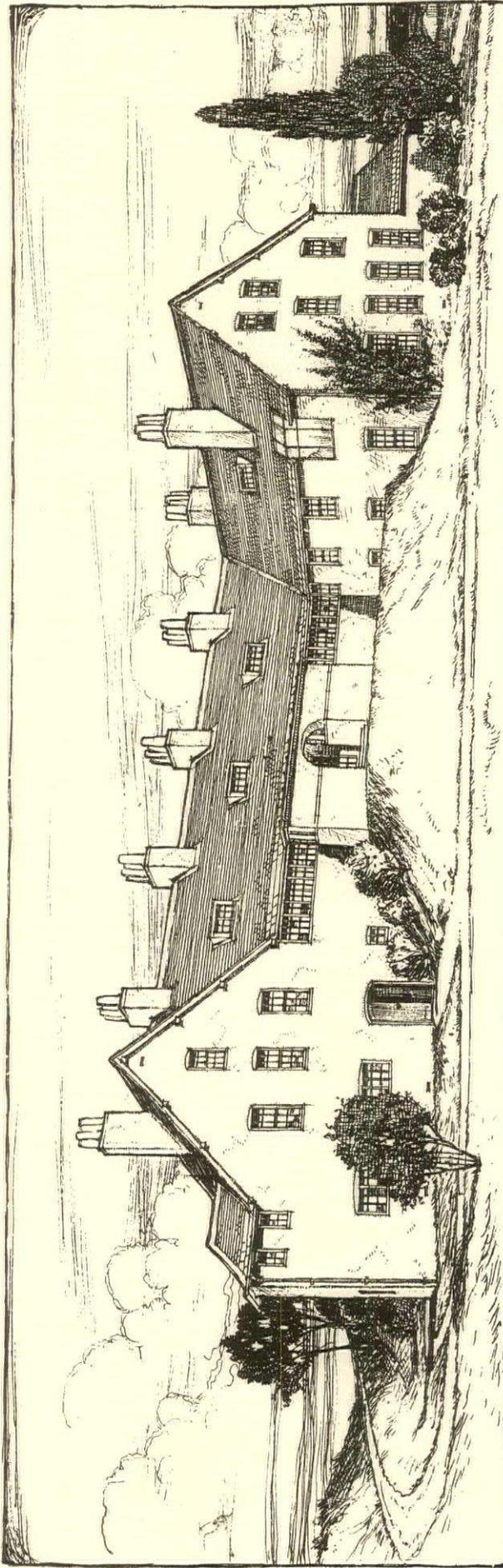
THE Executive Board announces that the Annual Convention of the Architectural League of America will be held at the Willard Hotel, Washington, D. C., December 11, 13 and 14, 1909. Further information can be obtained from the President, 1103 Union Trust Building, Detroit, Mich., or from the office of the Permanent Secretary, 729 15th Street, Washington, D. C.



PLANS, RESIDENCE, EDWARD DALE TOLAND, WYNEWOOD, PA.

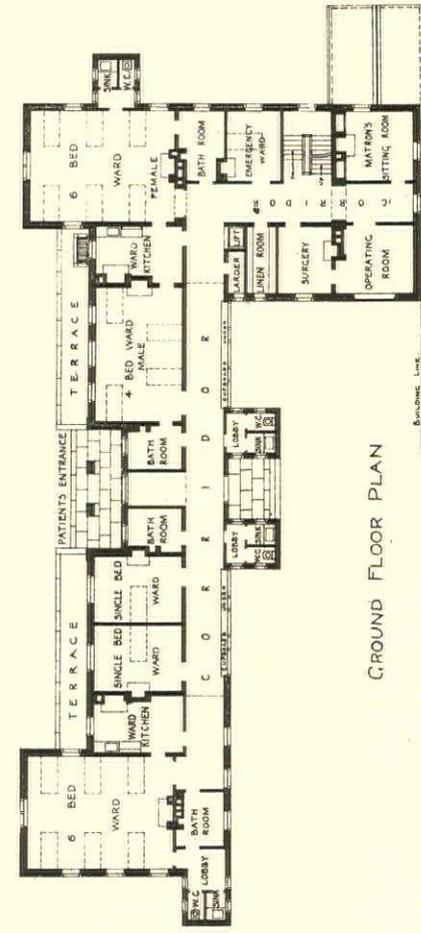
(See page 171).

Mellor & Meigs, Architects.

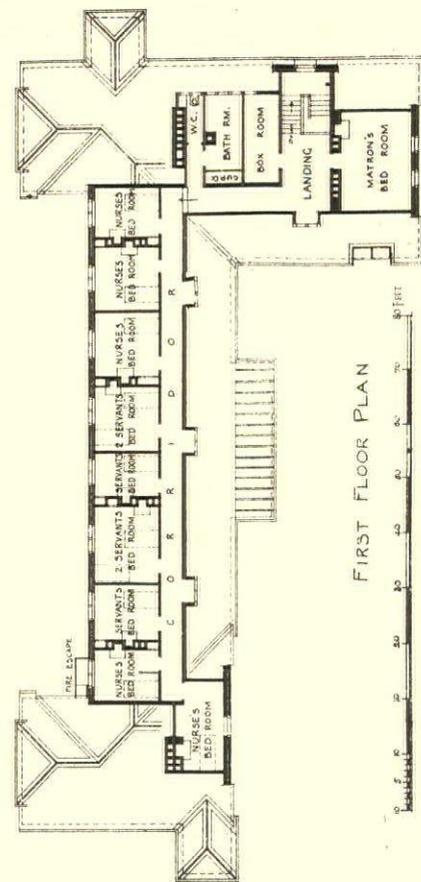


HOMEOPATHIC COTTAGE HOSPITAL. SOUTHPORT.

H. P. ADAMS AND CHARLES HOLDEN ARCHT. SOUTHPORT ENGLAND



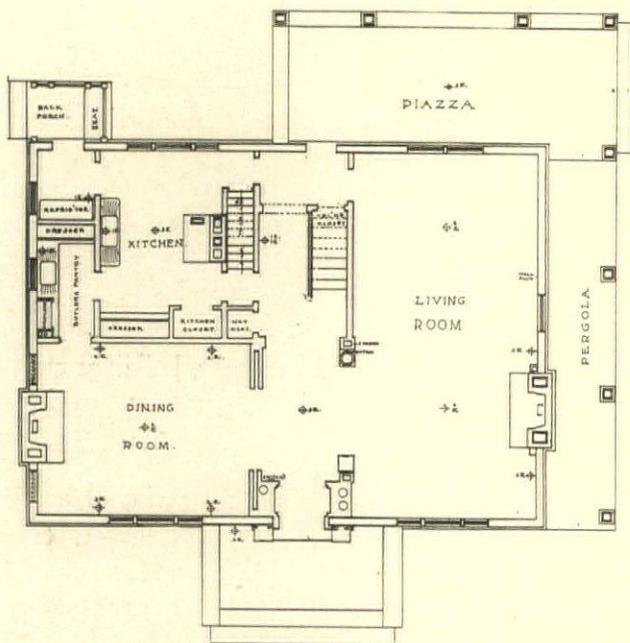
GROUND FLOOR PLAN



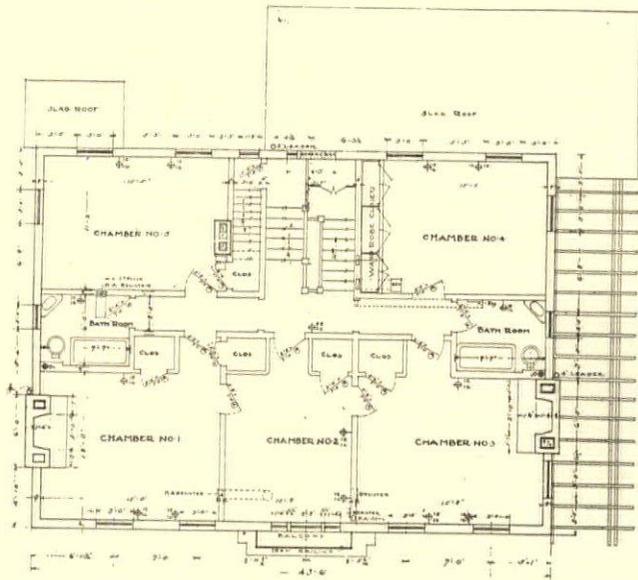
FIRST FLOOR PLAN

HOMEOPATHIC COTTAGE HOSPITAL, SOUTHPORT (ENGLAND).

H. P. Adams and Charles Holden, Architects.



PLANS, COUNTRY HOUSE, MILTON SEE, CORCORAN MANOR, MT. VERNON, N. Y.



(See page 169).

Milton See & Son, Architects.

HOUSE AT CORCORAN MANOR, MT. VERNON.

THE views of this house illustrate an attempt to give some interest to a suburban house absolutely a simple "box" in plan. This form was adopted because of its alleged economy. The site of the house before building began was a veritable tanglewood, filled with trees and wild shrubbery, and mostly all below the grade of the street. There were some really fine trees that were worth the saving—oak, hickory and maple—and these were (dry) walled up to the new grade. Landscape accessories are planned to be carried out in the spring. These provide an open-air "room" in the rear surrounded with "privet" hedges, with masses of rhododendrons and some silver birches, which we think will prove effective against the dark foliage of green. A bed of flowering perennials is also contemplated to get a succession of cut flowers the season through.

The plan is so simple that it explains itself. The piazza was placed in the rear of the house because of some really fine views in that direction and for greater privacy. Further, it is accessible to kitchen so that the family meals may be served there as conveniently as in the dining room.

We are not unmindful of the faults in design perpetrated in this essay. The sills of the windows, in our estimation, are just a little robust to suit the eye critical, and we feel the absence of a console at the end of the pergola on the front. Besides the five rooms and two bath rooms on the second floor, there are four rooms and servants' bath room in the attic. The laundry and heating apparatus is located in the cellar.

The house is constructed of hollow, vitrified, salt-glazed terra-cotta telephone conduits, stuccoed on the outside; the body of the wall in grey, with trimmings of white Portland cement.

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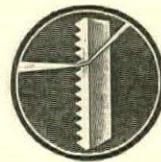
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ARCHITECTURE

VOL. XX. DECEMBER 15, 1909. No. 6

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ARCHITECTURAL CRITICISM.

IT is seldom enough that we find college buildings designed at the present time in the simple, clean and dignified manner of the State Normal College, Albany, (plates cvi, cvii), begun by the late G. L. Heins, during his incumbency of the position of State Architect, and completed by Albert R. Ross. The group shows no loss of character due to the change.

The Colonial style of these buildings is one used far too rarely in our college buildings and where it has been employed the results have been unusually successful. The University of Virginia is, of course, an old stand-by in this style. The Sweet Briar Institute follows the type of the University of Virginia very closely and with marked success. The Tome Institute is also of this character and while not ranking as high as the other two is still a worthy and distinguished piece of work. While there are very likely other groups in the Colonial style which rank as high as these, they do not present themselves so readily to the mind: to these, in future, will be added the State Normal College.

The group is not as large as any of the others, and I do not know whether it is intended to form part of a larger group or to be complete in itself, but it has that rare quality of being both complete in itself and susceptible of enlargement. The central building dominates those at either side sufficiently to insure unity in the composition as it now stands, or as it would be were other two-story buildings added extending toward the front.

The method in which the wings of the main buildings are dropped at once to the height of the buildings is admirable, and while the central motive of a double pediment is not in itself a very happy one it is here more successfully handled than in most other cases. A better arrangement of the center building, to my mind, would have been to have treated the third story of the Administration Building as an attic. However, the white panels between the windows in the second and third stories carry the line of the other buildings through, and avoid the complication of the window heights inherent to compositions where a wide entablature is carried between stories. The colonnades connected with the buildings are well placed and agreeable in themselves, while the secondary buildings they connect with on either side of the central mass are excellent. The cleverness of the designers is well illustrated in their ability to balance a one-story building with one of two stories without loss with quality of design.

The detail throughout is restrained, fresh and crisp. The whole group is remarkable not only for the excellence of its design, but for its avoidance of the errors of dryness and archeology which are far too common in modern work founded on Georgian.

NOT once in a thousand times does an architect have an opportunity to set a commercial building upon a site as is given the Metropolitan Life Insurance Company's building, San Francisco, Cal., N. Le Brun & Sons, architects, (plates cviii, cix). When such an opportunity does occur it is indeed delightful to see it so worthily used. The parent building of the Metropolitan Life Insurance Co., by the same architects, can only be admired with reserve, but of this branch office criticism fails. The motive is excellent and its execution is on the plane of the opportunity and the motive. The material is terra cotta with the frieze in rich color. The design of the frieze is one of extraordinary merit, for although it is highly enriched, this has been done without destroying the strong lines of the structure. The tremendous openings indicate ample light to the offices within, yet by the use of engaged columns and a narrow window architrave, the sense of stability, so important in every design, is completely preserved. The terraces and retaining walls are well handled and enable this square building, almost block-like in the simplicity of its proportions, to build up from the



Architects of To-Day.

MR. FREDERICK SQUIRES, NEW YORK.

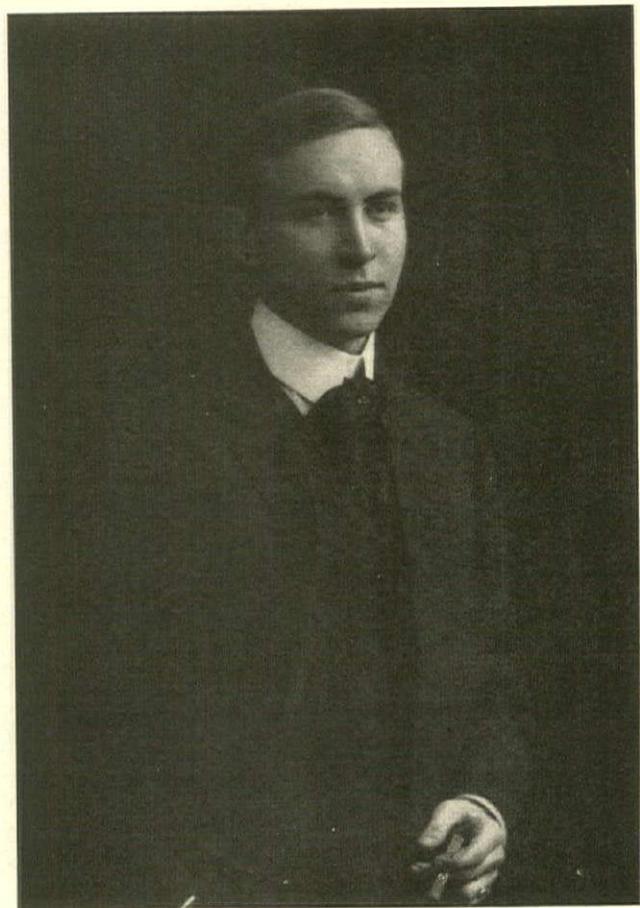
ground in the way all buildings should. That is, it is distinctly built up from the site and not set down upon it.

THERE has been so much written and said about the New Theatre, Carrere & Hastings, Architects, (plates cxi, cxii, cxiii, cxiv), that criticism of it is unnecessary. The exterior, although in many ways attractive, is by no means completed, and possibly it would be better to reserve a final judgment on it until this is done. As compared with the exquisite perspective which formed one of the competition drawings, it is disappointing, the detail lacking refinement which was the remarkable feature of that drawing. The capitals especially have lost in appearance, being blocky and rather coarse, and the treatment of the drum in the attic over the corner pavilion is far from satisfactory. The building as a whole does not seem to hang together as well as might have been expected; the reason for this is very difficult to tell, but such is the impression which both casual observation and fairly close examination give. Unquestionably, the appearance will be tremendously improved when the contemplated carvings are executed. How far these will aid in the refining of the design cannot at this moment be said, but that the exterior is disappointing to most architects familiar with the competition drawings cannot be denied. Not that the building is badly designed; the contrary is the case; but the competition drawings were so exquisite and showed a building of such tremendous merit that we were prepared to see here in New York the most beautiful theatre in the world, and as is often the case with great expectations, we have been disappointed.

The interior is another matter. Exceedingly rich both in form and in color, it houses properly America's greatest

effort toward the advancement of the drama. The interior of any theatre is necessarily a very difficult problem, as the spaces below and between the galleries are of irregular and curious shapes, and the top of the proscenium arch is far below the highest point of the upper balcony. This renders a ceiling treatment which not only is, but appears to be logical, almost impossible. Here it has been exceedingly well handled, and indeed the whole treatment of the interior is probably as good a one, from the pictorial effect, as there is in any theatre in the world. Everyone will find in it certain details with which he personally does not agree, but that this is due to individual questions of taste, and that the interior, as a whole, is of surpassing beauty will not be denied. The arrangements for entrance and exit are wonderfully complete, so much so, indeed, that they almost defeat their own purposes by confusing the mind as to which is the easiest way of egress. Nevertheless, the crowds can be managed with as little confusion and delay as is possible in a building of this size. The main foyer (a feature which except in name is new to American theatres) is exquisite, the ceiling treatment being really wonderful. In the auditorium the details of the proscenium arch and of the state boxes are also very lovely.

There are very many firms, both of architects and of decorators, who can splash what money will buy all round the interior and get an effect stunning and gorgeous, but when it comes to a question of combining gorgeousness with refinement and good taste, there are few whose work is in a class with that of this theatre. Sumptuous in the extreme it is still refined, and while gay, as befits the home of light opera, still has the dignity which is essential to the performance of serious drama.



Architects of To-Day.

MR. JOHN WYNKOOP, NEW YORK.

IN searching for a type of architecture which would give maximum window sizes and preserve the appearance of strength essential to good design, Mr. Snyder, the School House architect of New York, chose an English style of the late Tudor or early Renaissance. Cram, Goodhue & Ferguson have built in Boston one or two apartment houses in the same style, and recently there have been a number erected in New York along similar lines. The style is one excellently adapted to its purpose and the surprising thing is that its advantages were not sooner appreciated by those of our architects who have been designing apartment houses. One of the best is the Britannia Apartments, (plate cx), Waid & Willauer, architects, illustrated in this number. The scheme is a good one not alone from the point of view of light, but permits a more logical development of the court than is possible in any other style. Compare, for example, this building with the "Dorilton," a structure of exaggerated French tendencies in which a similar motive is employed, and the point I seek to make is at once apparent.

In any apartment house plan bow windows are, from the point of view of the renting agent, essential, and while an architect must deplore the breaking up of a wall surface by the uneasy lines resulting from them it is one of those points where architectural considerations must give way to commercial ones. Certainly, bow windows can be used with far more propriety in a building derived from Gothic motives than in one whose genesis is Classic.

Another unfortunate feature about apartment house design (and to some extent the same thing is true of office buildings) is that there is no floor less important than the others. All must be given the maximum of light in order to rent well. For that reason the upper stories of this building and of all others in which this commercial principle is apparent, seem somewhat over scaled. We are so accustomed to seeing the windows in the upper stories treated differently from those in the lower, that where the same size is used throughout, the upper windows seem larger than the lower. One fault this building has which might have been avoided. The windows are too wide for their height. Small mullions on all stories from the top to the bottom would have improved the design without injuring the light to any appreciable extent. On the whole, however, the building is designed with candor and executed with refinement. More such buildings would raise the standard of the apartment houses far beyond its present plane.

HOUSING MOVEMENT IN ENGLAND.

SCHUYLER M. MEYER.

THERE has never been any question of the close connection between the housing problem and many of the social evils in the present day. The facts set forth illustrate clearly the tragedy of one and the gross inadequacy of two-roomed houses. There are to-day, in England and Scotland, about 500,000 persons with houses of one room only, and 2,500,000 with houses of two rooms only. From this, one may obtain an idea of the evil and its bearing and effect on the efficiency and health of the British people. It is this evil that the co-partnership housing movement is doing so much to remedy.

One of the most beautiful examples of this movement is the "Hampstead Tenants" just outside of London. Here was devised a scheme for building houses which should not only themselves represent the best work that could be ob-

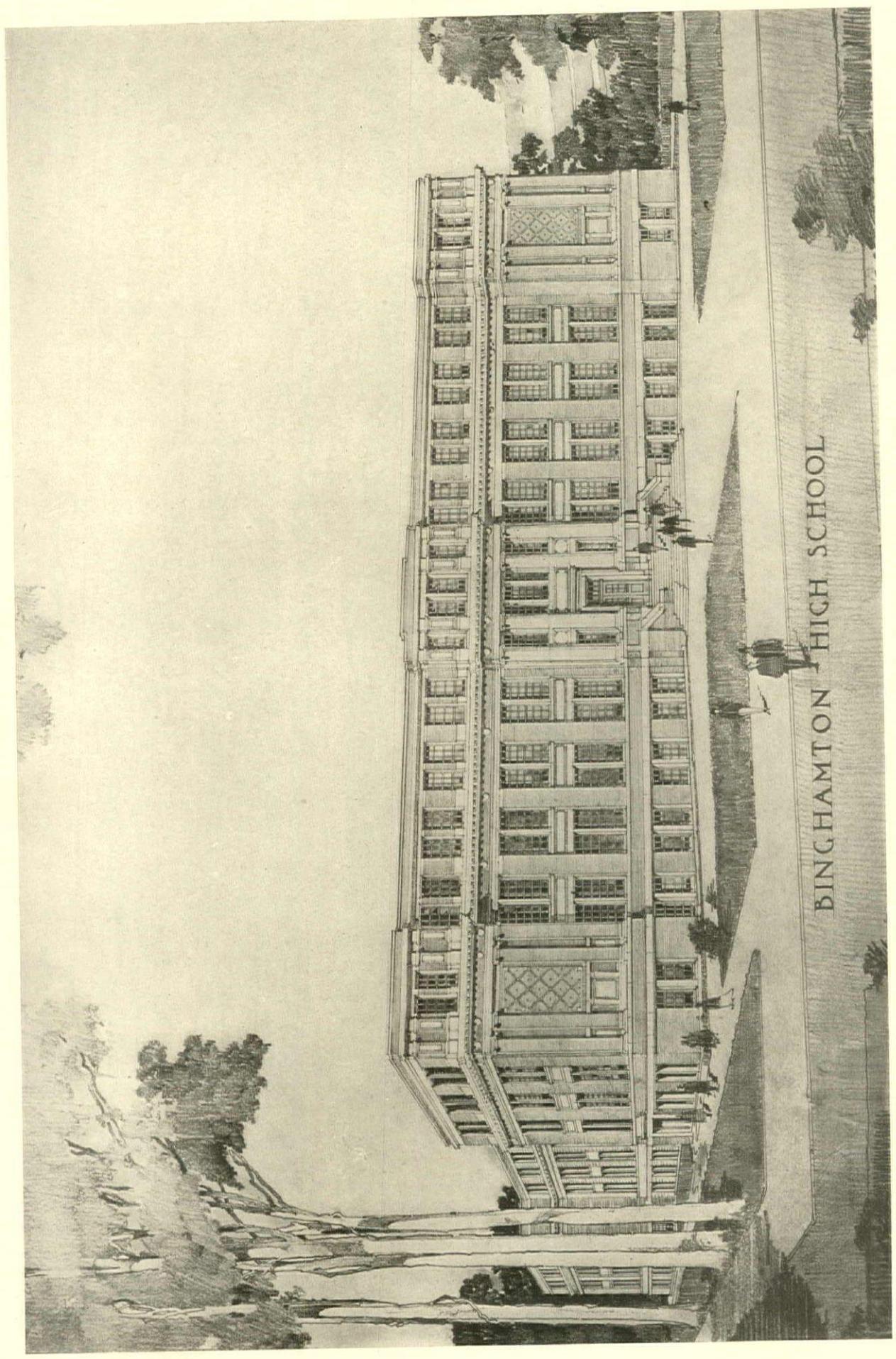
tained, but be designed and grouped in proper relation to one another so that each should form part of a well-considered plan for making the streets as well as the houses beautiful. With regard to the actual building of the houses, the company saw that it could only hope to effect economies by employing, not only a well-known reliable firm, but one accustomed to building on a large scale as best adapted to getting the most thorough and efficient work out of its men. But large builders will not tender for one or two small houses, and for the reasons already stated the small builder is out of the question. But this barrier did not hinder the Hampstead Tenant, Ltd. They hit upon the excellent and businesslike plan of asking for bids on the basis not of building a house or two but of undertaking \$200,000 worth of work which was sufficient to entice the larger builder.

These bids were from some of the largest and best known building firms in England. In all probability none of the firms would have bothered to put in bids for one or two houses, and in any case the rate would have been much higher than the lowest shown on the schedule. It might seem that building on such a large scale would tempt the builder and workmen to put in poor materials and workmanship; but so carefully does the society watch the progress of the work, and so thoroughly was the task of selecting competent workmen carried out that the society required the discharge of over 2,000 workmen who showed undesirable tendencies, on the principle that for a fair day's pay the artisan should return a good day's work of his hands and head. The result shows the wisdom of this principle in that the yearly repairs required are far less than the average house constructed on similar lines.

The society from the outset made it obligatory that not more than twelve houses should, on the average, be built to the acre, and that a large proportion of the estate should be reserved for open spaces and playgrounds. Another stride forward in the health precaution is the abolition of the garden wall. The addle-pated repetition of the suburban garden walls is done away with and with the walls the mortar-dust, cobwebs and rubbish corners they cause. In their place, as boundary lines, are grown hedges and bushes. Wherever practicable the houses are built with a southern aspect, thus allowing them to get the benefit of every ray of sunshine, and where this is impossible the principle is applied to the architectural arrangement of rooms and windows. Every house has electric light or gas, water and a bath. The house rents run from \$1.50 a week (imagine a five-room house with bath at \$1.50 per week) to \$400 a year. This varying in the rent does much towards preventing segregation of classes, an evil encountered everywhere in the cities and which the society does much to oppose.

A summary of the first complete annual report of the Hampstead Tenants Society discloses some interesting facts of the progress of the movement. This company was registered March 18, 1907. The first sod was turned on May 2, 1907. One hundred foundation stones were laid by the first hundred shareholders on June 5, 1907. The first pair of houses were opened by the Lord Mayor of London, October 2, 1907. On December 31, 1907, 17 houses were occupied and 38 more building. On December 31, 1908, there were 132 houses occupied and 48 more in different stages of construction. The expenditure on houses

(Continued page 181)



PERSPECTIVE, HIGH SCHOOL, BINGHAMTON, N. Y.

Squires & Wynkoop, Architects.

(Continued from page 179)

completed and in progress, shown on the report of 1907, was \$65,670. On December 31, 1908, it was \$318,235, or an increase of \$252,965. In 1908 the paid-up share capital increased from \$17,085 to \$72,875, and the loan stock from \$33,500 to \$109,950, together making a total at the end of the year of \$182,825 or an increase during the year of \$132,590. The revenue from the rents in 1907 was \$240. For the year 1908 it was \$8,305. This steadily increases with the progress of the building, the houses being tenanted as quickly as completed. A total rent from 132 houses of \$8,305 to the American builder seems ridiculously small, a little over \$64 a year per house. Yet after meeting all expenses, which should be debited against the revenue account, including interest on loan stock, there was a profit balance of \$2,695, from which the board recommended that a dividend of 5 per cent. on share capital be paid from the commencement of the company or society, as it is called, amounting to \$1,927.90.

The Hampstead Tenants Company is but an example of the sound businesslike way in which the movement is conducted.

CHEAP COTTAGE-BUILDING.

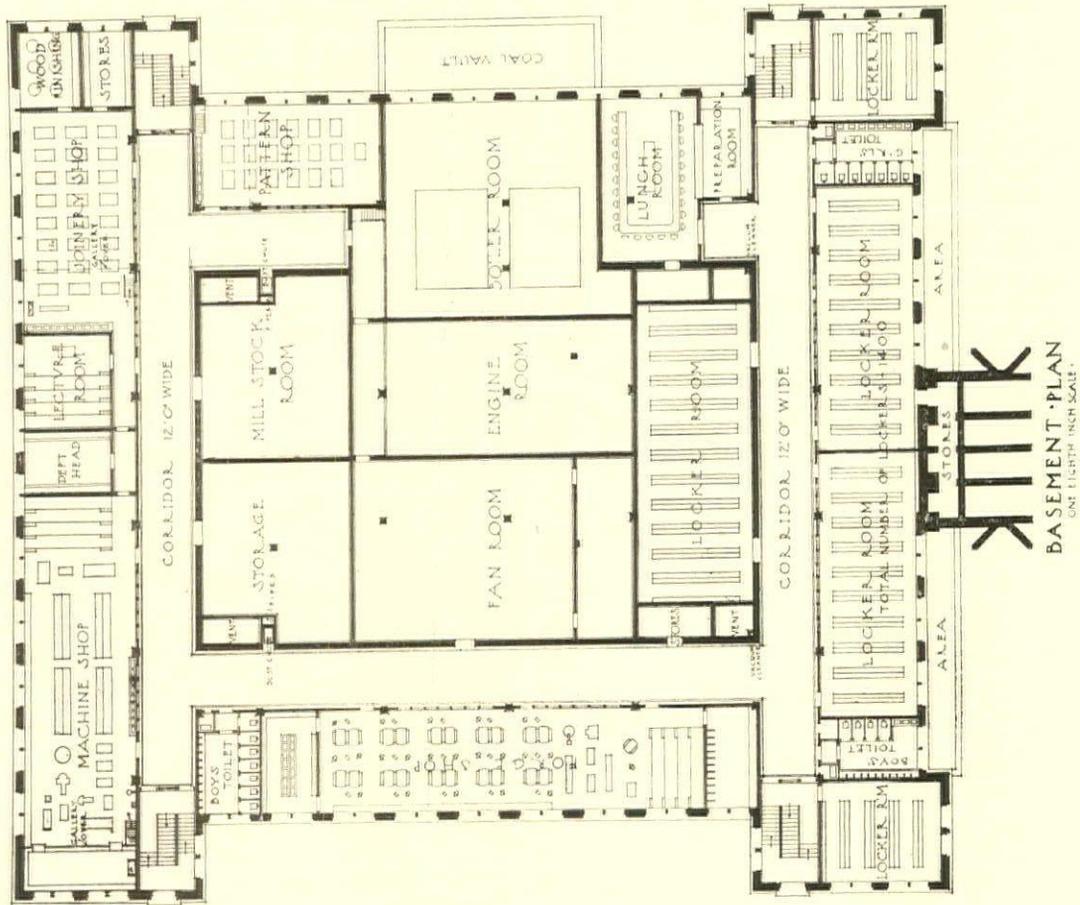
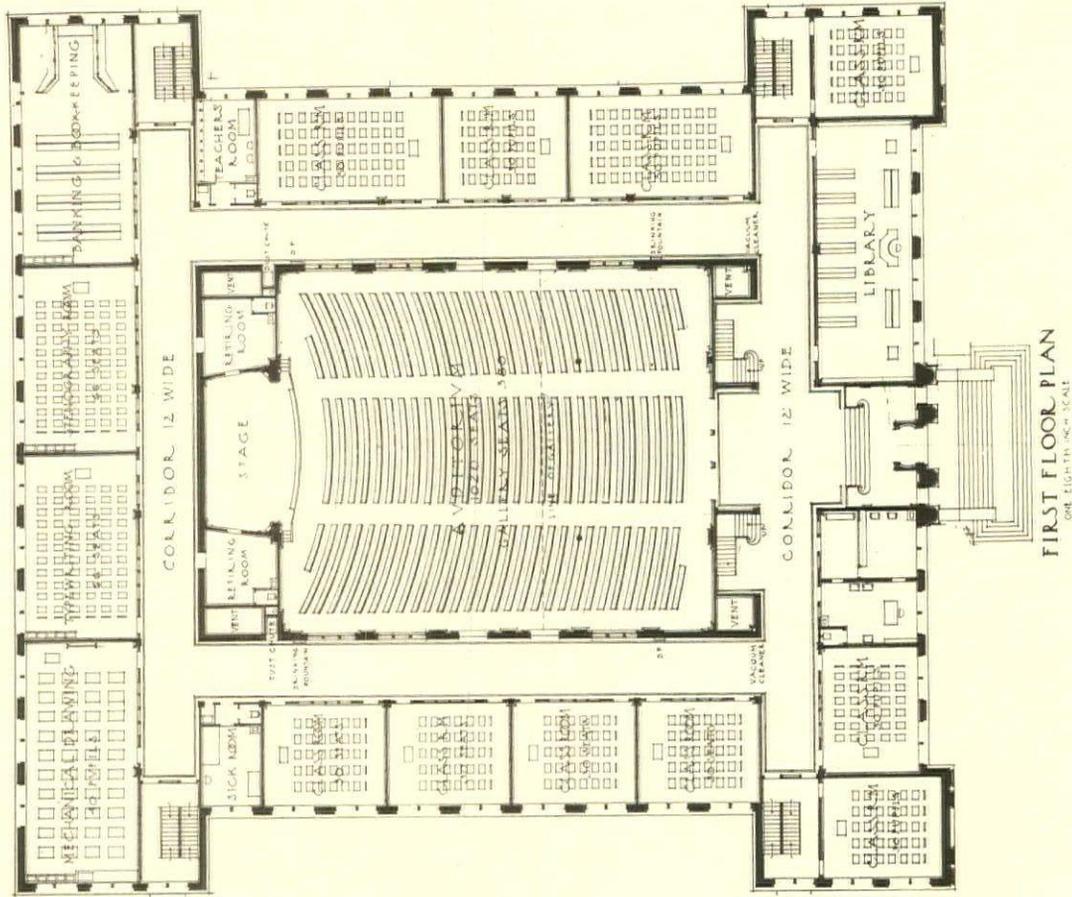
DURING recent years few subjects have had more attention devoted to them amongst architects than that of building exceedingly cheap cottages for the agricultural laborer. The problem has been to erect something which is structurally sound, lasting, and weather-tight. Among the methods proposed, a good deal of prominence has been given to concrete block building. Recently we had the opportunity of inspecting a row of cottages having walls of concrete blocks, and stairs, floors, and even a flat roof all of concrete. It may be said at once that they are exceedingly ugly. They have been built in a row, and look like nothing better than a long square box, with holes for the doors and windows, having all the appearance of a child's dolls'-house of the most elementary type. Compactly planned, they let only to a low class of tenants, for certain reasons which are easily to be found, some of which can be overcome and some not without incurring additional expense in building. The accommodation is, of course, restricted, but it is sufficient for small tenement cottages. If they could have been built independently or in pairs, each with a piece of garden in front, they would have been much more attractive, while very little skill need have been employed to improve the elevation; probably a simple band would have been sufficient, combined with the use of eaves instead of a parapet. Internally, the landlord has made the mistake of failing to paper the rooms, leaving the walls absolutely bare—not even colored or plastered—so that they have an uncomfortable appearance. Plastering is apparently not necessary, the blocks fitting closely together, and although the surface is not an ideal one for papering upon, still papering is possible, and it has been attempted by the tenants in one or two cases, the gain in appearance being considerable.

On the score of first cost, it is clear that these cottages have been economical. They have been erected in a part of the country where neither stone nor brick could be obtained without the expense of cartage for a considerable distance, whereas the site itself provided ample gravel and sand from a rising hill at the back, so that all that had to be imported was cement, while the labor required was of that

unskilled character which is easily obtainable in country districts at a low rate. One block-making machine, of course, sufficed for the whole row of cottages: its cost would be negligible under such circumstances.

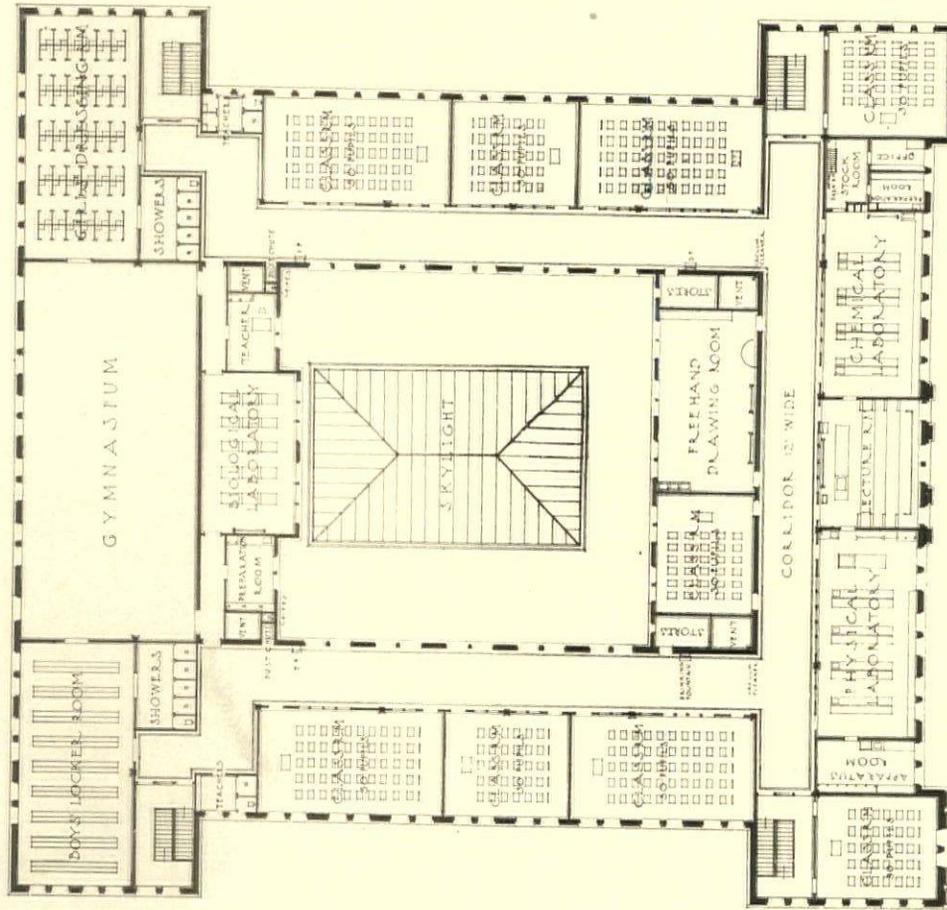
On the other side of the account it may be noticed that the repairs bill is likely to be a heavy one. A roof merely cemented over almost invariably leaks. This has happened, and it is now being attempted to rectify this difficulty by applying to it a coat of tar; but the permanence of the remedy is more than doubtful. Efflorescence has appeared upon the walls both externally and internally; but it is not apparent whether this is due to the cement in the blocks or to the use of ordinary lime mortar in the joints. At any rate, the effect is distressing; it gives a dilapidated appearance to the buildings which must militate considerably against their letting possibilities. Internally, it precludes papering. The stair treads are wearing badly, particularly at the nosings; in fact, these have chipped off so badly and in such a short period that the stairs put up in the cottages most recently built have been constructed of timber in the old-fashioned way. The floors, too, are wearing into holes, as might very well have been expected where the tenants are too poor to cover them with carpets, and where the inhabitants are agricultural laborers who wear heavy hobnailed boots. This is particularly noticeable on the ground floor. The tenants say that the floors are cold to the feet, and that the houses themselves are cold in winter and hot in summer. They also complain that the uncovered cement of the floors, ceilings, and walls is constantly rubbing off, causing a much greater amount of dust to lie about than is to be found in the normal house, and that, consequently, the labor of keeping these cottages clean is excessive.

This long list of defects is somewhat startling at first sight, giving the impression that concrete building is, after all, not the solution of the cheap-cottage problem; but if one inquires a little further one soon finds that each defect has an easily applied remedy. The concrete blocks are suitable enough for the walls, particularly if they are made hollow, and set in cement instead of lime mortar. Internally, they need to be papered, when they cease to give off dust, the surface being no longer constantly rubbed, while the ceilings should, of course, be whitened. The stairs should be made of wood instead of concrete, as has already been said, while the upper floors are best constructed of wood also, any little difficulty there may be in inserting the joists into walls made of blocks being overcome by corbelling rather than by inserting the ends of the joist into the walls. The ground floor, properly of concrete, ought to be covered with flag-stones or tiles, instead of having mere cement rendering; while the cheapest form of flat roof having watertight qualities would probably be one of timber joists boarded and asphalted or covered with tarred felt, properly ceiled underneath. It is almost certainly the solid character of this concrete roof which makes the cottages cold in winter and hot in summer; but the provision of a space, such as there would be in a flat roof constructed like that which is suggested, would overcome this defect. These little alterations would add to the cost to a certain small extent; but they would reduce the necessary repairs to a minimum, and render the houses much more habitable, and, consequently, much more attractive to a respectable class of tenants. To give the cheap cottage a real test it ought to be attractive in itself, both externally and internally.

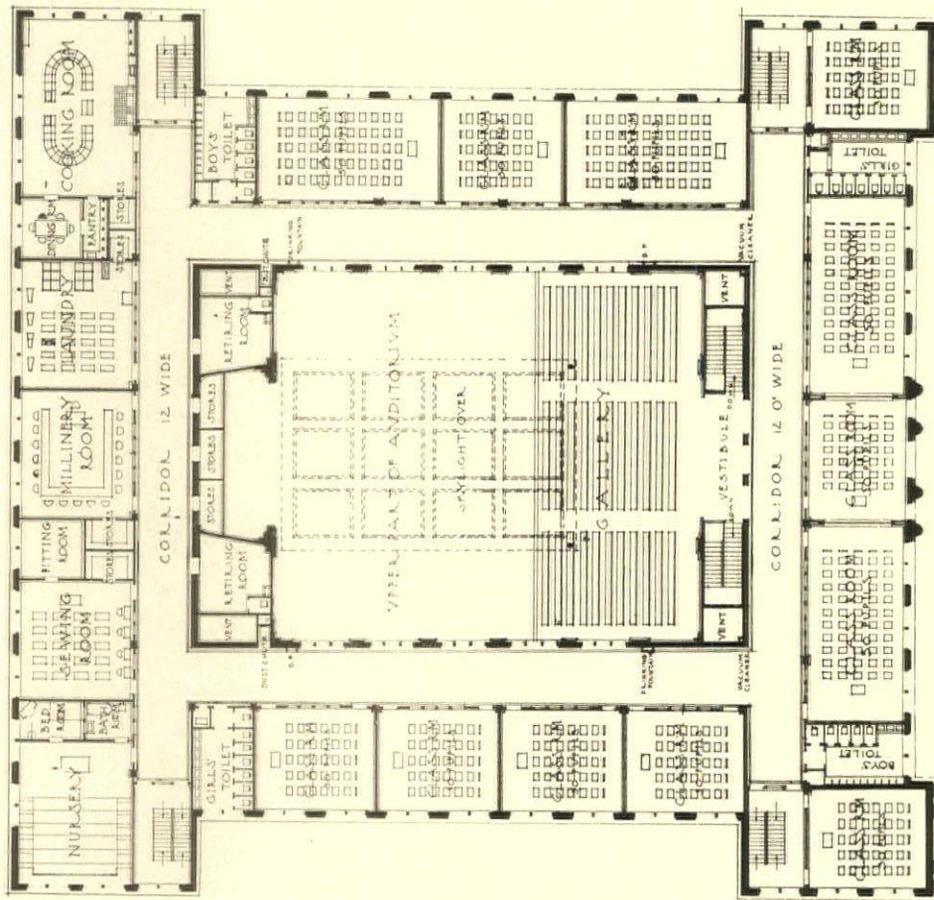


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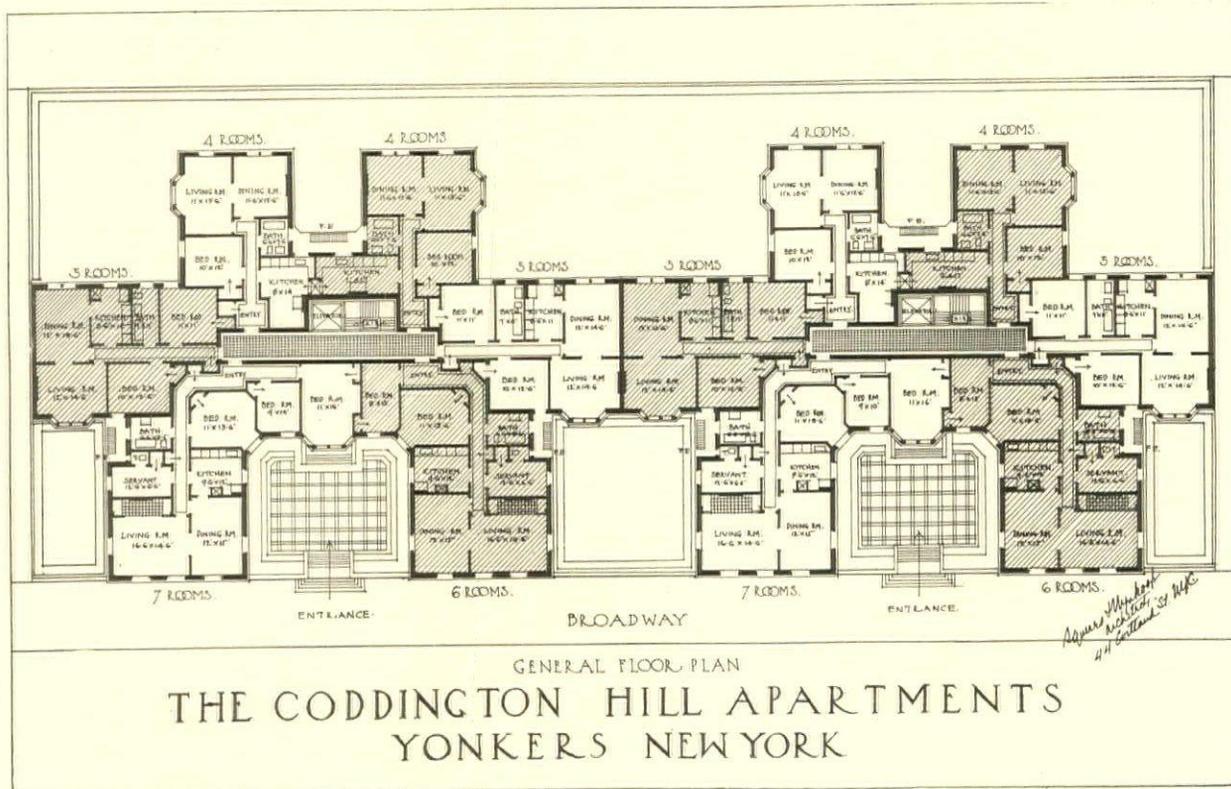
PLANS (FOR ESTIMATE), HIGH SCHOOL, BINGHAMTON, N. Y.



THIRD FLOOR PLAN
ONE EIGHTH INCH SCALE



SECOND FLOOR PLAN
ONE EIGHTH INCH SCALE

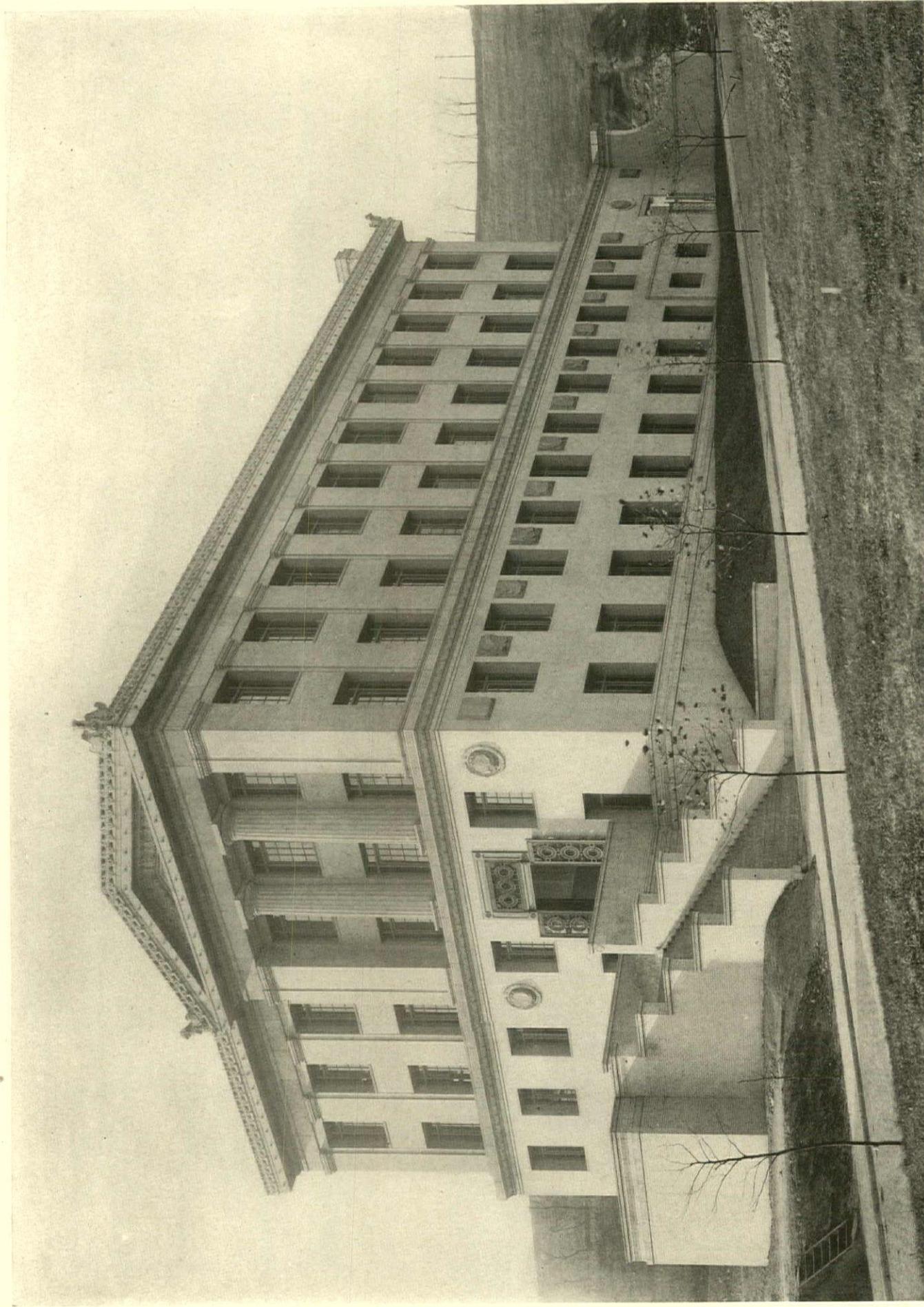




DECEMBER, 1909.

ARCHITECTURE

PLATE CV.



SCHOOL OF MINES, UNIVERSITY OF PITTSBURGH, PITTSBURGH, PA.

Kinnear Pressed Radiators.

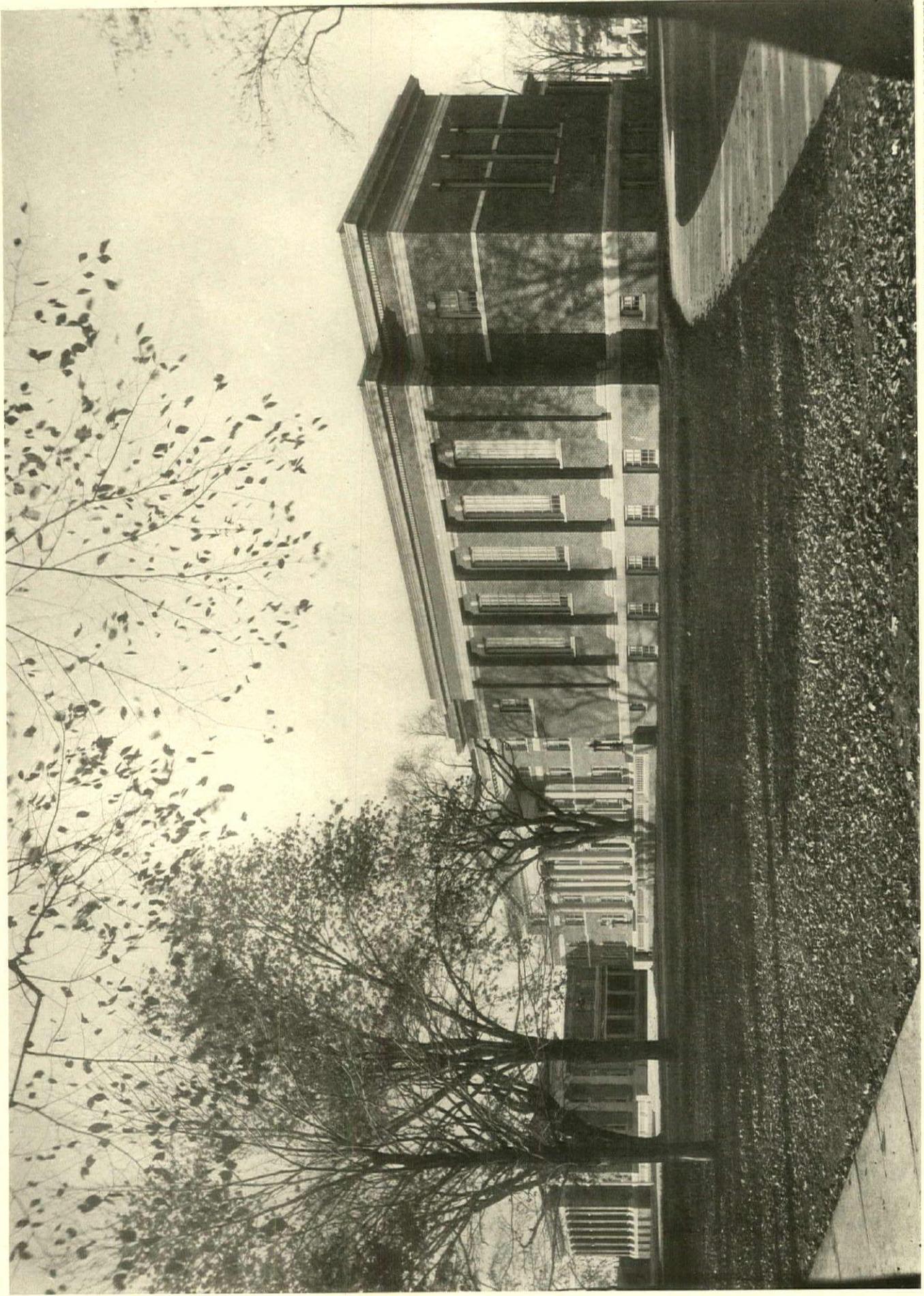
PALMER & HORNBOSTEL, ARCHITECTS.



DECEMBER, 1909.

ARCHITECTURE

PLATE CVI.



STATE NORMAL COLLEGE, ALBANY, N. Y.

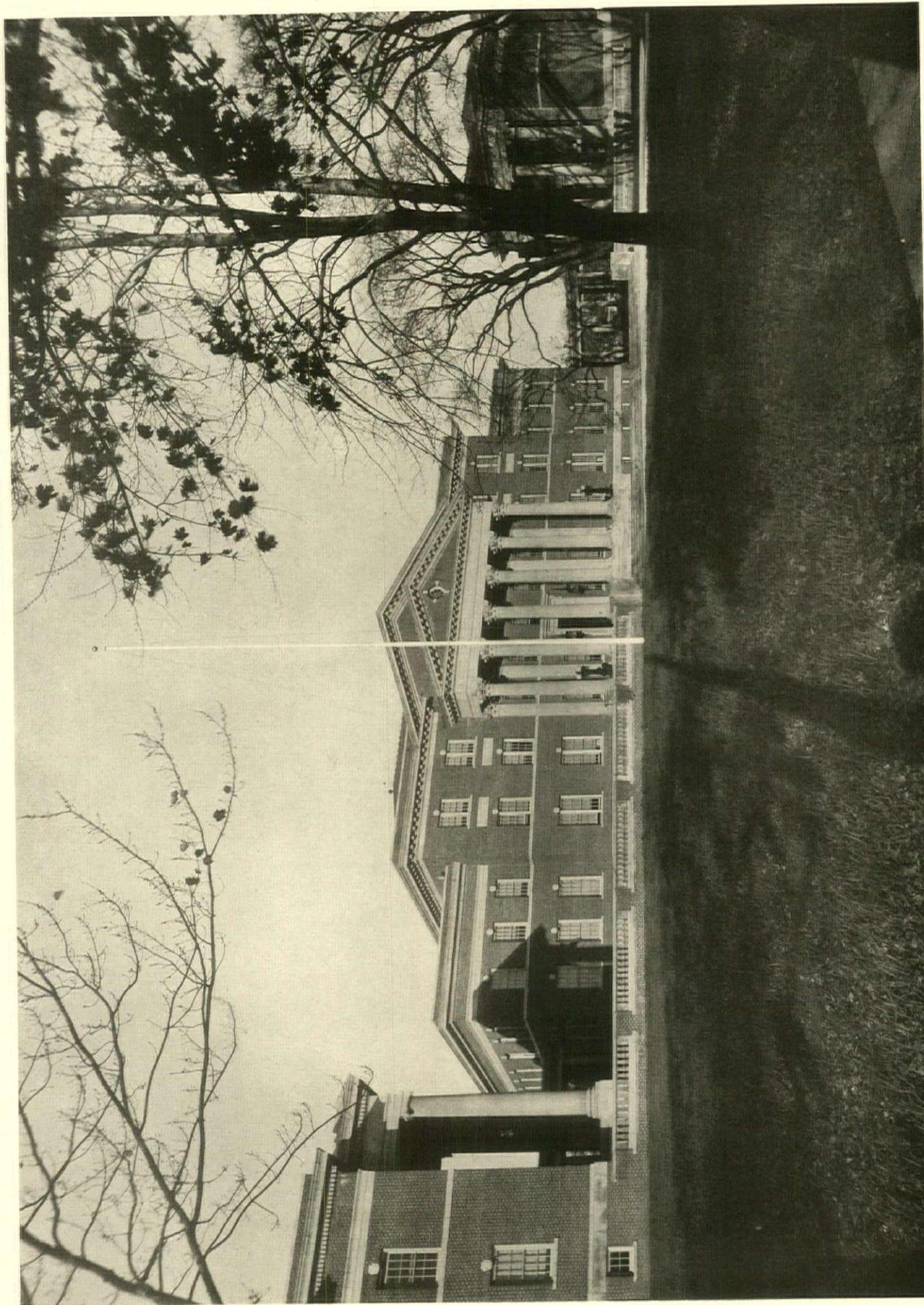
G. L. HEINS AND ALBERT R. ROSS, ARCHITECTS.



ARCHITECTURE

PLATE CVII.

DECEMBER, 1909.



STATE NORMAL COLLEGE, ALBANY, N. Y.

Otis Elevators.

G. L. HEINS AND ALBERT R. ROSS, ARCHITECTS.



DECEMBER, 1909.

ARCHITECTURE

PLATE CVIII.



METROPOLITAN LIFE INSURANCE CO. BUILDING, SAN FRANCISCO, CAL.
American Radiators.

Yale & Towne Hardware.

N. LEBRUN & SONS, ARCHITECTS.





ENTRANCE, METROPOLITAN LIFE INSURANCE CO. BUILDING, SAN FRANCISCO, CAL.

N. LEBRUN & SONS, ARCHITECTS.



THE BRITANNIA APARTMENTS, 515 WEST 110TH ST., NEW YORK.

WAID & WILLAUER, ARCHITECTS. Wurts Bros. Photo.

Otis Elevators.





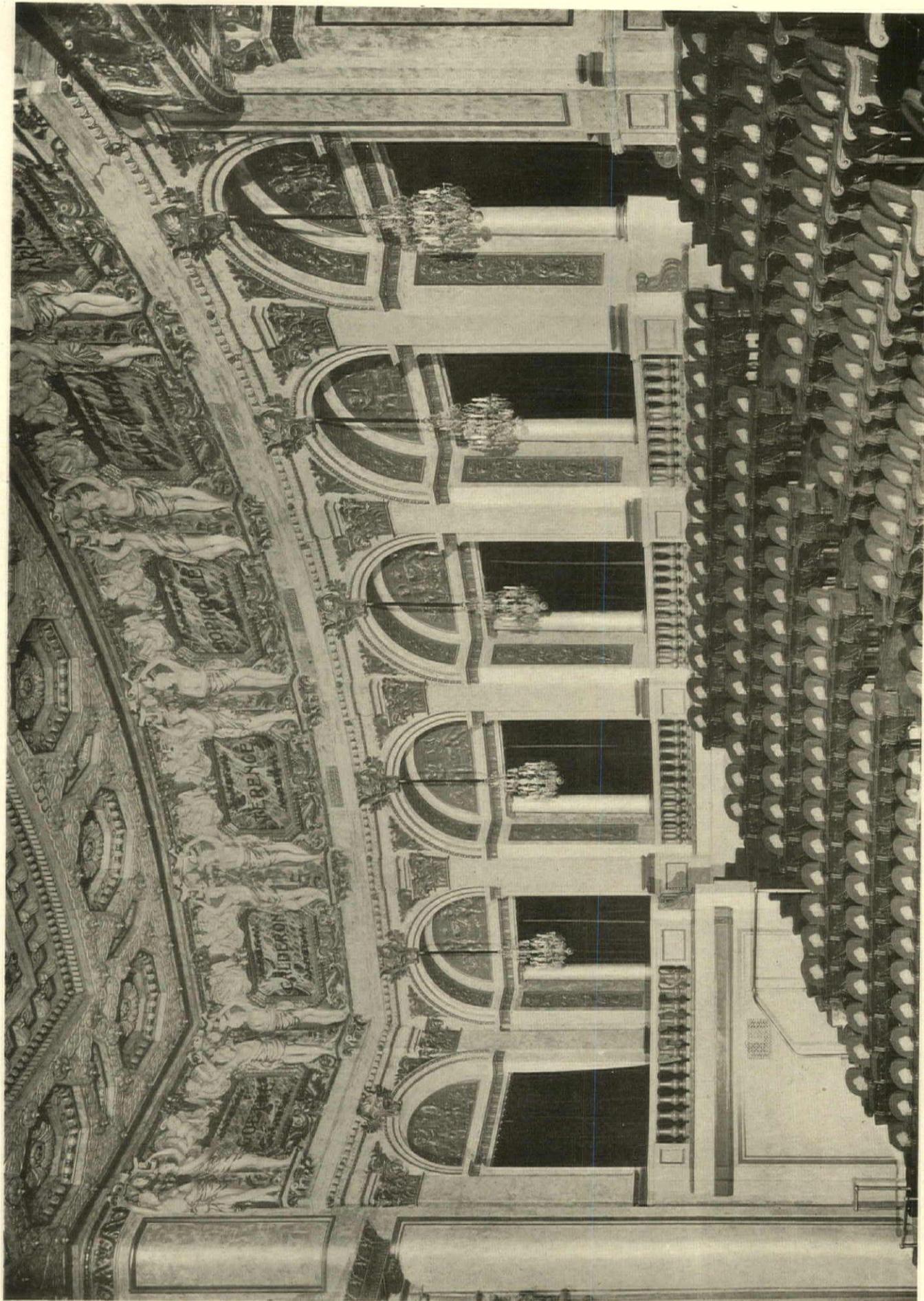
THE NEW THEATRE, NEW YORK.

American Radiators.

Bronze Tablets executed by Wm. H. Jackson Company.

CARRERE & HASTINGS, ARCHITECTS. Copyright, 1909. The New Theatre.
Otis Elevators.

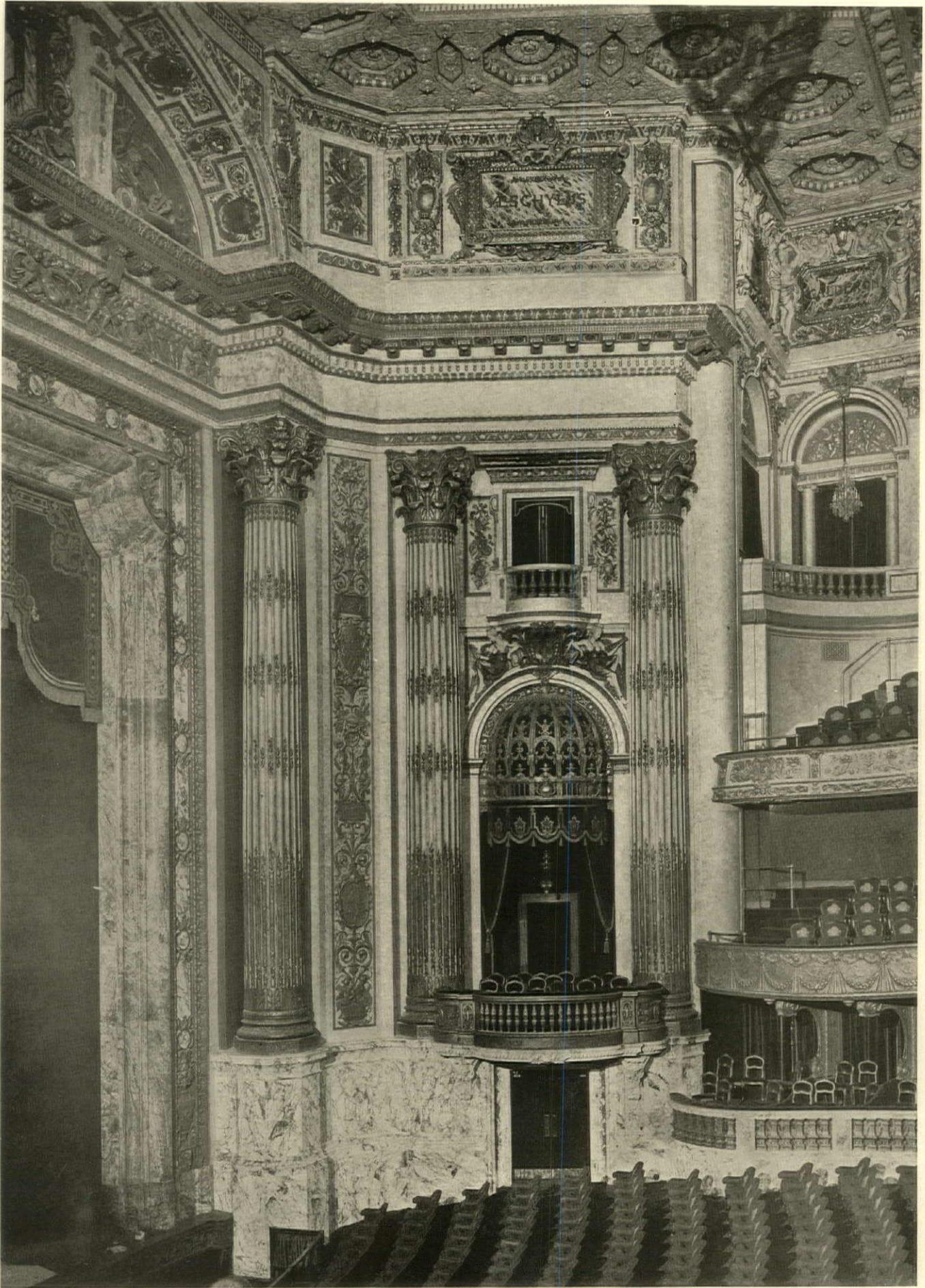




AUDITORIUM, THE NEW THEATRE, NEW YORK.

CARRERE & HASTINGS, ARCHITECTS. Copyright, 1909. The New Theatre.



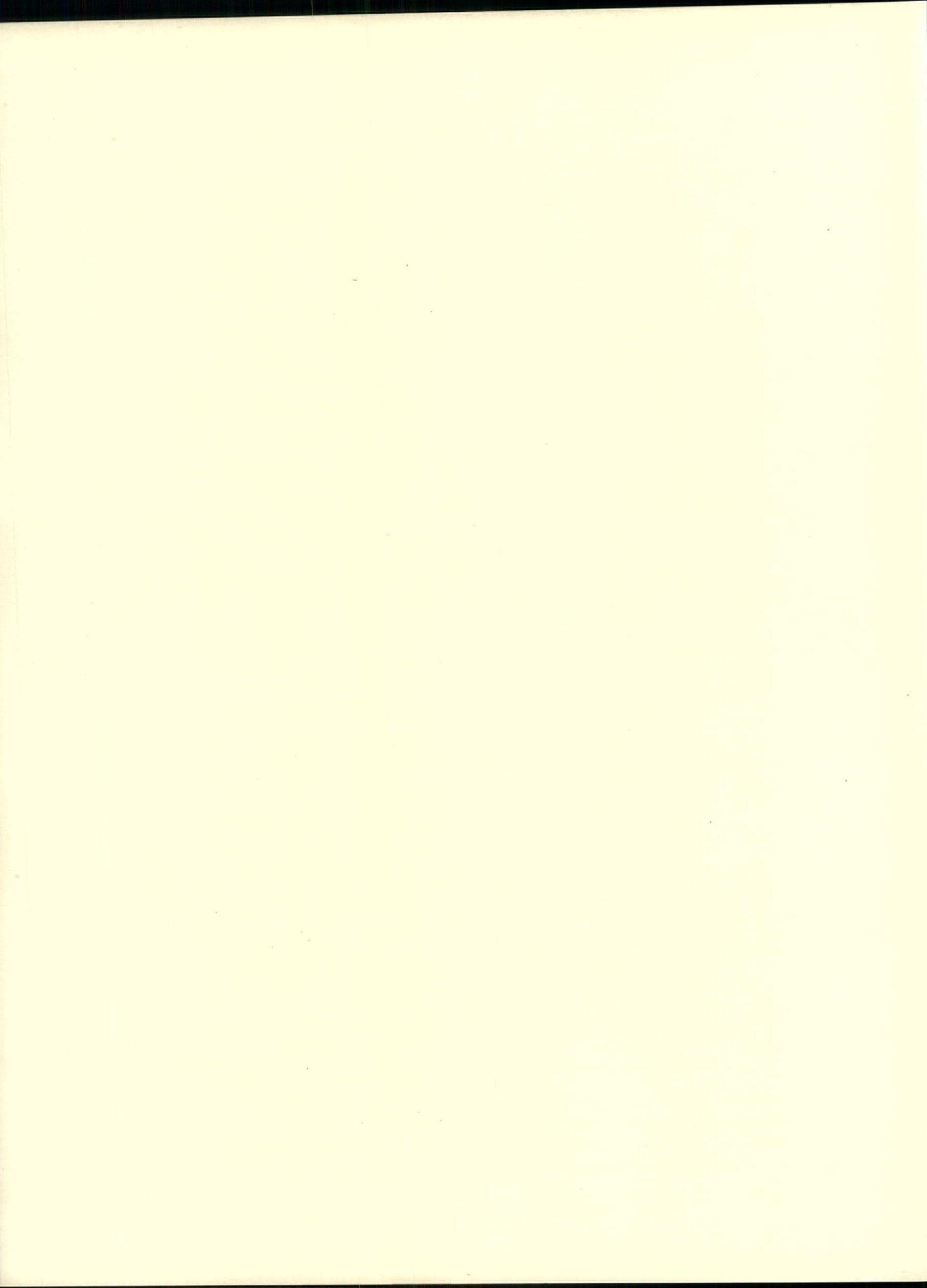


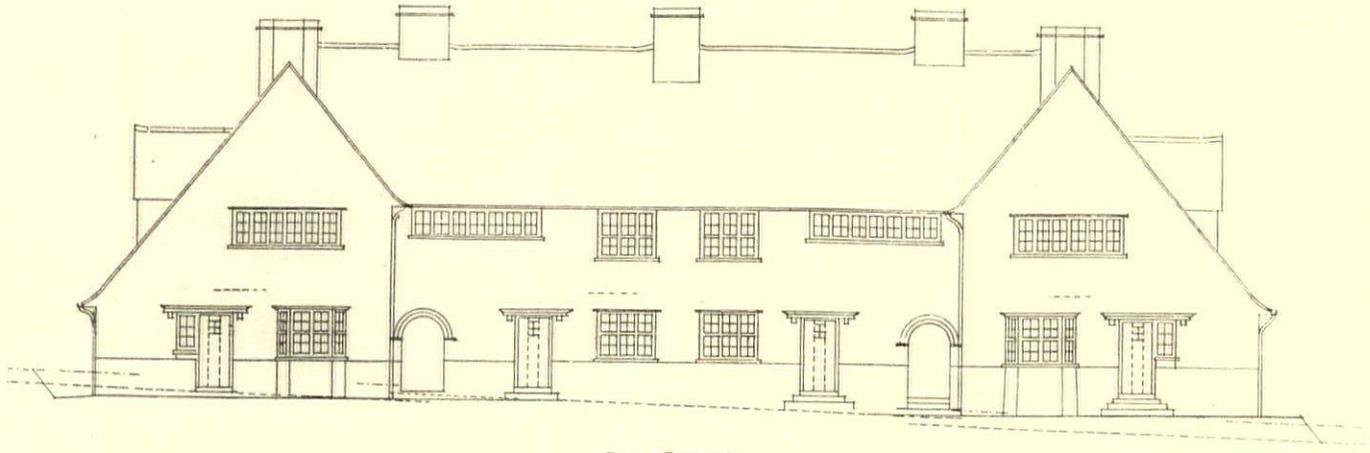
DETAIL, AUDITORIUM, THE NEW THEATRE, NEW YORK. CARRERE & HASTINGS, ARCHITECTS. Copyright, 1909 .The New Theatre.



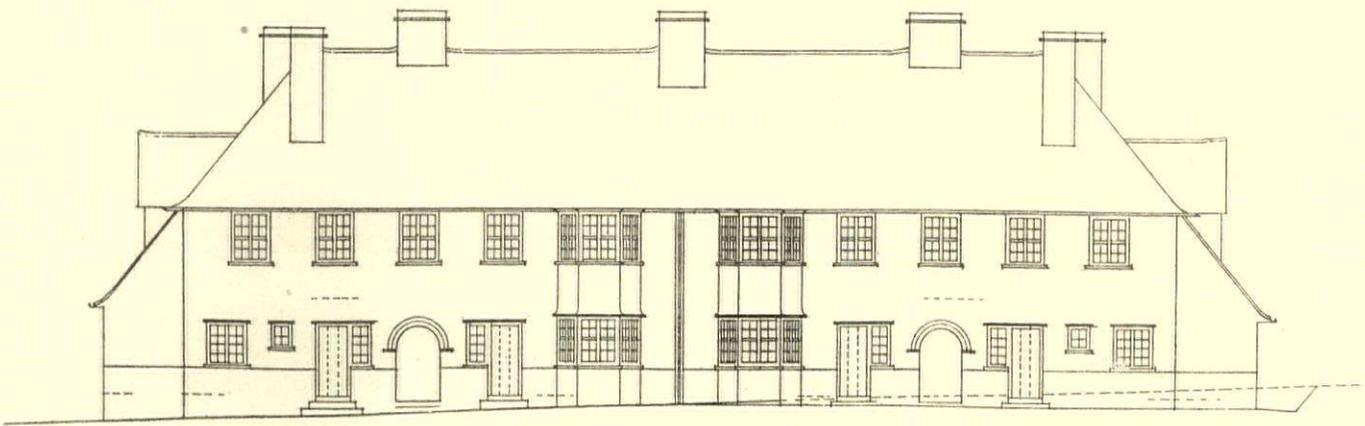
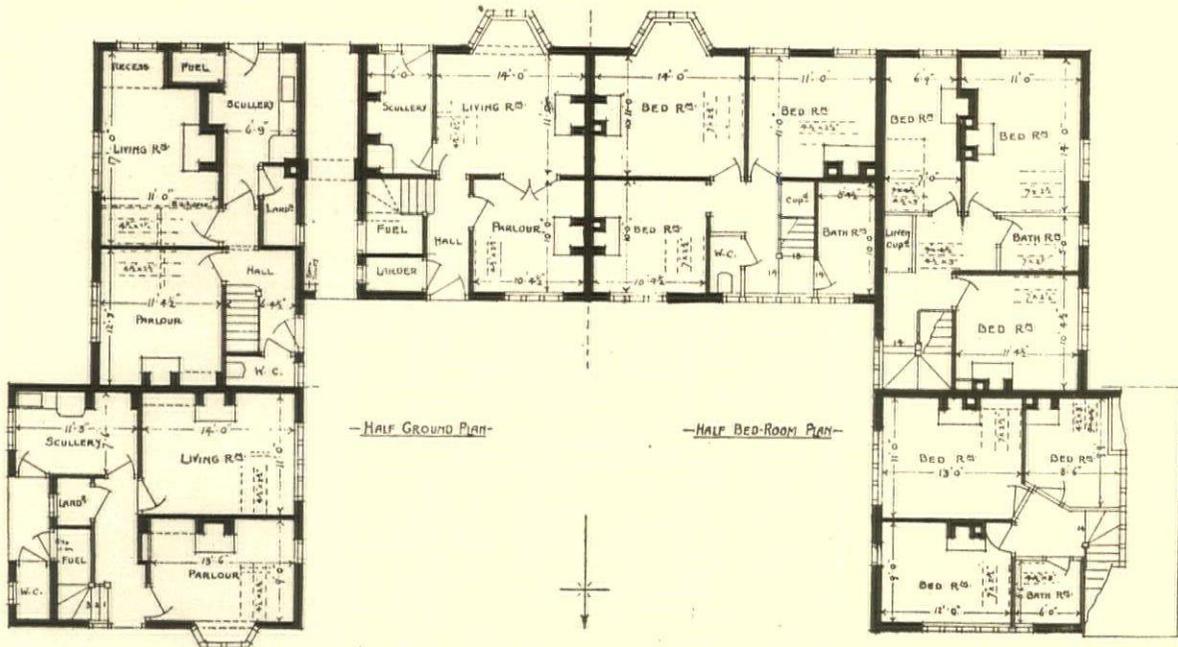
FOYER, THE NEW THEATRE, NEW YORK.

CARRERE & HASTINGS, ARCHITECTS. Copyright, 1909. The New Theatre.
Wood-Mosaic Flooring.





-FRONT ELEVATION-



-BACK ELEVATION-



Group of Tenements, Temple Fortune Hill.



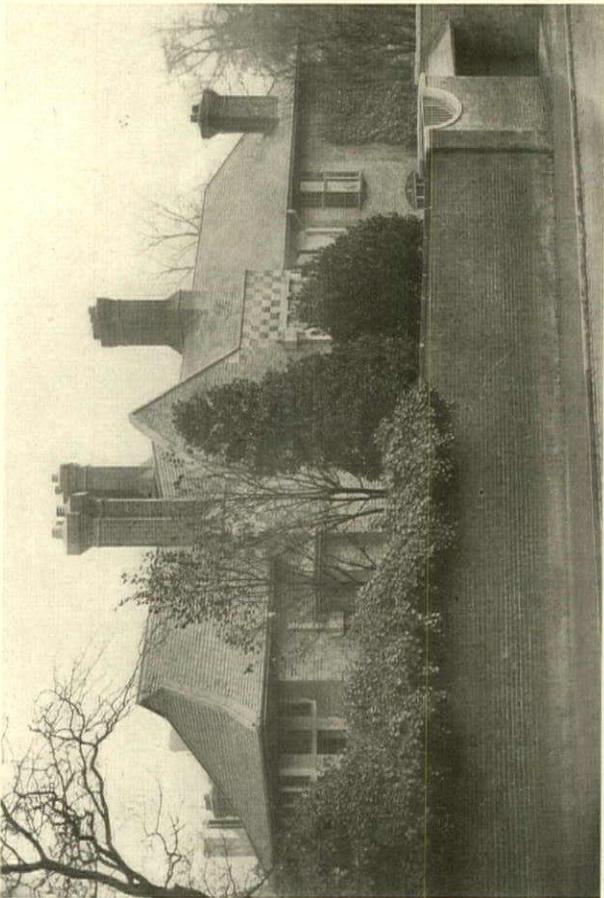
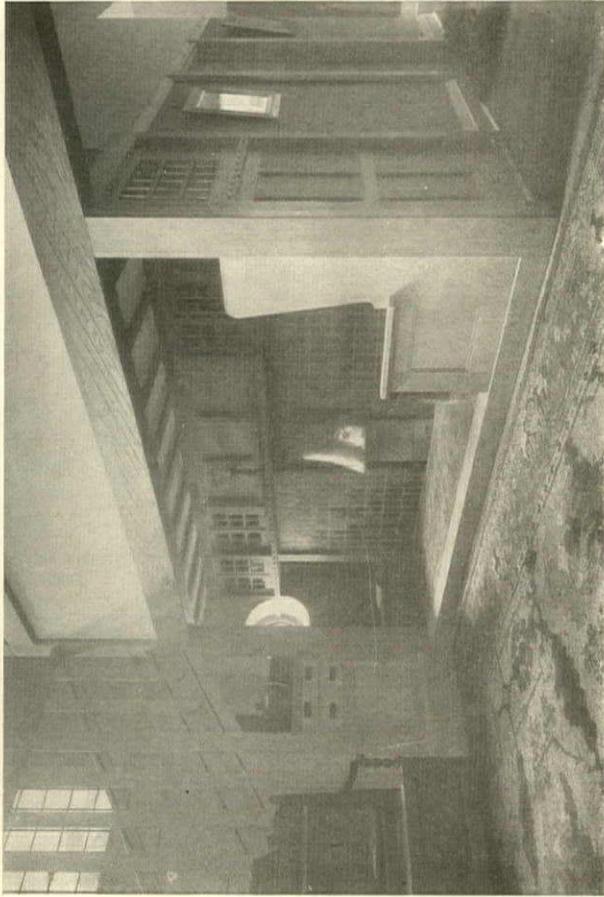
Group of Houses, Linnel Close.



Hampstead Way.



Asmunds Place.



EXTERIOR AND INTERIORS, PRIVATE HOUSE, HAMPSLEAD GARDEN SUBURB, NEAR LONDON, ENG

Parker & Unwin, Architects.

TRIBUTE TO CHARLES F. MCKIM.

FRRIENDS and associates of the late Charles Follen McKim gathered Tuesday afternoon, November 23, in the New Theatre to pay tribute to his memory. Representatives of fourteen organizations were on the stage. George B. Post presided.

Addresses were made by Joseph H. Choate, Robert Peabody, Elihu Root and Walter Cook, and short expressions of appreciation were read by Professor H. Langford Warren, who represented Harvard University; Josiah H. Benton, the Boston Public Library; Nicholas Murray Butler, Columbia University; and John Cadwalader, the New York Public Library. Professor William M. Sloane, of Princeton University, read resolutions.

The text of the resolutions, as read by Professor William M. Sloane, was, in part, as follows:

"Fourteen associations, artistic, technical and literary, here unite to commemorate the distinction of Charles Follen McKim as a citizen, as a craftsman and as an artist. To this end they join in recording these convictions.

"His life was an example of that which a creative architect must imperatively choose. His secondary training completed, he devoted ten years to his professional education, five to that of discipline and five to that of knowledge. He was stimulated to great thoughts and he had acquired the power to express them.

"His genius was exhibited in his supreme power of collaboration; he linked his work and fame inseparably with those of his two original partners, primarily for the sake of comprehensive mastery, but thus incidentally for the perfecting of achievement by each singly as well as by all in combination.

"His choice of style was predetermined by ancestry, temperament and training, for his soul was akin to that highest form of civilization which is marked by dignity, repose and proportion. As the great painter elaborates on the basis of strong drawing, whether of brush or pencil, so this great architect imagined and used structure that was itself poetic, the degree of elaboration and ornament being determined by adaptation to use and environment."

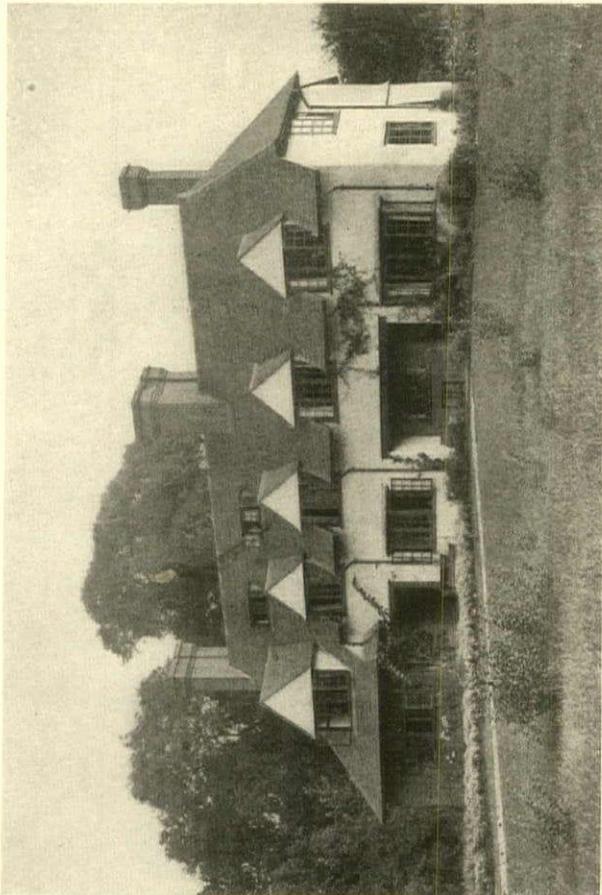
SELF-EDUCATION

An address delivered by Claude Bragdon, F.A.I.A., before the Boston Architectural Club.

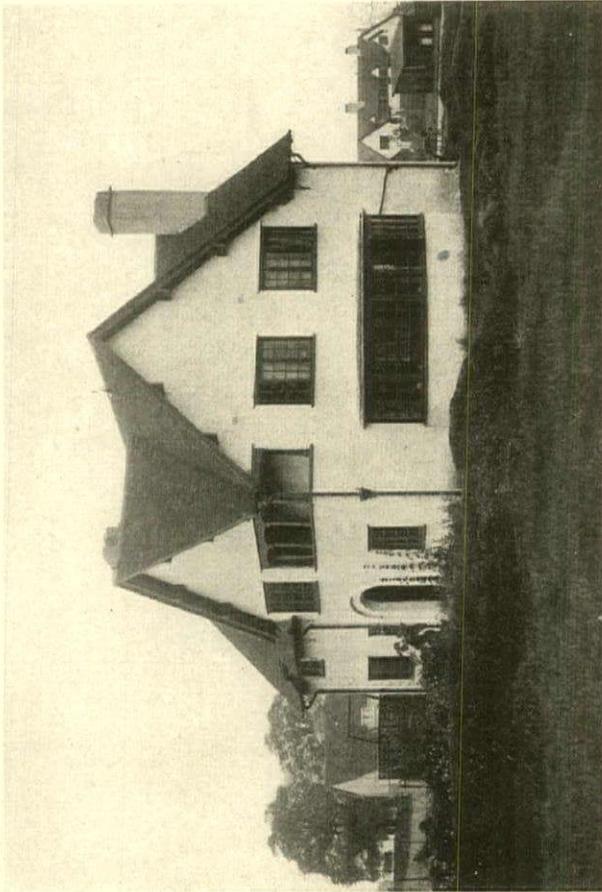
I TAKE great pleasure in availing myself of this opportunity to talk to you on certain aspects of the art which we practice. I do not forget, and I hope that you sufficiently remember, that the architectural future of this country lies in the hands of just such men as you. Let me dwell, then, for a moment on your unique opportunity. Perhaps some of you have taken up architecture as you might have gone into trade, or manufacturing, or any of the useful professions; in that case you have probably already learned discrimination, and now realize that in the cutting of the cake of human occupations you have drawn the piece which contains the ring of gold. The cake is the business and utilitarian side of life, the ring of gold is the esthetic, the creative side. Treasure it, for it is a precious and enduring thing. Think what your work is: to reassemble materials in such fashion that they become instinct with a beauty and eloquent with a meaning which may carry inspiration and delight to generations still unborn. Immortality haunts your threshold, even though your hand may not be strong enough to open to the heavenly visitor. Of Captains of Industry you are the

captains; by the very nature of your calling you are not privates in the ranks, but officers of staff. Though the profession of architecture is a noble one in any country and in any age, it is particularly rich in inspiration and in opportunity here and now, for who can doubt that we are about to enter upon a great building period? We have what Mr. Sullivan calls "the need and the power to build," the spirit of great art alone is lacking, and that is already stirring in the secret hearts of men, and will sooner or later find expression in objective and ponderable forms of new beauty. These it is your privilege to create. May the opportunity find you ready! There is a saying, "To be young, to be in love, to be in Italy!" I would paraphrase it thus: To be young, to be in architecture, to be in America. It is my purpose to-night to outline a scheme of self-education, which if consistently followed out I am sure will help you, though I am aware that to a certain order of mind it will seem highly mystical and unpractical. If it commends itself to your favor I shall be glad; there is no harm in stating it, at all events. Many of you will have had the advantage of a thorough technical training in your chosen profession; be grateful for it. Others, like Topsy, "just growed"—or have just failed to grow. For the solace of all such—without wishing to be understood to disparage architectural schooling, which is growing increasingly excellent and increasingly necessary—I would say that there is a kind of education which is worse than none, for by filling his mind with ready-made ideas it prevents a man from ever learning to think for himself; and there is another kind which teaches him to think, indeed, but according to some arbitrary method, so that his mind becomes a canal instead of a river, flowing in a predetermined and artificial channel, and unreplenished by the hidden springs of the spirit. The best education can do no more than to bring into manifestation that which is inherent; it does this by means of some stimulus from without—from books and masters—but the stimulus may equally come from within; each can develop his own mind, and in the following manner: The alternation between a state of activity and a state of passivity, which is a law of our physical being, as is a law of all nature, is characteristic of the action of the mind as well. Observation and meditation are the two poles of thought. The tendency of modern life and of our active American temperament is towards a too exclusive functioning of the mind in its outgoing state, and this results in a great cleverness and a great shallowness. It is only in moments of quiet meditation that the great synthetic, fundamental truths reveal themselves. Observe ceaselessly, weigh, judge, criticize—this order of intellectual activity is important and valuable—but the mind must be steadied and strengthened by another and a different process. The power of attention, the ability to concentrate, is the measure of mental efficiency, and this power may be developed by a training exactly analogous to that by which a muscle is developed, for mind and muscle are alike the instruments of the silent Thinker who sits behind. The mind is an instrument of something higher than the mind: here is a truth so fertile that in the language of Oriental imagery, "If you were to tell this to a dry stick, branches would grow, and leaves sprout from it." There is nothing original in the method of mental development here indicated; it has been known and practiced for centuries in the East, where life is less strenuous than it is with us. The method consists in silent meditation every day at stated periods, during which

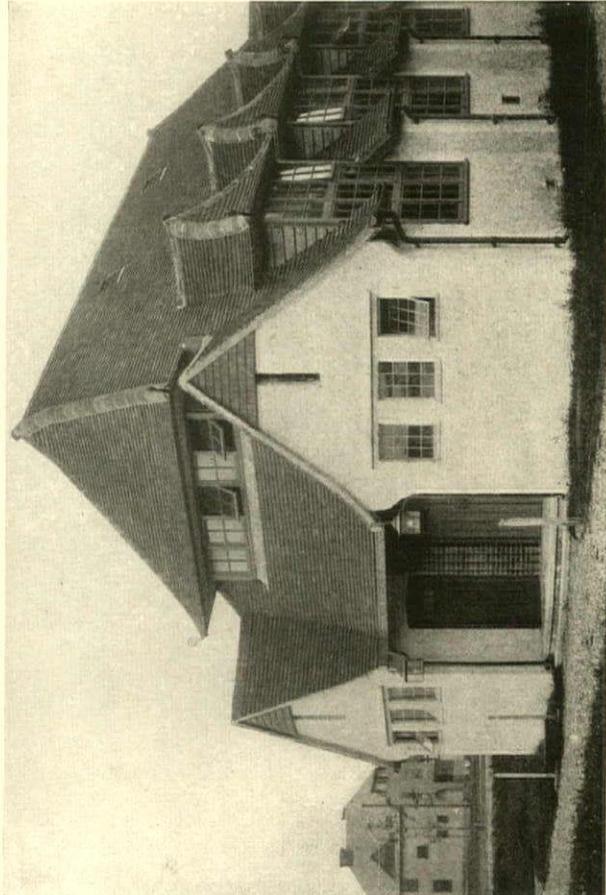
(Continued page 191)



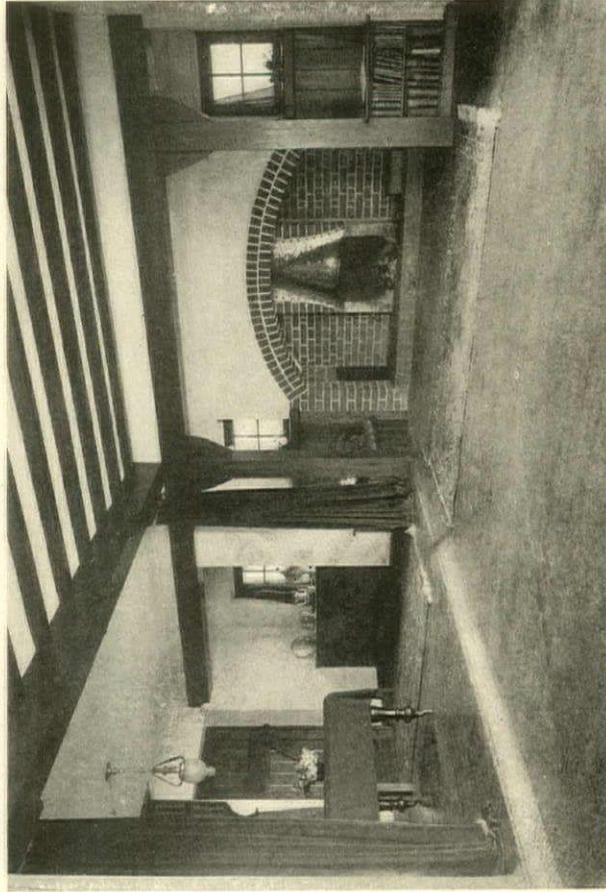
Laneside.



The Stephens Cottage.



Howard Memorial Hall.



Interior, The Stephens Cottage.

BUILDINGS IN LEITCHWORTH SUBURB, NEAR LONDON, ENG.

Parker & Unwin, Architects.

(Continued from page 189)

the attempt is made to hold the mind to the contemplation of a single image or idea, bringing the attention back whenever it wanders, killing each irrelevant thought as it arises, as one might kill a rat coming out of a hole. This turning of the mind back on itself is difficult, but I know of nothing that "pays" so well, and I have never found anyone who conscientiously practiced it who did not confirm this view. The point is, that if a man acquires the ability to concentrate on one thing, he can concentrate on anything; he increases his competence on the mental plane in the same manner that pulling chest-weights increases his competence on the physical. The practice of meditation has moreover an ulterior as well as an immediate advantage, and that is the reason it is practiced by the Yogis of India. They believe that by stilling the mind, which is like a lake reflecting the sky, the Higher Self communicates a knowledge of Itself to the lower consciousness. Without the working of this Oversoul in and through us we can never hope to produce an architecture which shall rank with the great architectures of the past, for in Egypt, in Greece, in Mediæval France, as in India, China, and Japan, mysticism made for itself a language more eloquent than any in which the purely rational consciousness of man has ever spoken. We are apt to over-estimate the importance of books and book-learning. Think how small a part books have played in the development of architecture. Indeed, Palladio and Vignole, with their hard-and-fast formulæ, have done the art more harm than good. It is a fallacy that reading strengthens the mind—it enervates it; reading sometimes stimulates the mind to original thinking, and *this* develops it; but reading itself is a passive exercise, because the thought of the reader is for the time being in abeyance, in order that the thought of the writer may enter. Much reading impairs the power to think originally and consecutively. Few of the great creators of the world had use for books, and if you aspire to be in their class you will avoid the "spawn of the press." The best plan is to read only great books, and, having read for five minutes, think about what you have read for ten. These exercises, faithfully followed out will make your mind a fit vehicle for the expression of your idea; but the advice I have given is as pertinent to anyone who uses his mind as it is to the architect. To what, specifically, should the architectural student devote his attention in order to improve the quality of his work? My own answer would be that he should devote himself to the study of music, of the human figure, and to the study of nature "first, last, midst, and without end." The correlation between music and architecture is no new thought; it is implied in the famous saying that architecture is frozen music. Vitruvius considered a knowledge of music to be a qualification of the architect of his day, and if it was desirable then it is no less so now. There is both a metaphysical reason and a practical one why this is so. Walter Pater, in a famous phrase, declared that all art constantly aspires to the condition of music, by which he meant to imply that there is a certain rhythm and harmony at the root of every art, of which music is the perfect and pure expression; that in music the means and the end are one and the same. This coincides with Schopenhauer's theory about music, that it is the most perfect and unconditioned sensuous presentment known to us of that undying *will-to-live* which constitutes life and the world. Metaphysics aside, the architect should hear as much good music as he can, and learn the rudiments of harmony, at least to the extent of knowing

the simple numerical ratios which govern the principal consonant intervals within the octave, so that, translating these ratios into intervals of space expressed in terms of length and breadth, height, and width, his work will "aspire to the condition of music." There is a metaphysical reason, too, as well as a practical one, why an architect should know the human figure. Carlyle says, "There is but one temple in the world, and that is the body of man." If the body is, as he declares, a temple, it is no less true that a temple, or any work of architectural art, is in the nature of an ampler body which man has created for his uses, and which he inhabits, just as the individual consciousness builds and inhabits its fleshly stronghold. This may seem a highly mystical idea, but the correlation between the house and its inhabitant, and the body and its consciousness is everywhere close, and is susceptible of infinite elaboration. Architectural beauty, like human beauty, depends upon a proper subordination of parts to the whole, a harmonious interrelation between these parts, the expressiveness of each if its functions, and when these are many and diverse, their reconciliation one with another. This being so, a study of the human figure with a view to analyzing the sources of its beauty cannot fail to be profitable to the architectural designer. Pursued intelligently, such study will stimulate the mind to a perception of those simple yet subtle laws, according to which Nature everywhere works, and it will educate the eye in the finest known school of proportion, training it to distinguish minute differences, in the same way that the hearing of good music cultivates the ear. It is neither necessary nor desirable to make elaborate and carefully-shaded drawings from a posed model; an equal number of hours spent in copying and analyzing the plates of a good art anatomy, supplemented with a certain amount of life-drawing, done merely with a view to catch the pose, will be found to be a more profitable exercise, for it will make you familiar with the principal and subsidiary proportions of the bodily temple, and give you sufficient data to enable you to indicate a figure in any position with fair accuracy. I recommend the study of nature because I believe that such study will assist you to recover that direct and instant perception of beauty, our natural birthright, of which oversophistication has so bereft us that we no longer know it to be ours by right of inheritance from that cosmic matter endowed with motion out of which we are fashioned, proceeding ever rationally and rhythmically to its appointed ends. We are all of us participators in a world of concrete music, geometry, and number—a world that is so mathematically constituted and co-ordinated that our pigmy bodies, equally with the farthest star, throb to the music of the spheres. The blood flows rhythmically, the heart its metronome the moving limbs weave patterns the voice stirs into radiating sound-waves that pool of silence which we call the air.

Thou canst not wave thy staff in air,
Or dip thy paddle in the lake,
But it carves the bow of beauty there,
And ripples in rhyme the oar forsake.

The whole of animate creation labors under the exquisite necessity of being beautiful. Everywhere it exhibits the perfect adaptation of means to ends and the expression both of the means and the ends. Nature is the workshop in which are built *beautiful organisms*. This is exactly the aim of the architect—to fashion beautiful organisms. What better school, therefore, could he have in which to learn his trade? To study Nature it is not necessary to go out into the fields and botanize, nor to attempt to make water colors of pictur-

esque scenery. These things are very well, but not so profitable to your particular purpose as observation directed towards the discovery of those simple yet subtle laws which determine form and structure, such as the tracing of the spiral line, not alone where it is obvious, as in the snail's shell and in the ram's horn, but where it appears obscurely, as in the disposition of leaves or twigs upon a parent stem. Such laws of nature are equally laws of art, for art is nature carried to a higher power by reason of its passage through a human consciousness. Thought and emotion tend to crystallize into forms of beauty as inevitably, and according to the same laws, as does the frost on the window pane. Art, in one of its aspects, is the weaving of a pattern, the communication of an order and a method to lines, forms, colors, sounds. All very poetical, and possibly true, you may be saying to yourselves, but what has it to do with architecture, which nowadays, at least, is pre-eminently a practical and utilitarian art whose highest mission is to fulfill definite conditions in an economical and admirable way; whose supreme excellence is fitness, appropriateness, the perfect adaptation of means to ends, and the perfect expression of both means and ends? Yes, architecture is all of this, but this is not all of architecture; else the most efficient engineer would be the most admirable architect, which does not happen to be the case. Along with the expression of the concrete and individual must go the expression of the abstract and universal; the two can be combined in a single building in the same way that in every human countenance are combined a racial or temperamental *type*, which is universal, and a *character*, which is individual.

J. W. WHITEHEAD, JR.
PRESERVATIVE COATINGS
NO. 1 MADISON AVE., NEW YORK
TELEPHONE 1525 GRAMERCY

DEC. 15, 1909.

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In this work I have received the encouragement and support of a large number of the prominent men of both professions, to the extent that I have determined to continue the work in my own name and will furnish all materials under my own brands.

I am prepared to furnish Chemical Stains, with which the woodwork can be equalized in both color and tone. Fancy Fillers for producing variations in color. Varnishes, specially selected for the woods over which they are to be used. Flat Finishes, Enamels, Enamel Undercoating, Shingle Stains, Mixed Paints and Preservative Coatings for Structural Steel and all metals.

The experience which I have gained in the years spent in this work has been formulated into detailed Specifications for Interior and Exterior finishing and for the preservation of Structural Steel, including my plan of work, which I will send to you on receipt of your request for same.

Awaiting your pleasure,

I remain very truly yours,

J. W. WHITEHEAD, JR.



"Target-and-Arrow Old Style" Tin

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"The roof is in good repair now—never costing anything except a coat of paint every few years, and looks now as though good for another 35½ years."

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