

THE AMERICAN ARCHITECT

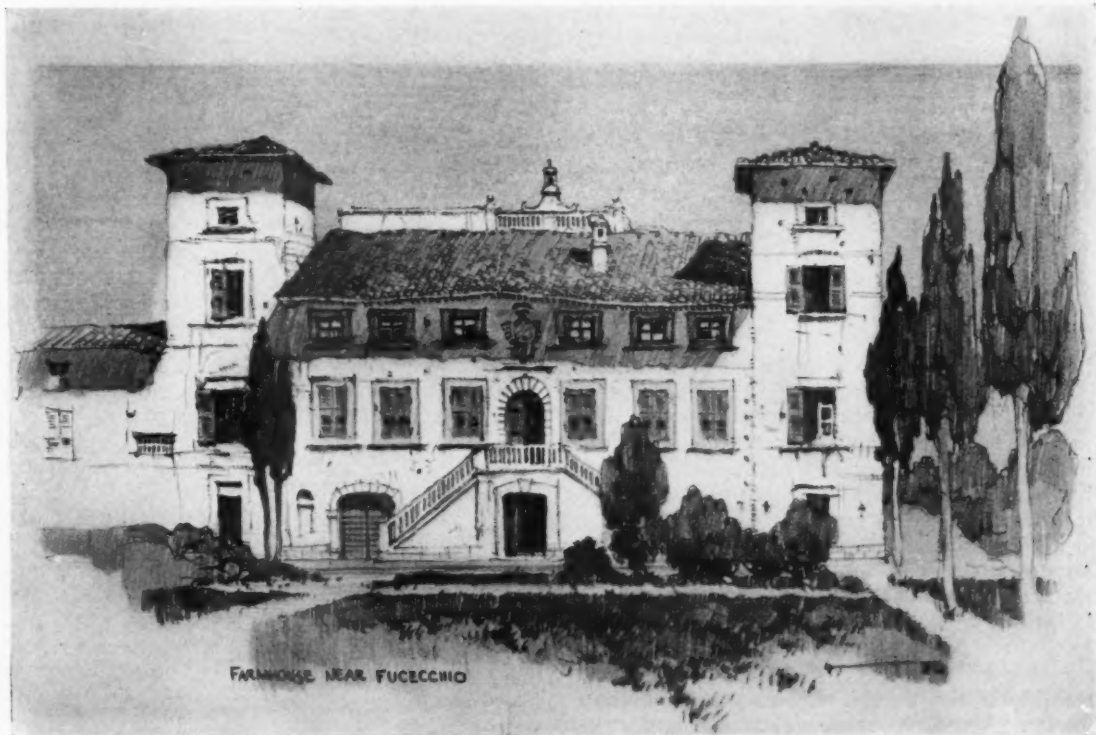
FOUNDED 1876

ITALIAN FARMHOUSES

PASSING NOTES AND SKETCHES, By SAMUEL CHAMBERLAIN

QUITE as characteristic of the Italian countryside as rolling hills and spiky cedars are the innumerable farmhouses which lend pastelly high-lights to the scene. So densely populated is the country that one is almost never out of sight of a habitation of some sort, even in the wilds of the mountains. The character of the farmhouses shifts, of course, with localities and climatic conditions. Some stand, sedate and serene, in protected valleys, revelling in ample window space, terraces and well kept gar-

dens. These are the ones which lead you to form an idyllic picture of the Italian farmer's life. By contrast, there are the meagre stone dwellings in the hills, whose occupants have to slave mightily to draw forth a living from the rocky soil. A different picture indeed. The houses are squat and substantial, huddling against a ledge of rock, a clump of cedars or any protection they can find against the savage winds which sweep the hills. A joyful element is rare in them. Their severe walls are pierced



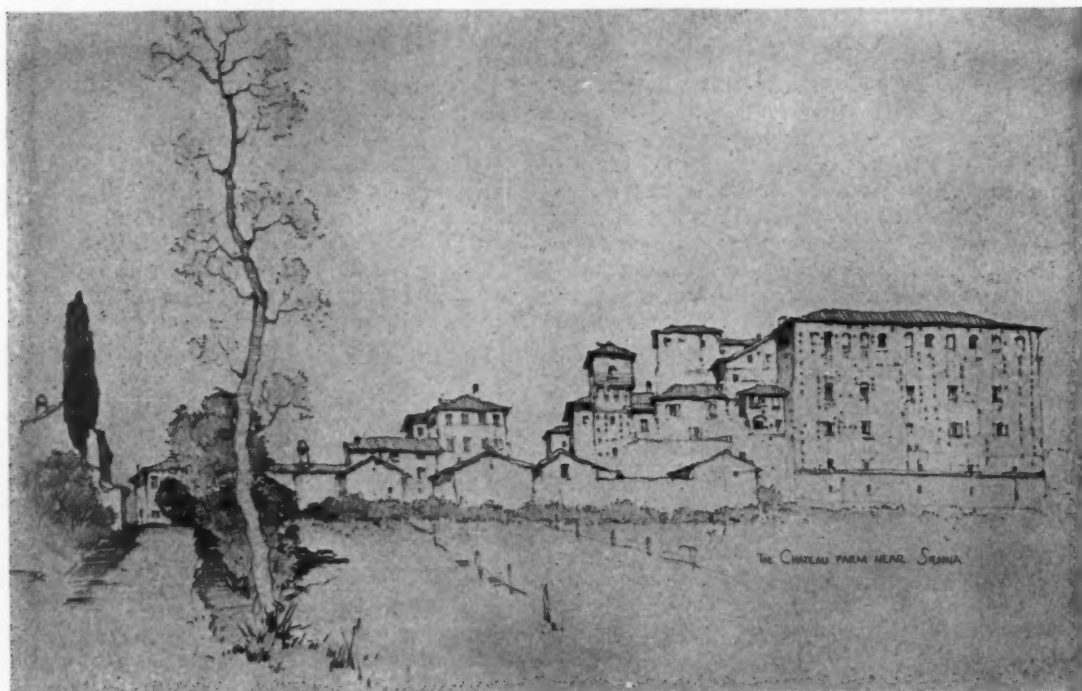
FARMHOUSE NEAR FUCECCHIO

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by only the smallest slits for windows. But the gay Italian temperament often comes to the rescue in such isolated spots, expressing itself in the form of brightly painted wall surfaces. One wonders, quite uselessly, if the home-loving enthusiasm of an Italian peasant can be gauged by the intensity of the paint used on his cottage walls; if the man with the bright orange barn is a more amiable character than his neighbor whose barn is a drab grey.

The examples of Italian farmhouses here illustrated were collected on a galloping cruise over the hills of Tuscany and Umbria, and cannot begin to do justice to the subject as a whole. Some of them, however, are typical of hundreds of their neigh-

them offers considerable retreat from the sun. Two quite formidable arches form a shelter which protects the main doorway, and above them is a rather crude gallery. There is a battered gateway to which has been joined a keeper's lodge. This now serves as a tool shed, and a ferocious hound fulfills admirably the role of custodian. The other house is a severe square edifice, surmounted by a superstructure which one pictures as a splendid billiard room. This particular partie is seen everywhere in Tuscany, and becomes a fixed part of the landscape. As one approaches Rome it takes on a faint touch of classicism. The mouldings are more carefully cut and the doorways assume some slight preten-



THE CHATEAU FARM NEAR SIENNA

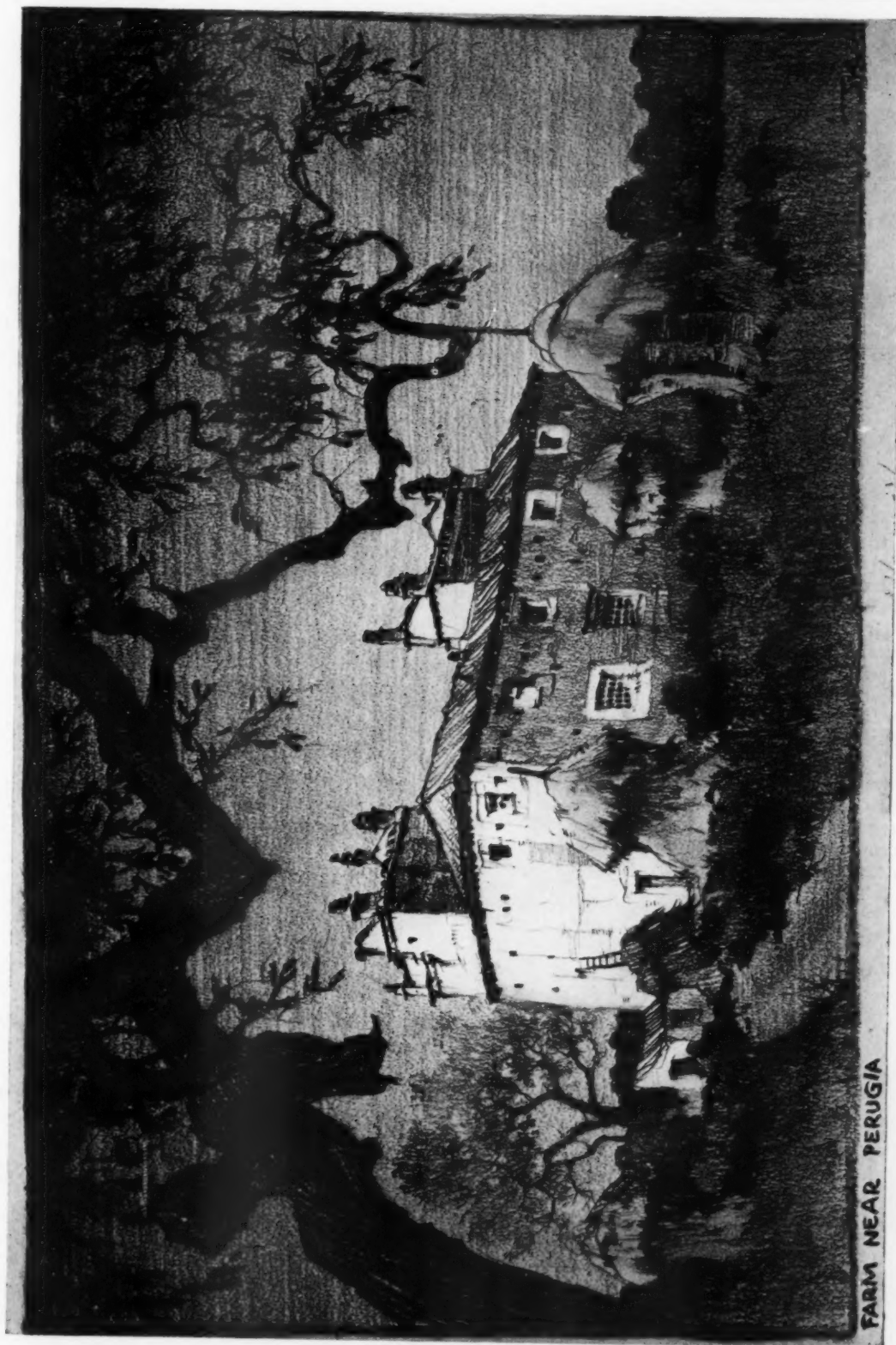
bors, and comment on them might be of interest.

The sunny structure near Fucecchio belongs on the border line between the very showy farmhouse and the less ostentatious Tuscan villa. The informality of the planting and the careless air of the hardy cultivators who live within are all that save it from the more pretentious classification. There is a Florentine distinction to the spacing of the windows and to the main doorway, over which reposes a rich coat of arms. The whole building has fallen into a casual and charming state of disrepair. Hinges are rusted; shutters are rotting; plaster is chipping off and the paint had become softly stained and faded. It looks like a very good "buy" for someone bent on acquiring something to restore.

The two farmhouses near Siena contain possible suggestions for small American homes. One of

sion. Happily enough, utilitarian needs still dictate their form and character.

The hills near San Gimignano proved to be a most fertile district for farmhouses. They all look irresistible from a distance, tempting one to hop madly from one hillside to another. At closer range one perceives that the magic effect is usually obtained with a flashing expanse of whitewashed wall surface, surmounted by a warm tile roof and punctuated by a few small black openings, all framed against the faded blue grey of olive trees and the ominous darks of cypresses. The little farm here chosen has a disregard for conventions which is most pleasant. There is a gay little gallery as well as a smattering of carefree detail. A grotesque touch is added by the sculptured haystacks which silhouette the landscape with their overbalanced forms.



FARM NEAR PERUGIA
FROM THE ORIGINAL SKETCH BY SAMUEL CHAMBERLAIN



CASCIA

Instead of pulling down the stack as fodder is needed, the farmer sensibly slices off a bit at a time, exactly as a butter-and-egg man zips off butter from a mound with a bit of wire.

How lacking in exclamation points would be the Italian scene if it had neither cypresses nor cedars! They give a final, blue-black accent to the paysage. The modest little house on the outskirts of Castelfiorentino would not be arresting were it not for its dense bodyguard of slender cedars. I thought this town had the longest name in Italy until I began to pore over the map and found others which make this sound like a curt monosyllable. It was in a pastry shop in Castelfiorentino that a shy little salesgirl, with a flashing smile and enormous brown eyes, asked us to listen to her one English sentence, acquired by correspondence: "I

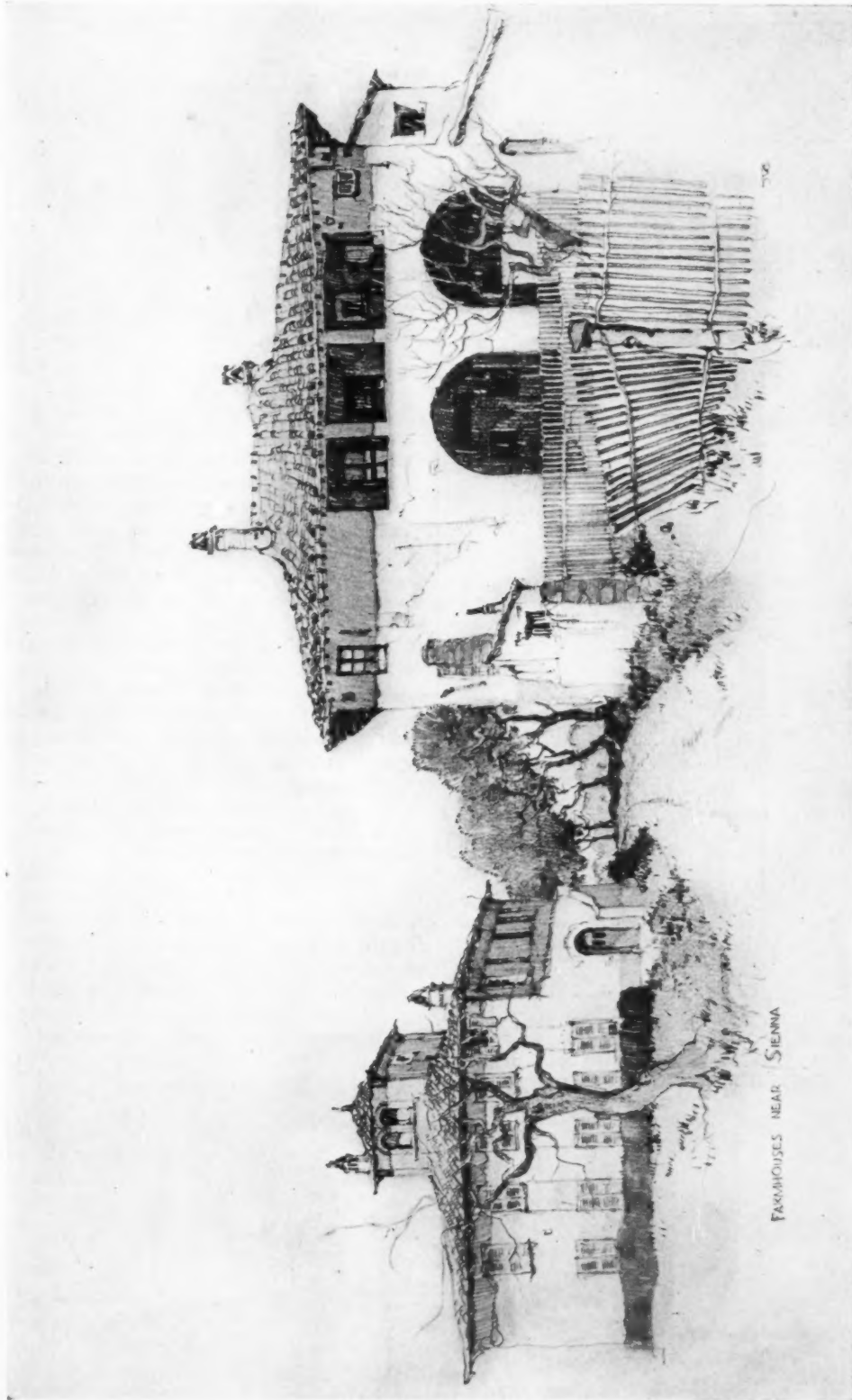
'ave sweetheart in New York at cento venti otto stritt."

One misses the combined use of many materials so prevalent in French farmhouses. There is no half timber work at all, of course, and only rarely does one find combinations of brick and stone. One such example roosts amid much prodigal vegetation in a luxuriant valley in the shadow of Perugia. This farm borders closely on the class of a small castello. It has two curious towers, dotted with chimneys. Stone, stucco and brick unite, under an aged patine, to give the walls of this old place a glorious texture.

The sprawling farm on the outskirts of Rimini is almost identical with hundreds of others which squat on the flat country along this shore of the Adriatic. Shelter from the merciless sun is afforded



OUTSKIRTS OF RIMINI



FARMHOUSES NEAR SIENNA
FROM THE ORIGINAL SKETCH BY SAMUEL CHAMBERLAIN



FARM IN THE HILLS NEAR SAN GIMIGNANO

by a commodious porch, part of which is crudely screened. These lifeless farmhouses would be lacking in atmosphere were it not for the indigo ribbon of the Adriatic, against which they are silhouetted, and the gaudy sails of fishing boats which creep behind them.

The high spot in farmhouse hunting, however, was reached one bright morning on the road from Siena to Orvieto. An imposing mass of golden masonry rose up in the distance, crowning a newly plowed hillside. The vastness of its feudal form indicated something more ambitious than a mere farm. It turned out to be an ancient castello, converted into a veritable village within walls. For some centuries it had been a fortified hospital; then it was converted into the estate of a merchant of Siena and now it serves honorably as the lordly farmhouse of a prosperous wine-grower. Visitors apparently are rare, for the entire course of activity was suspended when we ventured within the gates, and the assembled population turned to gape with open-mouthed curiosity. The proud and portly figure of the proprietor appeared in a doorway and we were received with as much pomp and cordiality as a visiting diplomat. A maid appeared with a bottle of old Marsala and we clinked glasses once. Our host led us to his office, a room of majestic proportions with fragments of frescos still on the walls. Another maid appeared with a fiasco of crystal clear white wine, deliciously cool. And we

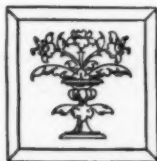
clinked again. Then he led us, followed at a respectful distance by the entire population, up ramps and down dark stairways, into enormous kitchens and vast baronial halls. Here, where prosperity was the keynote, it was instructive to note the spotless cleanliness of the place. The halls which once served as refectories are now used to store grain, and they are immaculate. Some idea of the excellent state of preservation of the farm is given by the close-up of the main gateway, which is indeed an impressive setting for the loads of hay and carts of wine casks which pass through its portal.

Finally the host escorted us to the cellars, where slits of sunlight illuminated the long vaulted caves. Dusty barrels covered most of the floor space and gigantic vats reared up in the half-darkness. Something was muttered to a farmhand, who went over to an aged vat and tapped three glasses of red wine, whose clear crimson we admired in a ray of sunlight. And again we clinked.

I should stop here, but there is another side to the picture. The two sketches of the chateau farm, if the truth must be known, at the price of enduring the sniffings of countless gamins at my elbow as well as a distressing number of flea bites. Hence a practical hint for pencil pushers in the Italian countryside: beware of scented hair tonic and woolen socks. The horse flies love them. The wag who asked me if I was going "itching in Italy" was not far from the truth.



CASTELFIORENTINO



EDITORIAL COMMENT



THE architects selected to plan and construct a new opera house in New York, one that will seat five thousand people, are confronted with an entirely different problem from that which the designers of the present opera house, built more than three decades ago, had to solve. At that time, production of any opera was limited not to exceed four acts, but since that day, when the so termed standard grand operas were staged year after year practically without change or innovation, there have appeared operas like *Pelleas and Melisande*, *Coq d'Or*, and *Rosignol*. To present these on the grand opera house stage, it was necessary to fit the production to the stage's limitations, and where certain scenes occurred outside the possibility of adaptation, so to curtail them as to lose great artistic possibilities. To illustrate just what is meant, and to demonstrate the difficulties producers labored under in their efforts to conform to the wishes of authors and composers, it may be pertinent to direct attention to the fourteen changes of scene in *Pelleas and Melisande*, that, one way or another, must be effected on a stage whose size was limited to the former four act opera. Staging *Coq d'Or* presents a good example of the utter lack of space at the present Metropolitan. Suitable sitting space has to be found at right and left for singers and chorus on a stage already filled with characters.

In *Rosignol*, for example, the voices really should come out of the orchestra pit, and this important feature must be omitted at the present Metropolitan Opera House, where the necessary orchestra has none too much space for its own efforts.

These things are set down at the outset that the reader may understand that there is no future in any opera house in New York, or in fact anywhere, when the mechanics of production are ignored and the cramped stage of the old house repeated in the new one.

Probably the best development in plan of the modern opera house is to be found in Germany, as in that country there is taken into consideration the fast changing necessities for presentation of a large number of sets, and also provide for such expansion in the future as will naturally come when composers give rein to their now hampered tendencies toward well studied scenic possibilities.

Modern tendencies in art in this country and a wider appreciation result in the crowding of our present opera houses with audiences representative of all grades of society. And it is perhaps correct to assume that among those who really go to grand opera for the opera itself, the large majority will

be found in that democratic element that crowd the galleries and not among an exclusive social class who make each performance an opportunity for display of clothes and jewels.

The "diamond horse shoe" gallery has seen its day. The tiers of boxes that now occupy the most desirable location in the house will undoubtedly be restricted in the new house to a single row of loges for owners.

* * *

The most important things to be considered in the development of a plan for the proposed new opera house are—(1) absolutely unobstructed vision from every part of the house; (2) correct acoustic conditions, and (3) what is of large importance, a plan that will provide for future development of opera.

Considering these essentials in the order of their stating, it undoubtedly will be a very great error to plan an auditorium that would fail to insure absolutely unobstructed vision from every seat.

In the past many attended grand opera, not because of appreciation of music and good stage setting, but, as was, and still is the case of the Horse Show, to view society or parade and sit close by with that exclusive social element that the late Ward McAllister designated as "the four hundred."

European opera houses, built on old or traditional principles, have a maximum capacity of 2,500. The Metropolitan in New York can seat 4,000, and of this number at least one-fourth find themselves in seats with interrupted view of the stage and an acoustical condition that is very bad.

If we should mistakenly follow out the general plan of the present opera house and build for a capacity of five thousand, at least two thousand seats would be found with these same conditions of poor line of vision and faulty acoustics.

Today "the play's the thing." Every effort must center about the business of the stage. The seating must conform to these new insisitencies; the stage must be of a size that will admit of the finest production of modern opera.

It is contended by a certain class that "opera is dead." It is, if by opera we mean the submersion of the business on the stage and the exaltation, as in the past, of the social exhibition in the "diamond horse shoe." Opera in the future will only be full of life when a genius is born to impart new form to it. Just at this moment that genius has not arisen, but it is absolutely certain that in the progressive history of grand opera, there will appear a mind so brilliant, so fertile in imagination, that the

production of his work will require every skill of stagecraft, of scenic art and a stage ample in size to carry to brilliant conclusion the new-born opera. And when born, it must be nurtured, kept alive to serve as inspiration for the genius who will undoubtedly spring from the soil of this country. When that is achieved, then we shall have an American grand opera that, like our present art of architecture, will set the standards for all the world.

It is, therefore, essential to our future success that these things should be in the forefront in every one of the many things that surround the planning of a modern opera house. When we have reached this essential condition, the old operas will take on a new form. The limitations set up by poor sight lines, poor acoustics and a cramped stage having been overcome, the standard operas may be produced, as we today produce Shakespearian plays, in a manner so greatly improved as to create new interest and revive among all the people a well sustained appreciation of the art of grand opera.

* * *

All over the world, opera companies are trying to create new and interesting *mis-en-scene* viewpoints to the old classical operas, but the old opera houses afford very little opportunities or facilities for any really radical departure from old methods of production.

That type of habitué of thirty years ago, who sat with closed eyes throughout a performance, so that the action on the stage would not prevent his sensuous enjoyment of the music, may now be relegated to chamber concert halls, where music is the only lure. But we must not lose sight of the decidedly important part of a modern presentation where all the gorgeous pageantry, as in *Aida*, *Lohengrin* and *La Vestale*, produces a harmony of color, a bewildering grouping and an artistic ensemble that in connection with the music of the opera, carries audiences off their feet and awakens the somnolent one who finds it difficult under such conditions to get others to agree to his insistence that in grand opera it is only the music that matters.

* * *

We may find that it is an error to build opera houses too large, as we have arrived at the conclusion, supported by the best architectural authority, that schools are being built too large to serve the best purposes for which they are erected.

European opera houses, built on the best principles, have a maximum capacity of 2,500. In all serious and authoritative works on theatre construction, statistics given for seating, with tiers arranged as in the conventional opera house, advise architects not to go beyond a capacity of 2,500 (Gaudet, *Elements and Theory of Architecture*), while the

best French authorities advise not to go beyond 1,800. But the old opera houses in Europe present nothing on which to base the problem of the new opera house in New York. European opera houses were built on aristocratic principles, and for that reason have limited capacity. The Paris Opera House has but 2,156 seats; the Royal Opera in Vienna has 2,260 seats; Dresden, 2,000; Munich, 1,028; Berlin, 1,900; Covent Garden in London, 2,000. These statistics are all based undoubtedly on an accurately computed grand opera attendance. The conditions in this country as to attendance are vastly different, and in a city as large as New York, an attendance of 5,000 is known to be nearer the average than excess.

In considering seating arrangements, we find that the best is that incorporated by Kaufmann and Poelzig in their later theatres built in Germany.

The rows of seats as at present arranged on practically straight lines should curve around the form of the orchestra pit, and come as near as possible to a semicircle to avoid the stiffness as emphasized in the Bayreuth amphitheatre. Seats arranged in soft curved lines permit the audience to see each other and feel the personal reaction of the performance.

The same feature as to curved lines should also be carried out in the loges. But under no condition should this line of loges take the form of the so-called "horse shoe," or lyre form, that results in a considerable number of boxes right and left with poor sight lines and the consequent inability to receive the full benefit of the performance.

Today the great artists of opera are dramatically trained and the chorus and masses are also trained to express dramatic action, and the entire stage is used in the performance.

* * *

As to the architecture of the proposed new opera house, we shall need a structure that will express on its exterior the same beauty and refinement that will characterize the performances on the stage, or, in short, it should at once and unmistakably proclaim to the beholder that it is a building for opera in its highest development; and in its interior designs that unobtrusive dignity and character that will impress but not loudly compete with the settings on the stage.

Whatever plans are presented should receive the closest study of men of architectural and technical training who could be called in council to judge their merits, their adaptability to the later and newer operas with many sets, or scenes, and, what seems vitally essential, that the plans provide for a building that would be so elastic as to make it, with few changes, meet the variety of requirements that will inevitably be presented within a year's operation.

THE NEW AMERICAN ARCHITECTURE

WITH PARTICULAR REFERENCE TO THE OHIO BELL TELEPHONE COMPANY'S BUILDING,
CLEVELAND, OHIO

By BENJ. S. HUBBELL, JR., A. I. A.

Of the Firm of The Hubbell & Benes Company, Architects

"The end crowns all
And that old common arbitrator Time
Will one day end it."

—SHAKESPEARE.

AS the course of nations has slowly rolled itself Westward through the centuries one nation after another has risen to the pinnacle of supremacy and pushed back the one who has previously held the foremost position and after holding the position for a time has, in turn, been superseded by another.

Nations have achieved this foremost rank by either armed conquest or commercial daring and enterprise—usually the great nations have achieved their position by a combination of both. These military and commercial conquests have formed the

basis of the new age which has been based upon the fundamentals which have won predominance for the victor nation. These have, in turn, given rise to a literature and art which form instruments for the people to express themselves. These also create a lasting record of the thought and actions of the nation.

So it is with America today. The United States is not a military nation in the true sense of the word. We have never sought to expand our territory or subject our competitors by force of arms. We have followed the path of fair dealing to all and have honored the rights of others at all times. However, when this country has been treated with disrespect by other nations and its rights violated so as to cause the people to become incensed, then



DIRECTORS' ROOM

and only then, does the United States unleash its tremendous war energies, and it is then we form the greatest fighting unit ever known. If you doubt our military power read General Liggetts' "A. E. F." Without question the United States is the greatest and strongest commercial power that the world has ever known. And so, we too are expressing ourselves in both literature and art and also in that greatest of the arts—architecture.

American architecture today surpasses all other known architecture in quantity, magnitude, diversity and completeness. It is interesting to note here, that our outstanding examples of architecture of

press itself in an entirely different feeling which I believe is gradually evolving into a great "American" style surpassing anything hitherto known. Its possibilities are legion! We wonder what the last leaves in the book of American Architecture (pray that there may be no last) may be, when the first start out with such gems as have been produced of late throughout all parts of the United States.

The Ohio Bell Telephone Company's Cleveland new main office building is one of the number of commercial buildings erected in our country in the last decade which are of the new order. The predominating note of this entire structure is one of



MAIN FOYER

today are different from most previous work of other nations in that it stands on its own feet financially and generally is a source of revenue. What architectural monuments of the past have there been that have been an investment? Not many. Incidentally by the foregoing we cannot be criticized for having no edifices of a monumental nature, witness the Lincoln Memorial, Nebraska State Capitol, Morgan Library and many others from which no financial return is expected—only the general good. Until the twentieth century, American architects were content to adapt historical styles to their needs, but as even the good King Arthur said, "The old order changeth, and giveth way to the new."

Today American architecture is seeking to ex-

service and simplicity. The building, as its name implies, is the headquarters of that branch of the great American public service, utility—The A. T. & T. Co.—which serves the State of Ohio. The structure is a symbol of the efforts and ideals of that Company in this district.

The purpose of the building is dual, in that it houses the central automatic telephone equipment (the largest single order of equipment ever placed) and the various executive departments of the Company.

The architecture is very fittingly the new American Perpendicular—some call it American Perpendicular Gothic. A good name. Regardless of the name, thank goodness, American architects are now

doing their own thinking and are not clothing their buildings in the building togas of Rome and Athens. There is no historical precedent for the Ohio Bell Telephone Building.

Primary consideration has been given at all times to the requirements of the Telephone Company, as it has been the ideal of the Telephone Company and their architects to make the building livable

commercial office has been treated with Roman travertine and marble with a painted beamed ceiling which is extremely simple and gives a pleasing dignity and charm to all on entering. The commercial office has been handled in a similar manner so that these two harmonize perfectly. The executive offices on the 20th floor are executed in walnut with panelled wainscot and ornamental plaster walls and



COMMERCIAL OFFICE

and nothing practical has been sacrificed for architectural effect.

The setbacks are all placed at the locations necessitated by the telephone equipment. Even the varying story heights which were necessitated by the equipment at various stages have been handled in a way to make the building count as a whole and leave no unpleasant effect from this irregularity.

The entrance foyer leading to the elevators and

ceilings—these rooms are pleasing yet simple and practical. Throughout the remainder of the building the space is treated simply as a fine workshop and home for the employees and equipment. Everything is workable and livable.

Recently, the Architectural Jury of *Nation's Business* selected the Ohio Bell Telephone Building as one of the fifteen best commercial buildings in the United States.

THE STRUCTURE OF THE OHIO BELL TELEPHONE COMPANY'S BUILDING, CLEVELAND, OHIO

By E. vB. PERRY, *Structural Engineer, The Hubbell & Benes Company*

AS an enduring monument to the progress and initiative of Cleveland and as an expression of the policy of The Ohio Bell Telephone Company, it was essential that this building be sturdy yet economical in design.

The foundation is essentially a huge reinforced concrete box carried down fifty-three feet below the street level. This fine piece of engineering was designed and supervised by Moran, Maurice and Proctor, of New York. The depth at which hard clay was found and the requirements of The Telephone Company, that practically all mechanical equipment other than that directly associated with the telephone service be below the first floor, necessitated carrying the foundation through some twenty-five feet of water bearing soil. The lateral pressure was carried by an elaborate system of timber cross-lot bracing and later transferred to the steel frame.

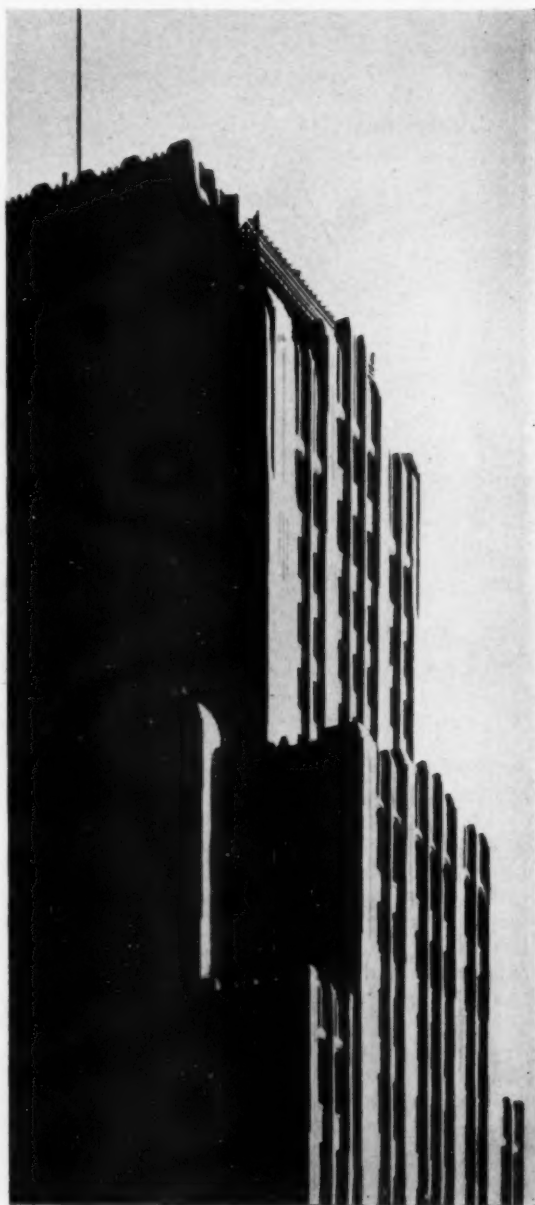
The structural frame is of standard rolled and built-up members, the design of which was governed by several special factors. Because of the open floor space required and the frequency with which the spandrel walls are pierced for openings, any system of diagonal wind bracing was impossible. The frame is designed to resist a wind pressure of twenty pounds per square foot—the moment being taken in bracketed connections at the columns. These moments were largely due to the unusual height from floor to floor. The story height on the average equipment floor is 14' 9". In as far as practicable, these brackets were standardized in order to reduce the fabricating costs, but due to wide variations of load conditions the number of different types is large.

The deep reveal which is essential to this type of architecture, requires that the stone facing be supported well clear of a large percentage of the spandrel beam length and involves an intricate system of cantilevered members. While these pier supports do not involve any particular problem in structural theory, they do mean a lot of work to both designer and fabricator and their proper treatment is largely dependent on a sound knowledge of shop and field practice.

The footings of adjacent buildings are shallow and add an immense surcharge to the normal earth pressure on the foundation walls. To prevent settlement it was essential in transferring the load from the timber cross-lot bracing to the permanent steel framing that lateral deflection of the subgrade walls be overcome. This was accomplished by means of heavy horizontal girders at the basement floor levels. These girders in turn were analyzed and their deflection overcome by means of wedging be-

tween the steel and the walls until the timber bracing was relieved.

The floor system is in general the pan type of reinforced concrete ribs having a span of about twenty feet. Extra heavy steel forms were used which resulted in an unusually neat job. Where



DETAIL OF UPPER STORIES

large concentrations occur or the floor was subject to lateral thrust, the rib construction is replaced by intermediate beams and solid slabs.

Elevator beams are carried on supporting girders which act as slings independent of the adjacent floor systems. This has the effect of minimizing vibration in the main frame.

High and low zone water tanks are carried on plate girders inside of a secondary tank of rein-



BRONZE ELEVATOR DOORS

forced concrete; thus if the steel tank overflows, there is a second tank to protect the equipment.

The total amount of structural steel was approximately 7,665 tons.

The structure as a whole may be said to have been designed with the economies of standard American shop methods constantly in mind, and in so far as the requirement of the equipment permits, unusual construction has been avoided.

PARIS SEEKS A PLAN TO IMPROVE SUBURBS

THAT the rapid growth of the suburbs of Paris calls for a more comprehensive city plan than any yet devised by the authorities, if the future of the capital is not to be compromised, was the theme of

an address delivered recently by M. Chardon before a meeting of the Academy of Moral Science.

"We allow factories to be built without regard to the rational direction of the future of the city," he said. "Real estate men are cutting up the suburbs and everywhere an enormous population is being thrown together under conditions that condemn it to an inferior mode of living that may lead to irritation and revolt."

M. Chardon suggested that this overflow of the Parisian population should be directed by the provision of two suburban cities, one for workers and one for the well-to-do. He thought the trade unions and the associations of employers might undertake together to supply the first, and that the "technical assistance of our American friends" should be had for the "ville de luxe."

30

SLAB-HOUSE VILLAGE FOUND

THE Smithsonian Institution at Washington, D. C., announces that one of its archaeologists, Frank H. H. Roberts, Jr., of the Bureau of American Ethnology, has uncovered in Chaco Canyon, N. M., a slab-house village. It consists of a group of pit dwellings sunk two or three feet in the ground and lined with stone slabs, surrounding a larger central excavation, which was probably the ceremonial chamber or council house of the village.

This achievement is described by the Smithsonian as a definite step in clearing up one of the intriguing mysteries of prehistoric America—namely, the evolution of the cliff house. Hitherto only single slab houses have been known to archaeologists. The discovery of a group of them surrounding a ceremonial chamber so closely resembling the Kiva of the Cliff Dwellers seems to prove that they were direct ancestors of the cliff houses.

The prehistoric Indian culture of the Southwest stood alone in North America. Not only was its architecture different from that of the other tribes, but the physical features of the Pueblo Indians, the character of their pottery, weapons and clothing were distinct. But in this Southwestern area itself there seem to have been four distinct stages of culture. First came the basket makers, who wove baskets and textiles, but made no pottery. The post-basket makers followed; they made pottery and built the slab houses. The pre-Puebloans preceded the highly cultured Pueblo peoples with their monumental dwellings.

The widest gap in the interrelationships of these four cultures came between the slab-house builders and the pre-Puebloans. This discovery of the slab-house village tends to lessen this gap and so is considered to constitute an important contribution to American archaeology.

Investigations are being extended to Montezuma Creek in Southern Utah in the hope of finding a similar village in another area occupied by the slab-house dwellers.



S C A L E

FIRST FLOOR PLAN

THE HUBBELL & BENES COMPANY, ARCHITECTS



OHIO BELL TELEPHONE COMPANY'S BUILDING, CLEVELAND, OHIO

THE HUBBELL & BENES COMPANY, ARCHITECTS

(From the architects' rendering)

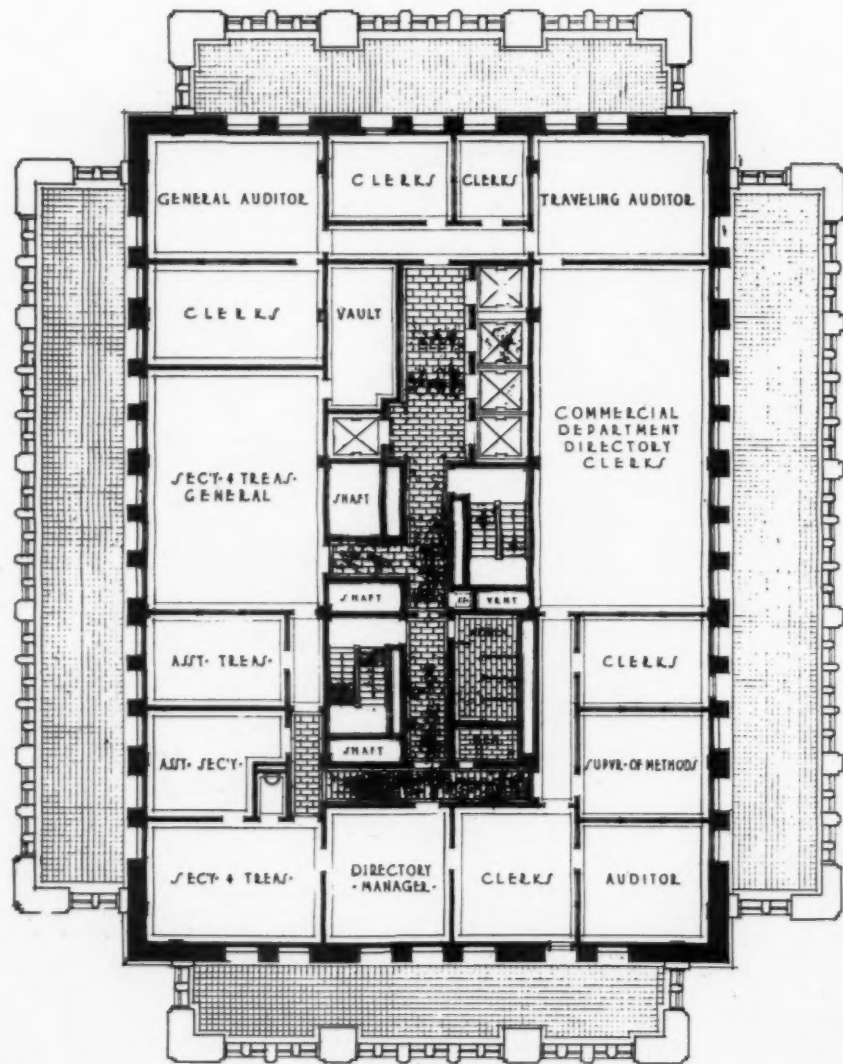


VIEW FROM NORTHWEST

OHIO BELL TELEPHONE COMPANY'S BUILDING, CLEVELAND, OHIO

THE HUBBELL & BENES COMPANY, ARCHITECTS

(See plan on back)



SIXTEENTH STORY PLAN

SCALE 0 10 20 30 40 50 FT

• MAIN OFFICE BUILDING •
 • THE OHIO BELL TELEPHONE CO. •
 CLEVELAND, OHIO
 • THE HUBBELL & DENES CO. ARCHTS. •

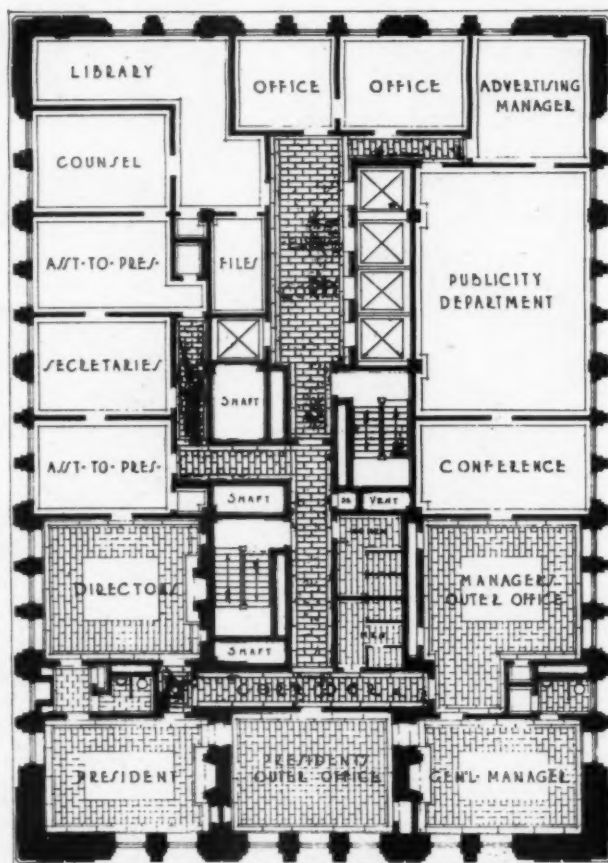


DETAIL OF LOWER STORIES

OHIO BELL TELEPHONE COMPANY'S BUILDING, CLEVELAND, OHIO

THE HUBBELL & BENES COMPANY, ARCHITECTS

(See plan on back)



TWENTIETH STORY PLAN

SCALE
0 10 20 30 40 50 60 70 80 90 100 FT.

• MAIN OFFICE BUILDING •
• THE OHIO BELL TELEPHONE CO. •
• CLEVELAND, OHIO •
• THE HUBBELL & DENES CO. ARCHTS. •
• CLEVELAND, OHIO •
J. J. HUBBELL - 1927



ELEVATOR LOBBY

OHIO BELL TELEPHONE COMPANY'S BUILDING, CLEVELAND, OHIO

THE HUBBELL & BENES COMPANY, ARCHITECTS





CEILING AND LIGHTING FIXTURES IN FOYER
OHIO BELL TELEPHONE COMPANY'S BUILDING, CLEVELAND, OHIO
THE HUBBELL & BENES COMPANY, ARCHITECTS



MANTEL DETAIL, VICE-PRESIDENT'S OFFICE
OHIO BELL TELEPHONE COMPANY'S BUILDING, CLEVELAND, OHIO
THE HUBBELL & BENES COMPANY, ARCHITECTS



MANTEL DETAIL, DIRECTORS' ROOM
OHIO BELL TELEPHONE COMPANY'S BUILDING, CLEVELAND, OHIO
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MANTEL DETAIL, PRESIDENT'S OFFICE
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THE MECHANICAL EQUIPMENT OF THE OHIO BELL TELEPHONE BUILDING

By W. M. KENNEDY

Mechanical Engineer, The Hubbell & Benes Company

IN the design of any building, there are at least two requirements that should be carefully considered, and the success of that building to a very large degree depends upon how carefully the problems presented by these two requirements have been analyzed and solved. First, a successful building must be pleasing to the eye, both on the exterior and interior. This is the problem for the designer. Second, no matter how successful a building is from the standpoint of design, if it fails to provide properly for the physical comfort of those who occupy it, that building is a failure.

In a building of the height above and the depth below the sidewalk of the Ohio Bell Telephone Building, the problem of providing the different services

such as heat, water, waste lines, light, transportation, etc., to the different portions of the building, becomes very complicated, and it becomes necessary to install special machinery and equipment that are peculiar to a building of this character.

The steam used for all purposes in this building is furnished by The Cleveland Electric Illuminating Company. A 16" connection is made to the service main in Huron Road. Pressure reduction is accomplished just inside of the building in basement "A" by means of four 8" pressure reducing



NIGHT ILLUMINATION OF THE OHIO BELL TELEPHONE
BUILDING

valves which automatically maintain between certain predetermined limits the steam pressure in the building. Recording gauges showing these pressures are located in the engineer's office in basement "B." From the pressure reducing valves, the 16" steam main is carried full size to the fifteenth story mezzanine pipe space, extending over the whole area of the building. Here it is connected to a 10" main which makes a circuit of the building near the exterior wall and supplies valved steam risers, some of which are up feed, supplying heat to the upper portion of the building above this point, and the remainder supplying heat down to and including the first story.

The 16" steam riser throughout its entire length, together with the 10" circuit main, are electrically welded, this being the first building in Cleveland in which electric welded piping was installed. The 16" steam riser is supported at its base by means of a hanger welded to the pipe and resting on the steel framework. The upward expansion when steam is turned on is about three and one-half inches. The condensation from the radiators and steam piping is carried to basement "C" and from there pumped by means of a vacuum pump up to basement "A," from which it flows

by gravity through The Cleveland Electric Illuminating Company's recording meters into the street sewer.

The radiators throughout the building are controlled by the largest system of dual temperature control ever installed. Each radiator supply valve in any one of three separate zones into which the building is divided, can be set to shut off at a certain predetermined temperature for that zone. This control can be accomplished manually, or auto-



UNDERPINNING THE CAXTON BUILDING ADJACENT TO THE OHIO BELL TELEPHONE BUILDING

matically by means of clocks from the temperature control board located in the engineer's office in basement "B." By this method, it is possible automatically to change the temperature in certain portions of the building that are only occupied during the daytime to a lower temperature at night, the daytime temperature being automatically secured again by means of the clock-operated automatic attachment.

All of the building above the grade is heated by means of direct radiation. The three basement stories are heated and ventilated by means of air supplied by two fans, each having a capacity of about 18,000 cubic feet of air per minute. The exterior air is drawn in through oil type air filters, heated by means of cast iron heaters and distributed to the various rooms through metal ducts. The temperature of the air is automatically controlled by a compressed air operated temperature control system.

The main exhaust fans for the three basements, all toilets and the cafeteria in the thirteenth story are located in the twenty-third story, and have a total capacity of about 55,000 cubic feet of air per minute. In addition to these exhaust fans, there are two battery room exhaust fans, one in the second story and the other in the ninth story. The total capacity of these fans is about 5,000 cubic feet of air per minute. The exhaust ducts from all exhaust fans are carried to the top of the building and discharged above the roof by means of curved exhaust hoods, so designed as to prevent any back draft

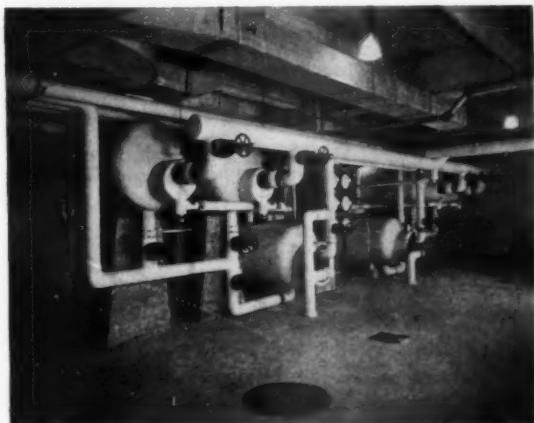
due to the wind velocity being greater than the fan velocity. All of the exhaust piping from battery rooms is a special asbestos coated metal designed especially for resisting acid fumes from batteries.

The plumbing installation in a structure of the height of The Ohio Bell Telephone Building presents many unusual problems. All of the rain water, sewage and waste water from that portion of the building above the grade is carried directly into the sewers in the street by gravity. All sewage and waste water from basements "A" and "B" discharges into two automatic pneumatic ejectors located in basement "C," each having a capacity of 50 gallons per minute. From these the combined sewage and waste water is forced by compressed air up into the main sewer. The waste water from basement "C" flows into a sump from which it is pumped by means of two vertical type centrifugal pumps each having a capacity of 300 gallons per minute. Drainage lines in connection with the reinforced concrete mat extending over the whole area of the building below the basement "C" floor, discharge into a small well from which the water is pumped by means of a hydraulic ejector into the sump previously mentioned.



ELEVATOR PENTHOUSE SHOWING ELEVATOR CONTROL APPARATUS

The water service comes into the building from three separate sources of supply, all being joined together into one main inside the building. Plumbing fixtures in the first story mezzanine and below are supplied with cold water from the city pressure. All of the remainder of the building is supplied with water from two house tanks. The 11,000 gallon high zone tank on the twenty-third floor supplies water for the fixtures down to and including the twelfth story. The 7,600 gallon low zone tank located on the fifteenth story mezzanine supplies the remainder of the fixtures down to and including the second story. The water level in each tank is automatically maintained by means of a float switch in the tank controlling two centrifugal pumps which pump from a 2,500 gallon surge tank located in basement "C."



HIGH AND LOW ZONE WATER HEATERS IN BASEMENT "C"

The hot water for all plumbing fixtures throughout the building, requiring hot water, is under tank pressure from the two house tanks and is circulated by gravity to points near the fixtures. Six multi-coil storage heaters, three for each house tank, automatically maintain the hot water at a predetermined temperature. In the winter time the water of condensation from the heating system is passed through one of the three heaters connected to each tank. This heater acts as a "booster" for the hot water before it is passed on to the other two heaters, which are heated with steam. Each heater is of sufficient size to heat 500 gallons of water per hour from 40° to 180°.

Fire protection is secured by means of an underwriters standard fire pump with a capacity of 500 gallons per minute, located in basement "C" and connected to two 6" stand pipes. These extend up through the building with fire hose cabinet connections on each floor. Each cabinet contains a 1½" fire hose for emergency purposes and a 2½" valve for use by the City Fire Department. Each stand

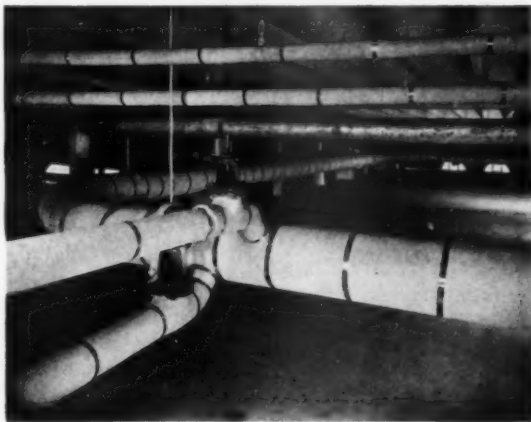


HOUSE PUMPS AND SURGE TANK IN BASEMENT "C"

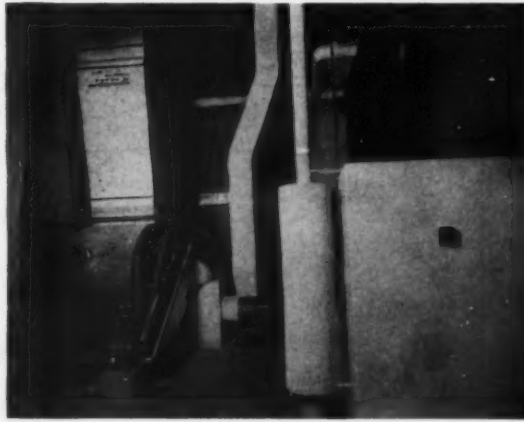
pipe is connected at the top to the high zone house tank and at its base to a double steamer connection located on the north side of building. Each of these stand pipes has connections above the roof at the sixteenth and twenty-second floors.

Refrigeration is accomplished by means of one 12-ton and one 6-ton carbon dioxide compressor located in basement "C." The cold brine from the brine tank is circulated by means of three centrifugal pumps to the refrigerators and cold pans in the thirteenth story and basement cafeterias, and to the drinking water cooler in basement "C." The drinking water is first filtered, then passed through the drinking water cooler, then circulated by means of two centrifugal pumps to the various drinking fountains located throughout the building.

Compressed air for operating the elevator doors, the two pneumatic sewage ejectors and the dual temperature control system is furnished by two air compressors, each having a capacity of compressing 100 cubic feet of air to 100 pounds pressure. The compressed air tank is located in basement "C."



TEN INCH STEAM DISTRIBUTION MAIN WHICH CIRCLES ENTIRE BUILDING IN THE FIFTEENTH FLOOR MEZZANINE



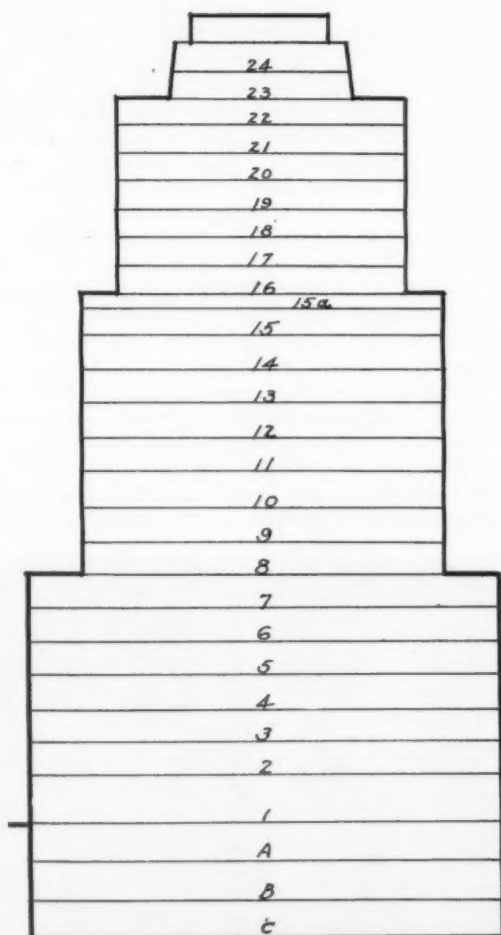
EXHAUST FANS IN 23RD FLOOR. THE 11,000 GALLON HIGH ZONE HOUSE TANK IS AT THE RIGHT

Two large vacuum machines in basement "C" maintain a vacuum in a 34" pipe extending to the ceiling of the twelfth story. Connections are taken off of this pipe at different points for the pneumatic conveying systems for the toll charge tickets and also for the commercial department. Liquid soap at the lavatories is supplied through soap valves connected to piping from concealed soap tanks. All hot water pipe is of copper with brass fittings. Galvanized mild steel piping is used for rain water lines, and all piping for cold water, waste, soil pipe and back vents is of galvanized wrought iron.

Most of the mechanical equipment, such as pumps, air compressors and hot water heaters, is installed in duplicate and so connected that in case one unit is not capable of handling the load, the other will automatically come into action.

Uninterrupted electric service is absolutely neces-

sary in a building which serves the public twenty-four hours each day. With this end in view the service to the building from The Cleveland Electric Illuminating Company's main is divided into two feeders, each fed from a different sub-station. With the network of high tension lines covering the State of Ohio, which can be tapped in case there is a complete failure of the city service, a complete failure in the electric service to this building is remote. A 48 volt emergency lighting service supplied from the storage battery room in the second story is provided for certain outlets in the telephone equipment and toll operating rooms. This service can be automatically drawn upon in the event of a complete failure of the outside electric service. The regular and emergency feeders for both light and power have separate transformer sets located in a large transformer vault. Here the electric circuit is



- ELEVATOR MACHINERY AND MOTOR GENERATORS
- VENTILATING FANS AND HIGH ZONE WATER TANK
- BUILDING ENGINEER
- BUILDING AND EQUIPMENT ENGINEER
- EXECUTIVE OFFICES
- CHIEF ENGINEER
- GENERAL COMMERCIAL SUPERINTENDENT
- GENERAL PLANT SUPERINTENDENT
- SECRETARY, TREASURER, CENTRAL DIRECTORY
- PIPE LOFT
- VICE-PRESIDENT AND GENERAL AUDITOR
- GENERAL SUPERINTENDENT OF TRAFFIC
- MACHINE SWITCHING SCHOOL, OPERATORS' CAFETERIA
- TOLL OPERATING ROOM (OHIO BELL)
- TOLL OPERATING ROOM (A. T. & T. CO.)
- TOLL TERMINAL ROOM (OHIO BELL AND A. T. & T. CO.)
- TELEGRAPH EQUIPMENT, POWER AND BATTERY ROOM
- DIVISION PAYMASTER AND AUXILIARY SERVICES
- COMMERCIAL SUPERINTENDENT, TRAFFIC SUPERINTENDENT
- PLANT SUPERINTENDENT, PLANT ACCOUNTANT
- DIRECTOR OF INSTRUCTION, AUDITOR RECEIPTS, MAIL ROOM
- MAIN AND CHERRY SWITCH ROOM
- MAIN AND CHERRY INCOMING AND FINAL FRAME ROOM
- POWER AND BATTERY ROOM, CENTRAL REPRODUCING BUREAU
- BUSINESS OFFICE
- EMPLOYEES' DINING ROOM
- BUILDING SUPERVISOR, STORAGE
- HOUSE SERVICE MACHINERY AND EQUIPMENT

DIAGRAMMATIC SECTION OF THE OHIO BELL TELEPHONE BUILDING SHOWING LOCATION OF DEPARTMENTS AND IMPORTANT MECHANICAL EQUIPMENT

transformed from the line voltage in the street to the voltages required for power and light within the building. The regular and emergency feeders are connected on the switchboard to interlocked circuit breakers so that in the event of a failure in one feeder the other will automatically be put in service. From the switchboard in basement "B," power and light feeders extend to all parts of the building. The lighting feeders are distributed in three cable shafts to the fifteenth story and in two shafts above this point. There are two to four cabinets on each floor containing the "cut-outs" for the various circuits required for the lighting outlets.

A network of power feeders radiates from the main switchboard to supply electric energy to the multitude of motors scattered throughout the building. The operation of the mechanical equipment necessary to provide for the needs and also to assist in carrying on the business of the 2,000 occupants of this building requires the expenditure of 900 horse power. To charge the storage batteries connected with the automatic switching equipment and the toll switchboards requires an additional 775 horse power.

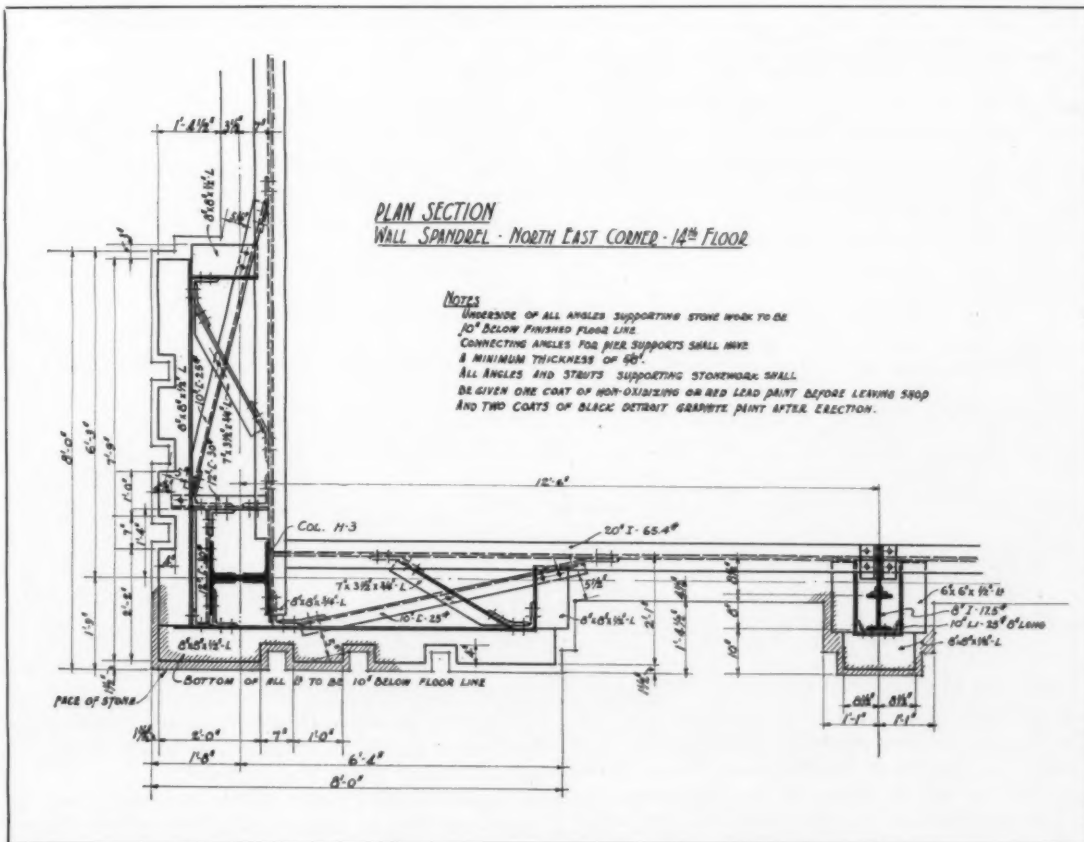
The telephone system throughout the building connecting with the different departments and to outside lines is very flexible. Two main riser shafts

are joined together at different floors, and from these risers a network of rectangular "underfloor" ducts branches out to supply the different telephone outlets. In this system it is possible to tap the "underfloor" duct at any point and install a telephone.

A very complete watchman's system is installed throughout the entire building with stations so arranged on each floor that when all stations are rung up, the entire floor has been visited. A recording tape in the engineer's office makes a complete record of the time each station was visited. There is a clock system with clocks in important rooms and a master clock in the engineer's office.

Flood lighting of the upper portion of the exterior of the structure is accomplished by batteries of 500 watt lights located back of the parapet wall on the four sides of the building at the sixteenth floor level, and also at the four corners at the thirteenth floor level.

The amount of business and the ease with which it can be conducted in a building of this kind, depend very largely upon the kind of transportation provided between the different parts of the building. The elevator installation in this building is divided into two groups. One group is located on the fifteenth story mezzanine floor for the three



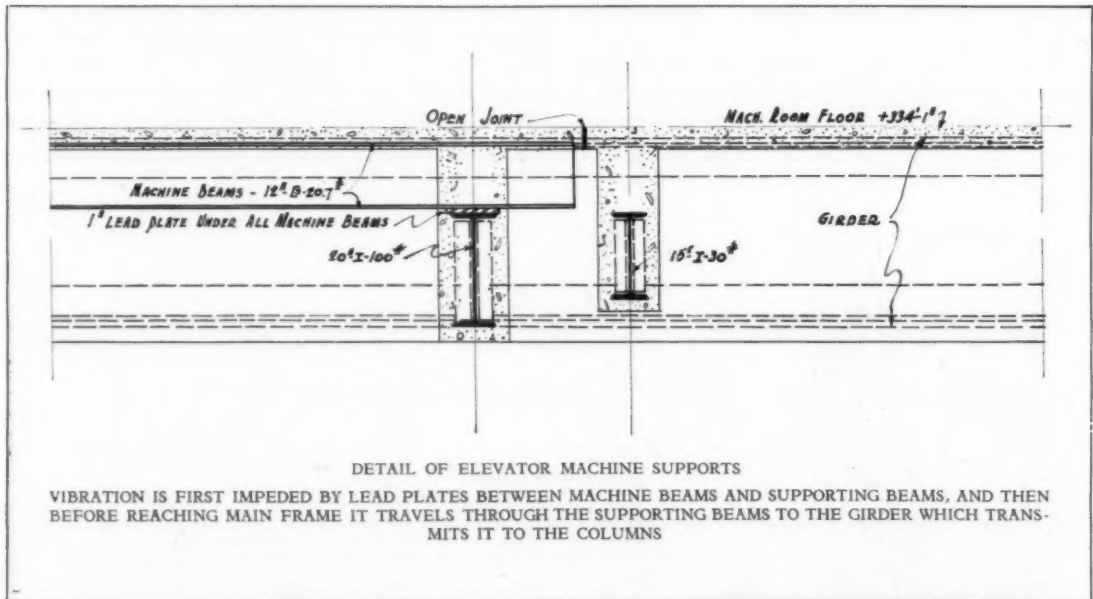
local elevators that run to the fourteenth floor. The other group is located on the twenty-third floor for the five express elevators running to the twenty-second floor. The current is changed to direct current by motor generating sets.

Upon entering the car the passenger announces the floor at which he wishes to stop and the elevator operator presses the button for that floor. The car will automatically stop at that floor and be brought to rest level with the floor by means of a micro-leveling device. The doors open automatically by means of compressed air. By pressing the "up" or "down" button on any floor, the car automatically stops at that floor. The signal board in the elevator lobby on the first floor shows in a graphic manner the travel of each car throughout the entire trip. It also shows the location of each passenger who has signalled a car and direction he wishes to go.

The elevator dispatcher on the first floor has complete control over the elevators at all times. By means of the control board he can change the speed

of elevators and change an express elevator into a local one. The signal board is a register of the position of each car and thus enables the dispatcher to regulate the movement of the cars according to the traffic conditions. A white signal light in the car is a starting signal for the elevator operator, and a green signal light indicates when the car should be at the top floor. The dispatcher can at any time bring any elevator to the first floor if the traffic conditions make it necessary, regardless of where that elevator may be, or in what direction it may be travelling. The elevator operator can transfer the stop signals registered in the car to the next car following and proceed without interruption.

Although hidden from view to the vast majority of those who daily work in this building and also to those who come there to transact business, the mechanical equipment, by the perfect operation of its separate units, is the one factor that makes it possible for those occupying this building to perform their daily tasks in comfort.



UNITED STATES GOVERNMENT MASTER SPECIFICATION FOR FIRE-CLAY BRICK

CIRCULAR NO. 299, 2nd Edition, entitled "United States Government Master Specification for Fire-Clay Brick," recently issued by the Department of Commerce, Bureau of Standards, contains revised specifications for six classes of fire-clay brick.

This specification was developed by conferences at the Bureau of Standards of official representatives

of the various interested Government departments and of manufacturers and users of fire-clay brick. General requirements are outlined, and the requirements for each of the six classes and the methods of testing are detailed. In addition, the specification contains a definition of each class based on the requirements of the service intended.

Copies of this circular may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., at 5 cents each.

THE OHIO BELL TELEPHONE BUILDING

THE SUPERINTENDENT'S PROBLEM

Extracts from Notes by JOHN M. SNEAD, Superintendent, The Hubbell & Benes Company

IN the erection of large buildings, it rarely happens that the architect can frequently visit the jobs and direct their operations, but must transmit his ideas to the builders through his superintendent. This places the superintendent in an exceedingly responsible position—that of representing the architect in the field, and it is, therefore, of paramount importance that the architect's representative should be in full sympathy with the ideals of his own office.

In the new Cleveland headquarters building of the Ohio Bell Telephone Company, housing equipment more costly than the structure itself, requirements had to be met that were of vital importance. Certain floors, on which the Telephone Company's equipment was to be installed, needed to be finished first, in order that this equipment might be ready for operation as soon as possible after the completion of the building. Workmen employed by the owner, direct, to place the telephone equipment on these floors had to be separated from the contractor's men then completing the other floors. The nature of the building demanded that the quality of the materials and workmanship be of the best, the costs kept at a minimum, the work progress at full speed without delays, and the owner's interests be fully protected.

To obtain these results, a definite program was formulated by the superintendent with the co-operation of the owner, contractors, and sub-contractors. Co-ordination of the work was felt to be a thing most desired, that confusion might be reduced to a minimum and all those working on the building strive to do their utmost to erect as fine

a structure as possible, suited to its requirements and withal a credit to the architecture of a great American city.

The architect's superintendent is the logical head of the erection forces in the field, and there he should assume full control. Divided authority leads to unnecessary friction and annoyance. In order that the requirements of the owner, architect, and contractors, as they affected this work, might be fully understood and the problems arising in the meeting of these needs might be settled in a most satisfactory and efficient manner, the superintendent presided at a weekly meeting where the owner, architect and contractors were represented and at a daily job meeting of the various contractors.

The plans and specifications should always be adhered to in order to assure results creditable to the profession. The superintendent will not change plans and specifications without the knowledge and consent of his office. He will at all times strive to give full expression in the building to the creative ideas of the designer.

One of the foremost problems confronting the architect's force in the field in large building operations is the attitude of labor. Surely, the architects of America, with their highly trained and creative minds, must give more time and study to the great questions in which labor is now involved. Labor, contractor, owner and architect must all be imbued with the spirit of service, beauty and art in building, if fine and lasting results are to be obtained. Profit, essential though it is, should be given secondary consideration: service, foremost.



MT. WASHINGTON ROADWAY BRIDGE, PITTSBURGH, PA.

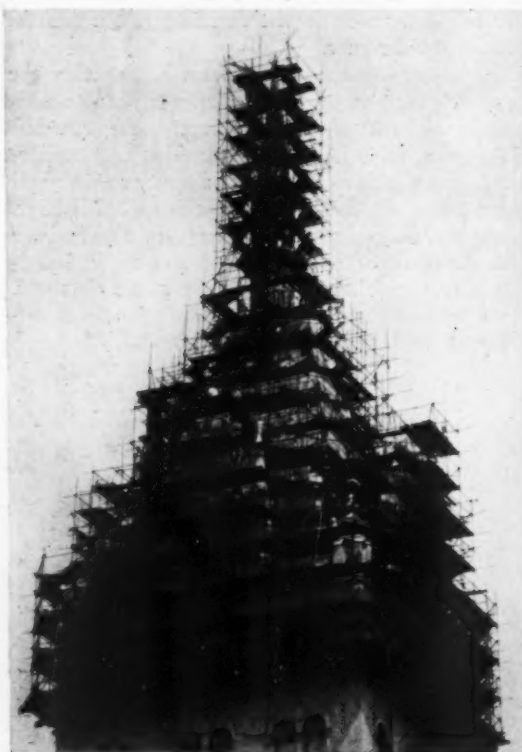
JOHN D. STEVENSON, ENGINEER—STANLEY L. ROUSH, ARCHITECT

A NEW TYPE OF FIRE RESISTING SCAFFOLDING

EXTRACTS from the report of the New York Board of Fire Underwriters on the scaffolding fire at the Sherry-Netherland Hotel, New York City, were published in the June 20th, 1927, issue of *THE AMERICAN ARCHITECT*. The Sherry-Netherland Hotel is a 38 story building facing the Plaza at Fifth Avenue and Fifty-Ninth Street. The exterior of the building was practically completed except for the upper portion of the tower, where a large quantity of wooden scaffolding surrounded the building. On April 13th, 1927, this scaffolding was, from some unknown cause, destroyed in a spectacular fire that not only jeopardized the lives of firemen and pedestrians and safety of buildings in the immediate vicinity, but also did considerable damage to the building on which it was erected. In completing the tower after the fire, the contractors used a patented scaffold composed of pipe supports and braces. This type of scaffold, successfully used abroad, has been developed to meet construction conditions in the United States. It is understood that the planking used with this new scaffolding method is fireproofed, and that the supporting members of the framework enable the

workmen to proceed with construction work under better light conditions than usual. It may be seen in the accompanying illustrations that very little light is cut off from the face of the building by the temporary structure. The tower surrounded by scaffolding, especially when viewed from a distance, gives one an impression of a picturesque medieval structure.

This scaffolding fire, uncontrolled and high above the street, demonstrated that combustible materials, even for temporary use, are a menace when used in locations that cannot be readily reached by fire fighting apparatus. It is of interest to note that in completing the tower the mistake of using combustible scaffolding was not repeated and that it was found that a remedy had already been provided in the form of steel scaffolding. The present instance is an interesting illustration of how modern invention keeps abreast of necessity and quickly meets emergencies. The high building presents many unusual erection problems not met with in buildings of lesser height that often require a radical change in method and procedure.



SHERRY-NETHERLAND HOTEL, NEW YORK CITY—SCHULTZE AND WEAVER, ARCHITECTS

AT LEFT: UPPER PORTION OF TOWER ENCLOSED IN FIRE RESISTING SCAFFOLDING. AT RIGHT: DETAIL OF SCAFFOLD AND PLATFORM

INTERIOR ARCHITECTURE

COUNTRY CLUB INTERIORS

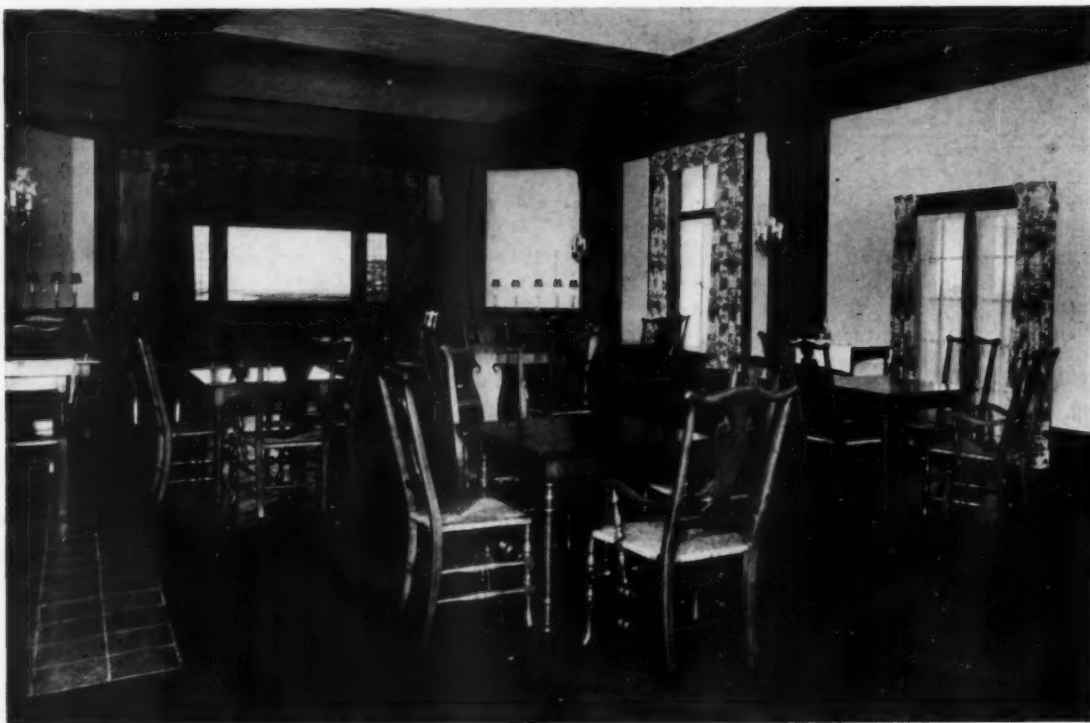
THE modern country club makes its greatest appeal by offering to its members opportunities to enjoy certain phases of life in the country which their limited living quarters will not allow. Although a club cannot boast of the privacy that is so peculiarly characteristic of a house, its membership is restricted, and it therefore cannot be considered in any sense a public institution. Its members are almost invariably the best of friends and might even be considered as belonging to one big family. In order to attain the desirable atmosphere of the private country house, many of its characteristics are featured in the design of the interior of

the modern country club. Comfort, informality and sociability should dominate throughout, in the environment of which its members may be freed from dignity and formality, allowing them to enjoy life to the fullest in surroundings that are as they would have been in their own country houses. The interior of the Timber Point Golf Club, exterior views and floor plans of which appear on pages 395 to 399 inclusive, has been designed on this principle. By its furnishings, as well as the architectural treatment of the interior, the club serves satisfactorily the purpose for which it is intended, suggesting throughout character of the private house.



TYPICAL BEDROOM IN THE TIMBER POINT GOLF CLUB, ISLIP, L. I., N. Y.

CHARLES M. HART, ARCHITECT



IN THE DINING ROOM AN AIR OF INFORMALITY AND SOCIABILITY IS OBSERVED



THE LOUNGE

TIMBER POINT GOLF CLUB, ISLIP, L. I., N. Y.—CHARLES M. HART, ARCHITECT



THE TAP ROOM IN WHICH THE CHARACTER OF MASCULINITY IS RETAINED
TIMBER POINT GOLF CLUB, ISLIP, L. I., N. Y.
CHARLES M. HART, ARCHITECT



ENTRANCE HALL, HOUSE OF ASA V. CALL, LOS ANGELES, CALIFORNIA

STANTON, REED AND HIBBARD, ARCHITECTS

THE DESIGN IS INTERESTING IN THAT IT IS SO LOGICALLY BASED ON THE STRUCTURE. THE DECORATIVE INTEREST THAT THE ROOM SO SURELY POSSESSES IS ARCHITECTURAL IN ITS ORIGIN

(Courtesy of The Decorative Furnisher, New York)

INFLUENCE OF FURNITURE ON ARCHITECTURAL DESIGN

THERE are some who, although appreciating the relationship of furniture to architecture, claim that in the majority of cases furniture is actually selected for the house after it is erected and can, therefore, have no influence on the plan and design of the interior. Those who take this stand are not architects in the true sense of the word. They may sell plans and houses, but they do not design houses for individuals—houses that meet requirements and needs of the owners and serve their individual purposes. There have frequently been illustrated in this department floor plans of houses showing the location of the more important pieces of furniture as suggested by the architect, to guide him in the preparation of working drawings. The location of furniture is an architectural problem, for it affects placing of doors and windows and is instrumental in determining the size and shape of rooms.

The reproduction of a photograph below shows the fireplace wall in a room in the architectural design of which perfect balance has been retained between the treatment of the wall on either side of the mantel by setting a circular headed window in a deep reveal on one side, and framing it in as the built-in cupboard is framed in on the other. By the choice of chairs on opposite sides of the fireplace—chairs similar in type, but different in design—this balance has been emphasized without repetition.

On the following page there are reproduced photographs of two rooms in a house designed by George R. Thompson, architect, which he claims was actually designed for and around the furniture, as the majority of pieces were selected before the house was designed. The upper photograph shows the bay in the dining room. It is interesting to note that the large corner cupboard has been placed so that in plan it balances the opposite side of the bay. Without the cupboard in place, the room would appear to lack symmetry. Although a case of this kind may be an everyday occurrence to many architects, it is referred to here as it so strikingly illustrates the necessity for the architect to consider the placing of furniture. The floor plan of this house, showing location of the corner cupboard, was shown in a recent issue of *THE AMERICAN ARCHITECT*.

The placing of furniture is governed by the principles of architectural composition—proportion, repetition and subordination. Correct relationship of furniture to architecture is attained by repeating in the design of the furniture the proportions that feature the architectural treatment of the wall space. This is clearly demonstrated in the living room, which is shown at the bottom of the following page. The davenport below the group of windows satisfactorily emphasizes the proportions of the architectural treatment.



FIREPLACE WALL IN LIBRARY, HOUSE OF CHARLES F. GLORE, LAKE FOREST, ILL.—RUSSELL S. WALCOTT, ARCHITECT

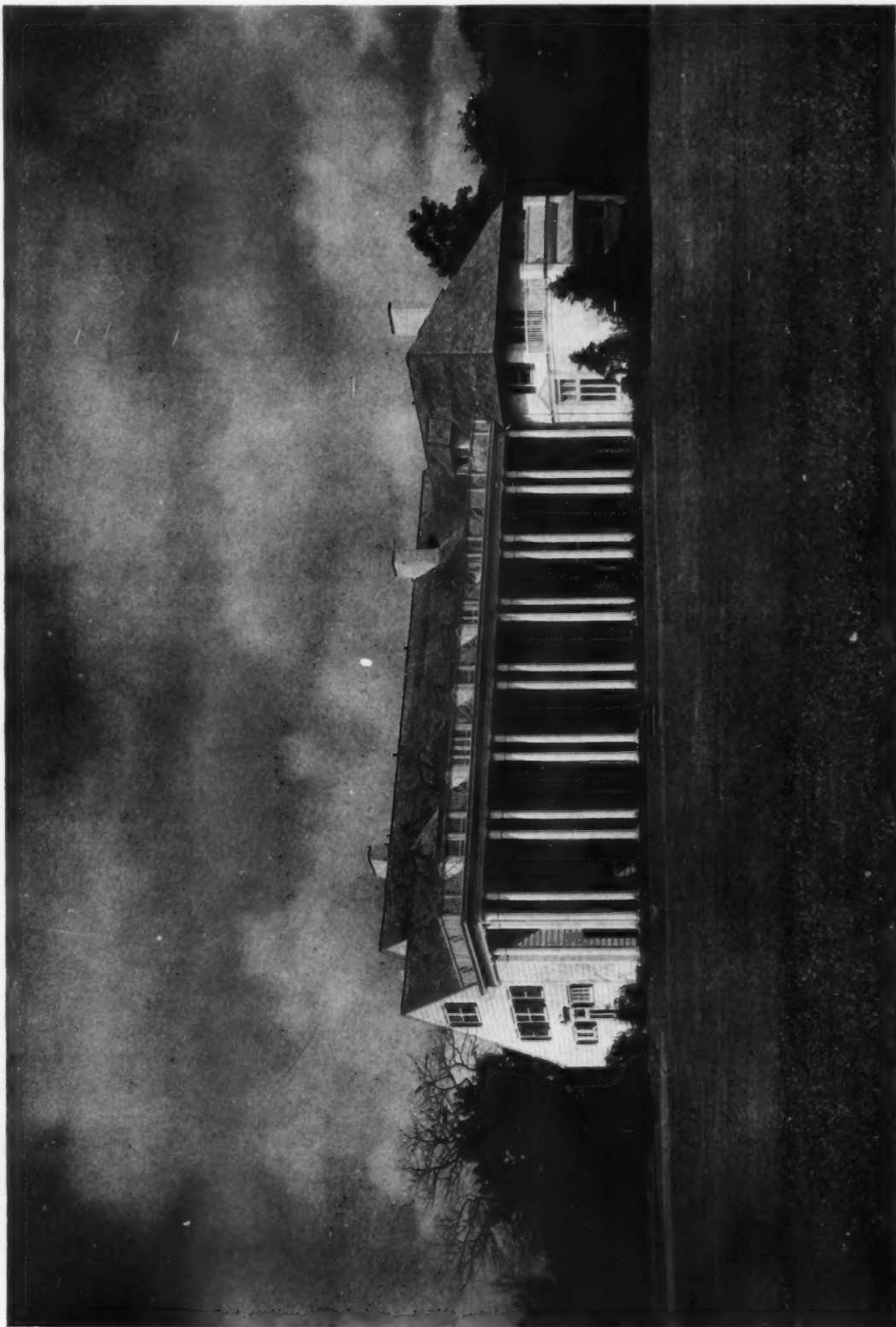


DINING ROOM



LIVING ROOM

HOUSE OF ROY S. BONSB, SCARSDALE, N. Y.—GEORGE R. THOMPSON, ARCHITECT



TIMBER POINT GOLF CLUB, ISLIP, L. I., N. Y.
CHARLES M. HART, ARCHITECT



TIMBER POINT GOLF CLUB, ISLIP, L. I., N. Y.

CHARLES M. HART, ARCHITECT

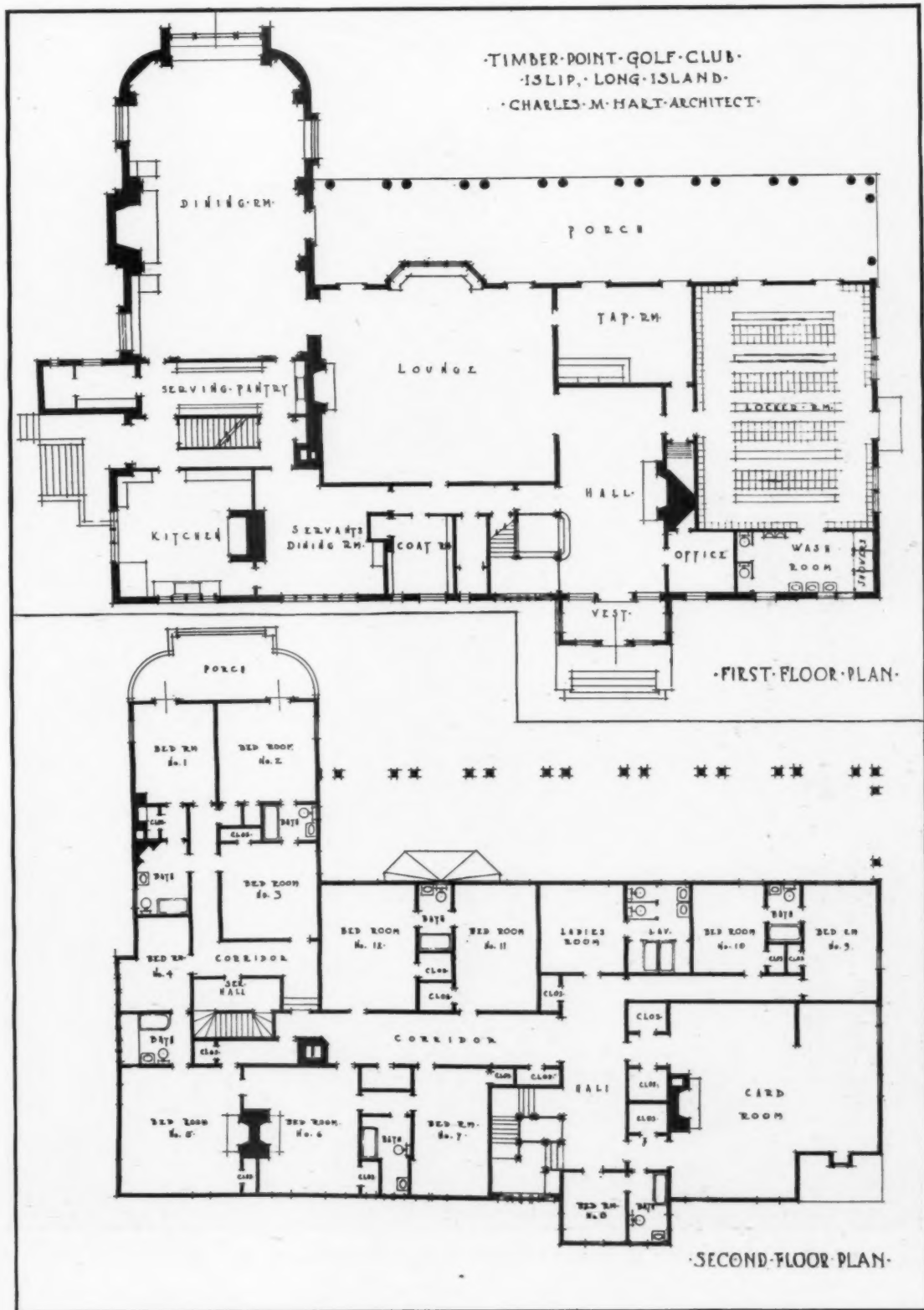


TIMBER POINT GOLF CLUB, ISLIP, L. I., N. Y.

CHARLES M. HART, ARCHITECT



TIMBER POINT GOLF CLUB, ISLIP, L. I., N. Y.
CHARLES M. HART, ARCHITECT





DETAIL OF WINDOW BAY, OLD COURT HOUSE, WISCASSET, ME.

EXAMPLES OF EARLY NEW ENGLAND BRICKWORK

WORKING PHOTOGRAPHS—SERIES II, COLLECTION OF DWIGHT JAMES BAUM, ARCHITECT

ARCHITECTURAL ORNAMENT OF AMERICAN ORIGIN

FEATURING ORNAMENTAL MOTIVES OF NEW SYRACUSE, N. Y., BUILDING
OF NEW YORK TELEPHONE COMPANY

VOORHEES, GMELIN & WALKER, *Architects*

HAVING set certain important architectural and decorative standards in its West Street building, or home office, it was logical to assume that the New York Telephone Company would seek to impart to its important branches in other cities a character and style equally good. That it has gone forward in its building policy with such commendable ideals is proven by the accompanying sketches of two buildings, both of which are the work of Voorhees, Gmelin & Walker, who wrote on the skyline of New York the silhouette of a splendid structure.

One of the most distinctive features of the design of the Barclay-Vesey Building, which was fully illustrated in a recent issue of *THE AMERICAN ARCHITECT*, is its ornament. In its design consideration was given to the purpose it serves in accenting architectural forms and motives, as well as to the character of the building and its location on a street trod morning and night by suburban commuters whose thoughts are centered on their garden patches and the flowers which bloom therein. The architects appreciated, too, the opportunities presented in the dignified development of modern machine methods of production. Individuality is expressed in design largely by the method by which design takes form. It is to a great extent the technique of the ornament of the West Street building which gives it distinction and character.

The idea seems to prevail generally that modern American architecture is barren of ornament. This is due to the fact that we so often lack the knowledge of the correct introduction of ornament. Modern machine methods allow of the most intricate forms of ornamentation, once its design is properly conceived and its introduction logically determined upon. The accompanying illustrations are reproduced from photographs of plaster models

of ornament designed for the new building of the New York Telephone Company at Syracuse, N. Y. One of the most interesting features of the design of the several motives is the manner in which upright forms, emphasizing the vertical movement of the mass, are combined with the scroll. Interlacing scrolls form the basis of the design, but, instead of being continued, according to precedent, many of the scrolls break into upright forms. The purpose

of the vertical lines of the ornament is twofold: to bind the scrolls into unity, and to give direction.

There is a logical reason for the development of the ornamental forms which feature the design of the Syracuse building of the New York Telephone Company. Of first importance, perhaps, is the desire for contrast between the flowing lines of the ornament and the vertical lines of the structure. There is also produced a textural contrast between the ornamental motives and the severely plain surfaces of the structure. The entire facade of the building is of cast stone, as well as the ornament, and is applied as a veneer to the concrete structure. The ornament at the lower portion of the building, in close alignment to the eye of the passerby, is touched up with an air hammer; that of the upper stories is left exactly as it comes from the mould. Immediately the cast stone is removed

from the mould, the entire surface is dressed or scratched with a wire brush. Thus is its peculiar texture attained. Attention is called to the interesting and logical manner in which the bronze cresting is designed, bearing a definite relation to the stone ornament with which it comes in contact.

The original models, photographs of plaster casts of which are reproduced on the following pages, were made by John De Cesare of Steften & De Cesare, from drawings by the architects.





SYRACUSE, N. Y., BUILDING OF THE NEW YORK TELEPHONE COMPANY

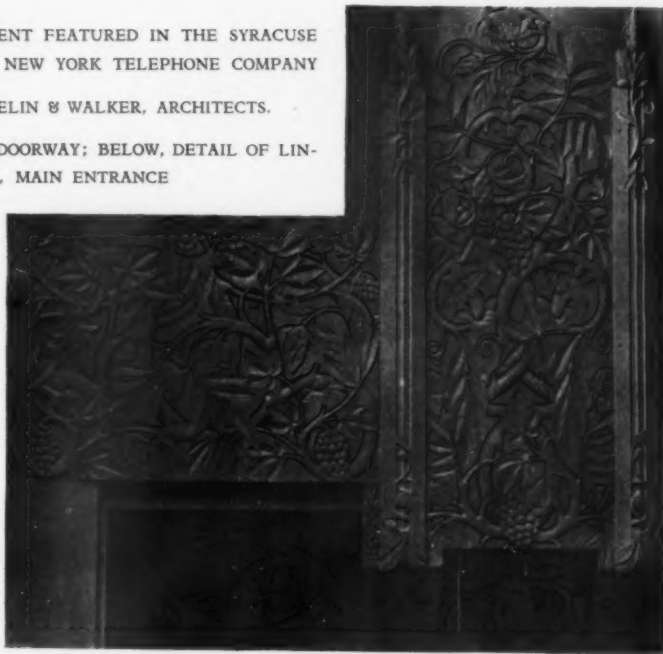
VOORHEES, GMELIN & WALKER, ARCHITECTS

(From the original drawing by Chester B. Price)

MODELS OF ORNAMENT FEATURED IN THE SYRACUSE
BUILDINGS OF THE NEW YORK TELEPHONE COMPANY

VOORHEES, GMELIN & WALKER, ARCHITECTS.

ABOVE, LINTEL OF DOORWAY; BELOW, DETAIL OF LIN-
TEL, MAIN ENTRANCE





MODELS OF ORNAMENT FEATURED IN THE SYRACUSE BUILDING OF THE NEW YORK TELEPHONE COMPANY.

VOORHEES, GMELIN & WALKER, ARCHITECTS.

IN THE UPPER LEFT CORNER IS SHOWN THE ORNAMENT AT A WINDOW HEAD. BELOW IT IS THE ORNAMENT OF THE PIERS AT THE THIRD FLOOR LEVEL. THE ILLUSTRATION ABOVE SHOWS IN DETAIL THE BRONZE CRESTING AND STONE LINTEL OVER THE SHOW WINDOWS AT THE SECOND STORY. NOTE THAT THERE IS NOT THE CUSTOMARY BREAK BETWEEN THE BRONZE AND THE STONE ORNAMENT, BUT THEY HAVE BEEN TREATED AS CONTINUOUS

MODELS OF ORNAMENT FEATURED IN THE
SYRACUSE BUILDING OF THE NEW YORK
TELEPHONE COMPANY.

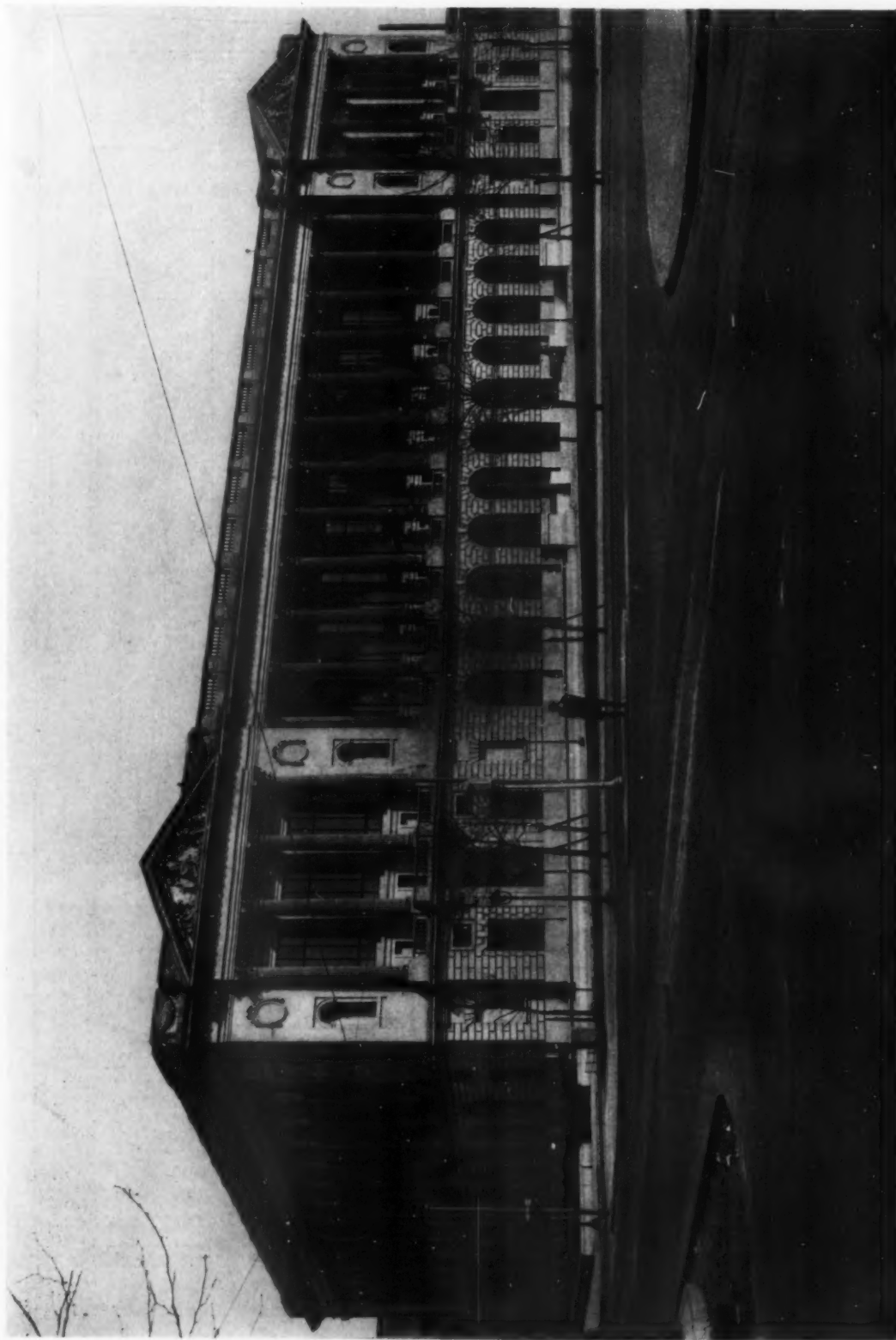
VOORHEES, GMELIN & WALKER,
ARCHITECTS.

AT THE RIGHT ARE THE BRACKET AND
WINDOW SILL AT THE SECOND FLOOR;
BELOW AT LEFT IS THE LINTEL OVER
SMALL DOORWAYS; BELOW AT RIGHT IS
THE LINTEL OVER WINDOWS

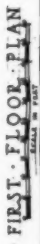




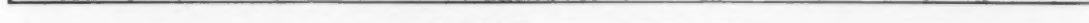
NEWARK, N. J., BUILDING OF THE NEW YORK TELEPHONE COMPANY
VOORHEES, GRELIN & WALKER, ARCHITECTS
(From the original drawing by Chester B. Price)



PUBLIC LIBRARY, PHILADELPHIA, PA.
HORACE TRUMBAUER, ARCHITECT



HORACE TRUMBAUER, ARCHITECT

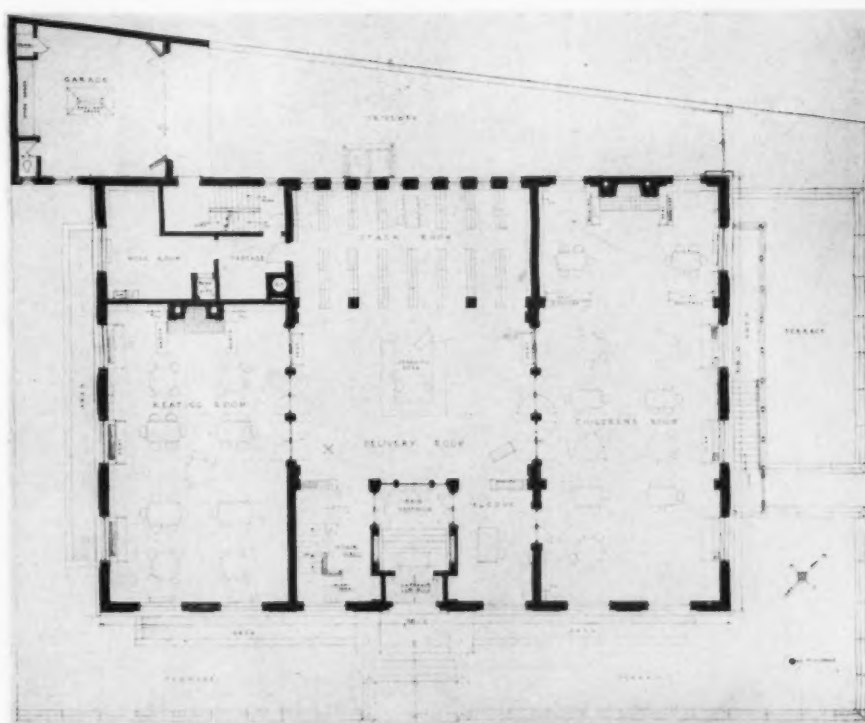
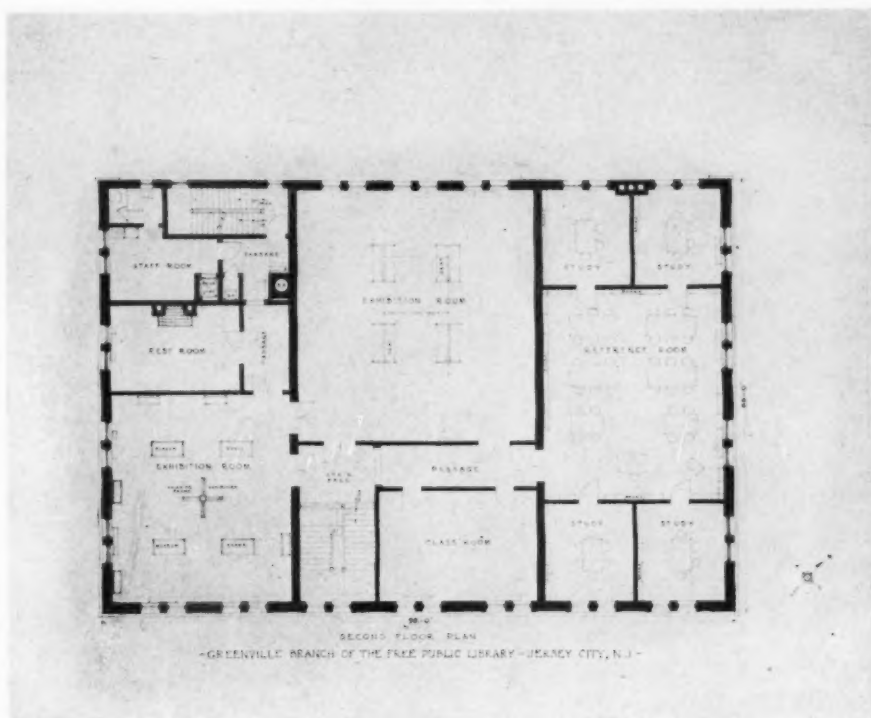


HORACE TRUMBAUER, ARCHITECT



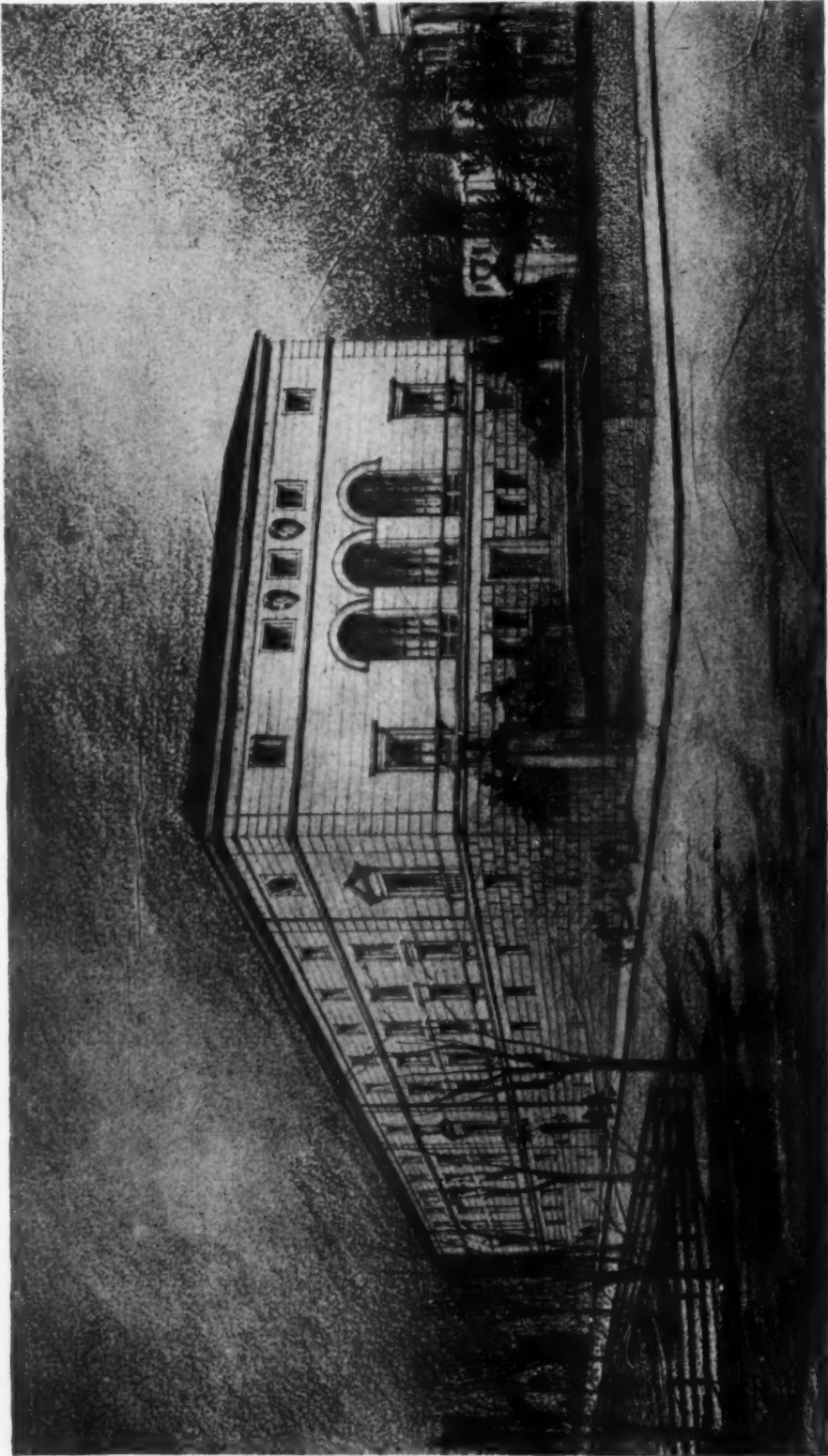
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ALBERT S. GOTTLIEB, ARCHITECT



GREENVILLE BRANCH, FREE PUBLIC LIBRARY, JERSEY CITY, N. J.

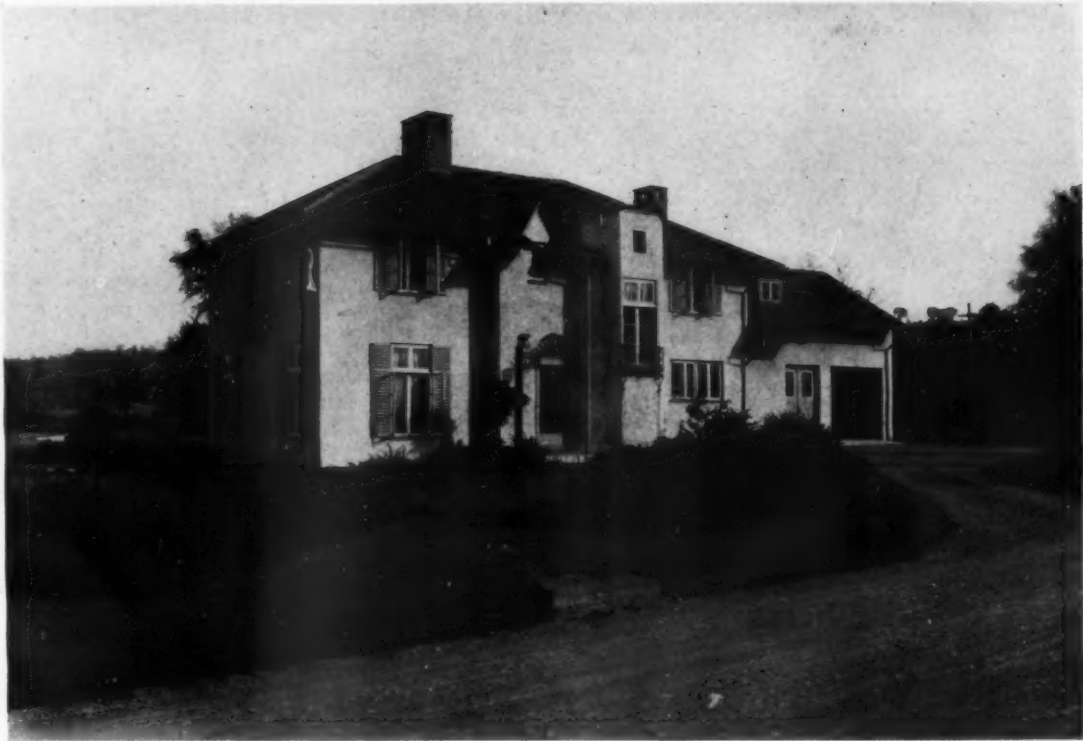
ALBERT S. GOTTLIEB, ARCHITECT



ADMINISTRATION BUILDING, BOARD OF PUBLIC EDUCATION, PITTSBURGH, PA.

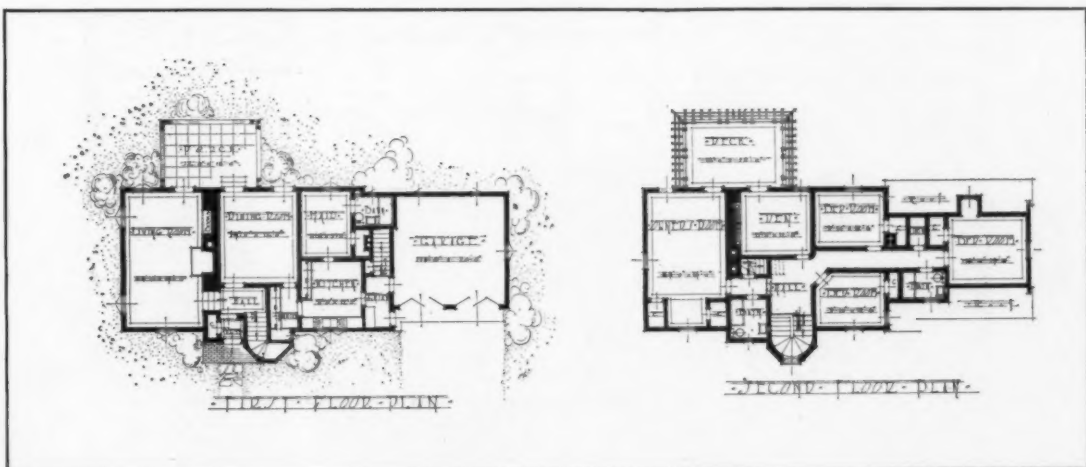
INGHAM & BOYD, ARCHITECTS

A GROUP OF BUILDINGS OF MODERATE COST



HOUSE IN UTICA, N. Y.—BAGG AND NEWKIRK, ARCHITECTS

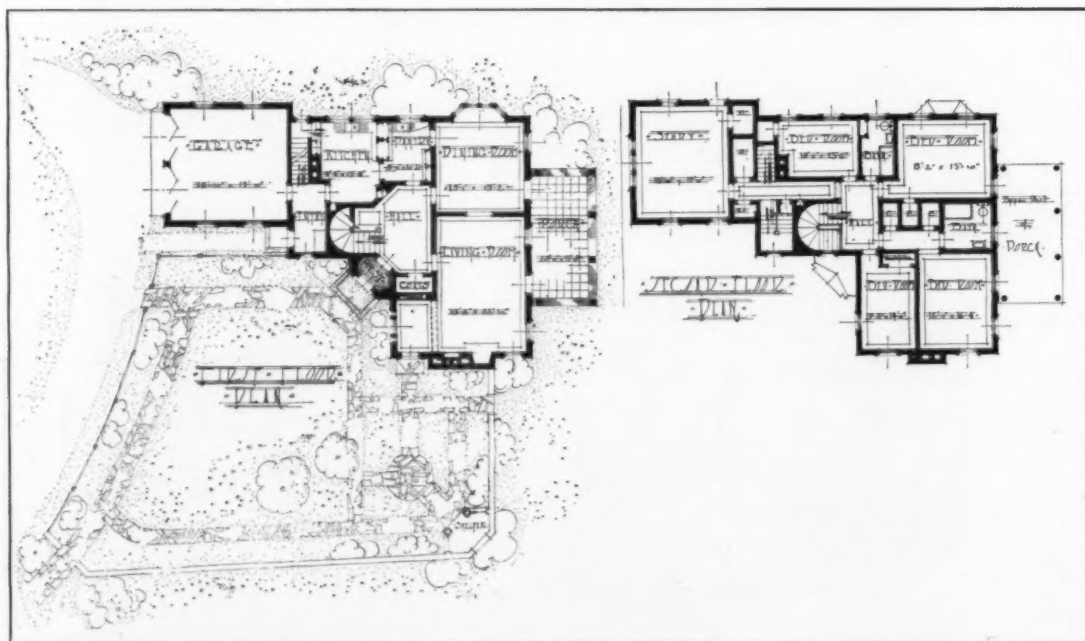
EXTERIOR WALLS ARE OF STUCCO WITH SHINGLED ROOF. THERE ARE A LARGE LIVING ROOM, A DINING ROOM, MAID'S ROOM AND KITCHEN ON THE FIRST FLOOR, WITH A TWO-CAR GARAGE ATTACHED. THERE ARE FOUR BEDROOMS AND TWO BATHS ON THE SECOND FLOOR, AND ALSO A SMALL DEN. AN INTERESTING FEATURE OF THE EXTERIOR IS THE OCTAGONAL TOWER IN WHICH THE STAIRCASE IS ENCLOSED





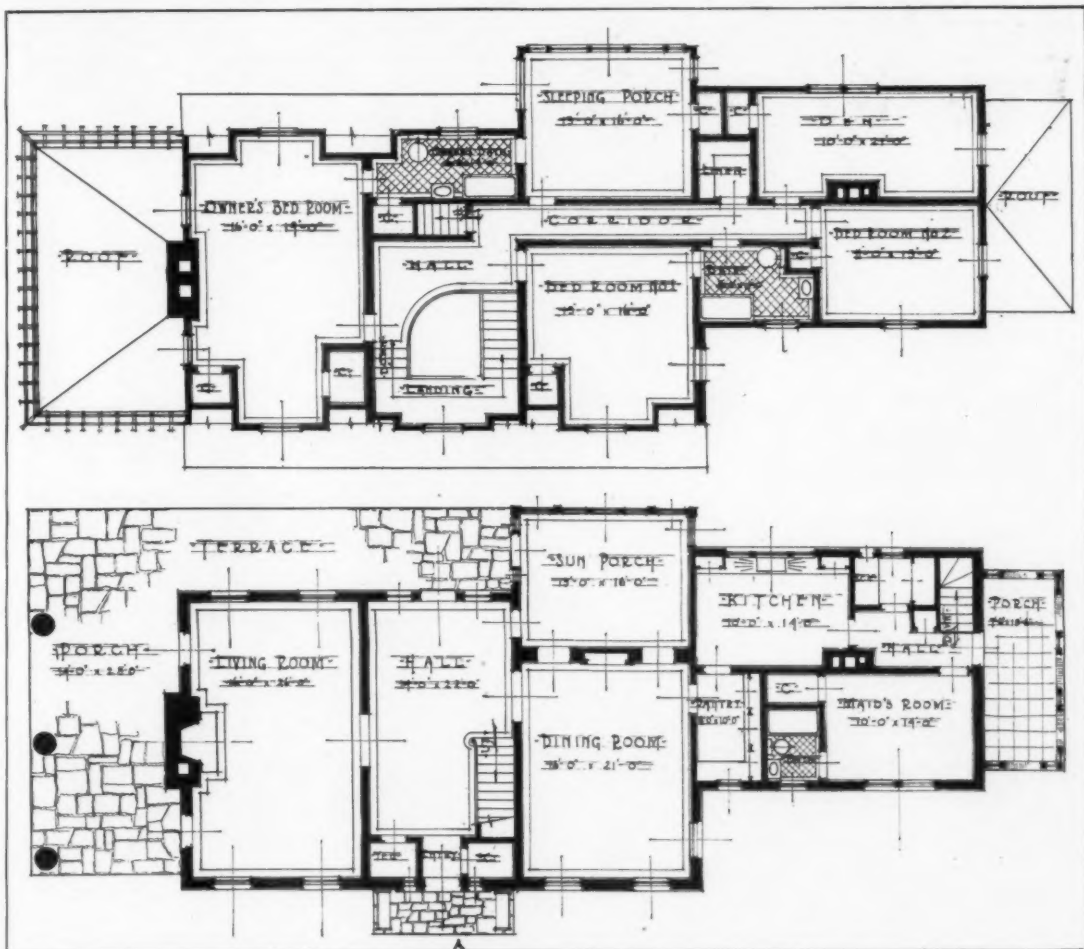
HOUSE IN UTICA, N. Y.—BAGG AND NEWKIRK, ARCHITECTS

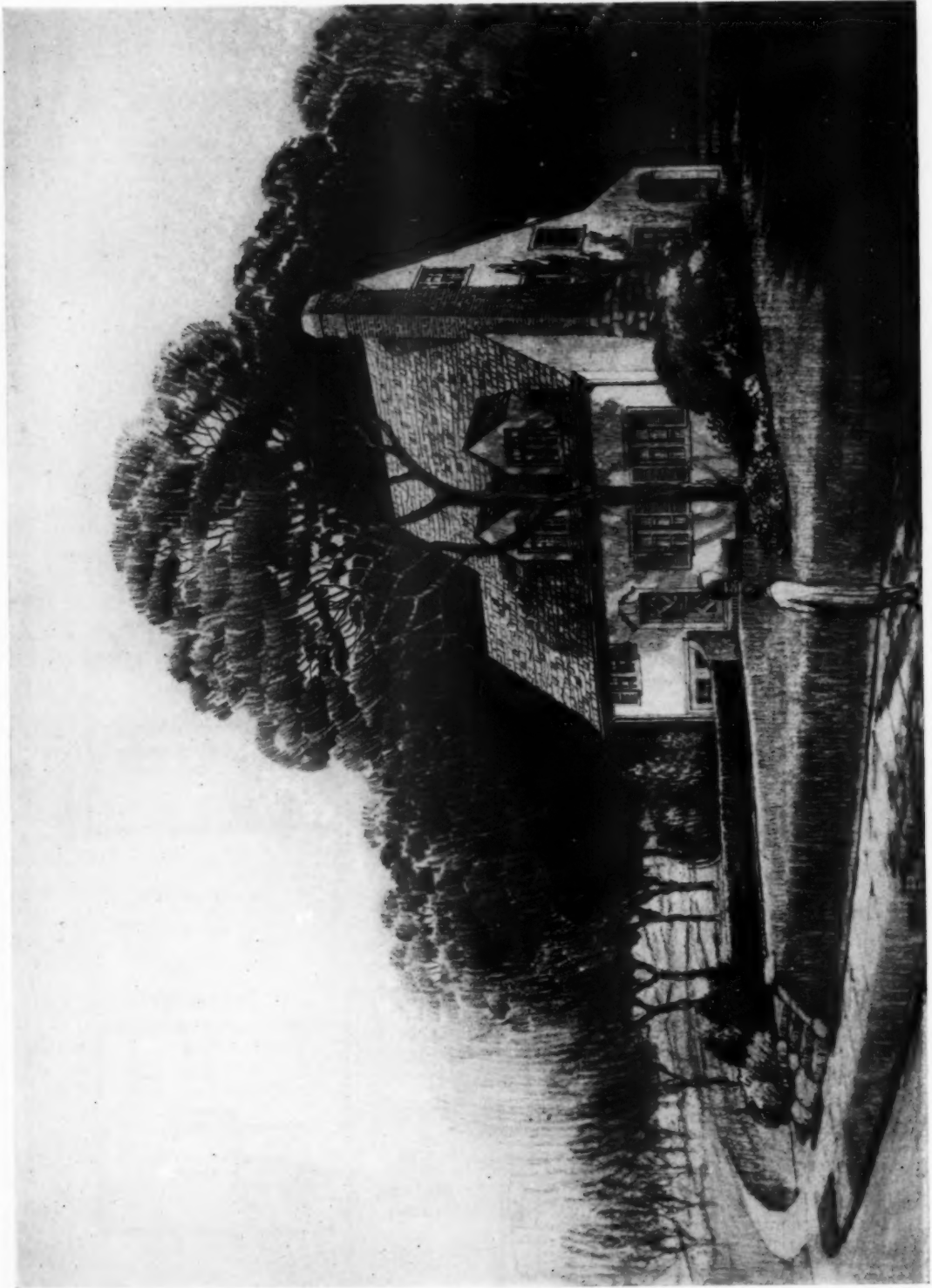
A BRICK HOUSE WITH SHINGLED ROOF. A LARGE LIVING ROOM OPENS INTO A GOOD-SIZED DINING ROOM. A TWO-CAR GARAGE IS ATTACHED TO THE HOUSE. THERE ARE FOUR BEDROOMS AND A STUDY ON THE SECOND FLOOR AND TWO BATHS





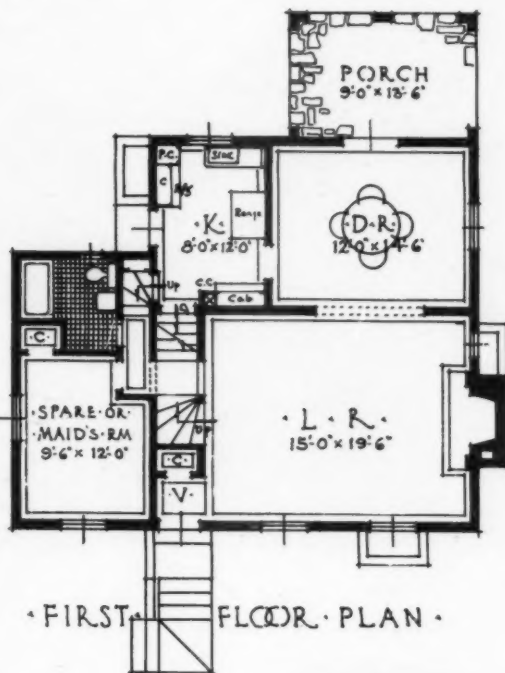
HOUSE IN UTICA, N. Y.—BAGG AND NEWKIRK, ARCHITECTS



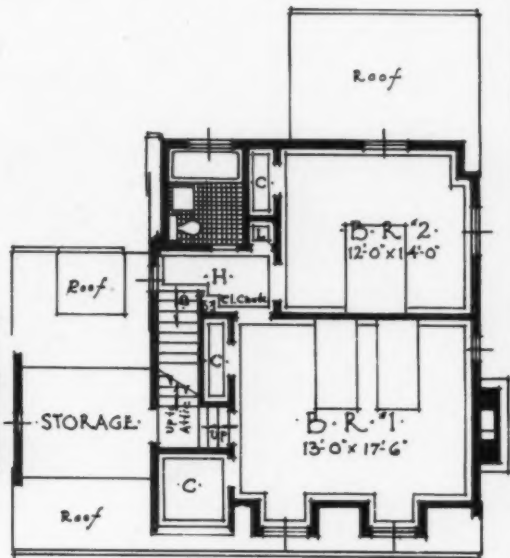


HOUSE IN LARCHMONT WOODS, NEW ROCHELLE, N. Y.

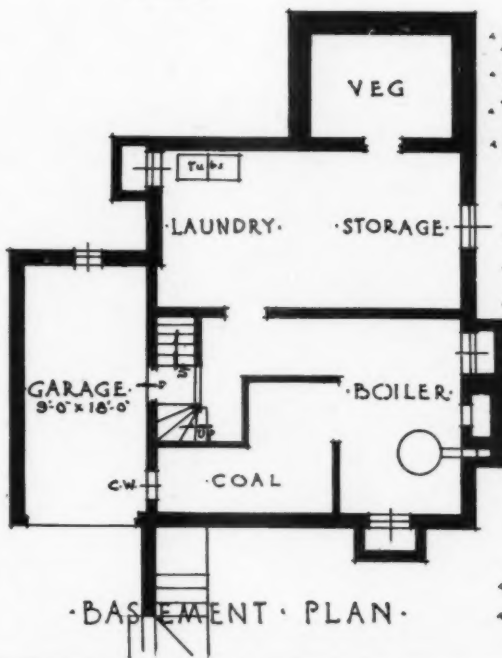
WILLIAM C. HALBERT, JR., ARCHITECT



FIRST FLOOR PLAN



SECOND FLOOR PLAN

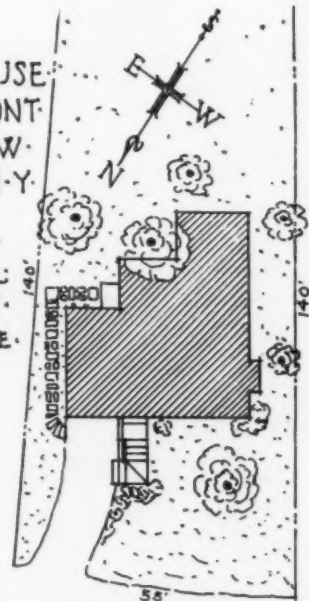


BASMENT PLAN

A SMALL HOUSE
IN LARCHMONT
WOODS ~ NEW
ROCHELLE, N.Y.

WILLIAM C.
HALBERT, JR.
ARCHITECT
NEW ROCHELLE.

CUBAGE...
26,000 CU. FT.



PLOT PLAN



HOUSE AT BRONXVILLE, N. Y.

W. STANWOOD PHILLIPS, ARCHITECT—LOUIS KURTZ, DELINEATOR



HOUSE AT GREENWICH, CONN.

W. STANWOOD PHILLIPS, ARCHITECT—LOUIS KURTZ, DELINEATOR

THESE REPRODUCTIONS ARE MADE FROM ORIGINAL SKETCHES PREPARED TO SUBMIT TO CLIENTS THAT THEY MAY BETTER AND MORE EASILY VISUALIZE THE HOUSE WHICH THE ARCHITECT HAS PROPOSED



HOUSE AT SCARSDALE, N. Y.

W. STANWOOD PHILLIPS, ARCHITECT—LOUIS KURTZ, DELINEATOR



HOUSE AT SCARSDALE, N. Y.

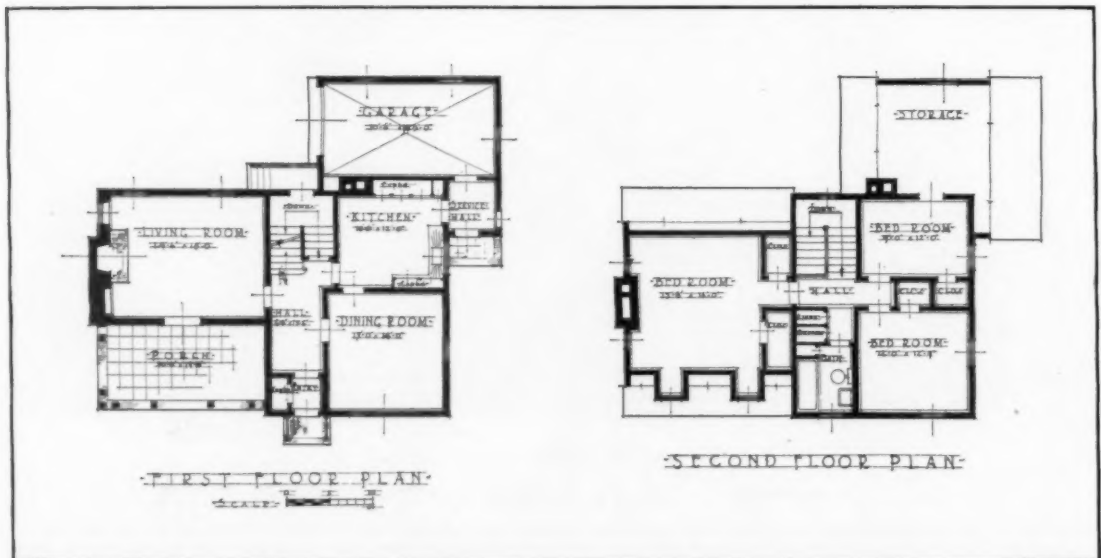
W. STANWOOD PHILLIPS, ARCHITECT—LOUIS KURTZ, DELINEATOR

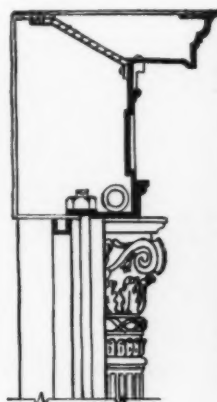
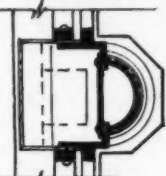
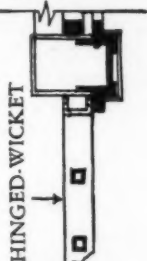
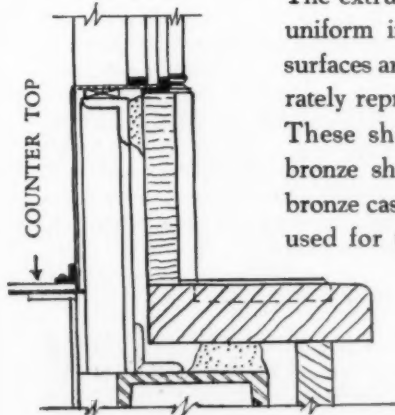
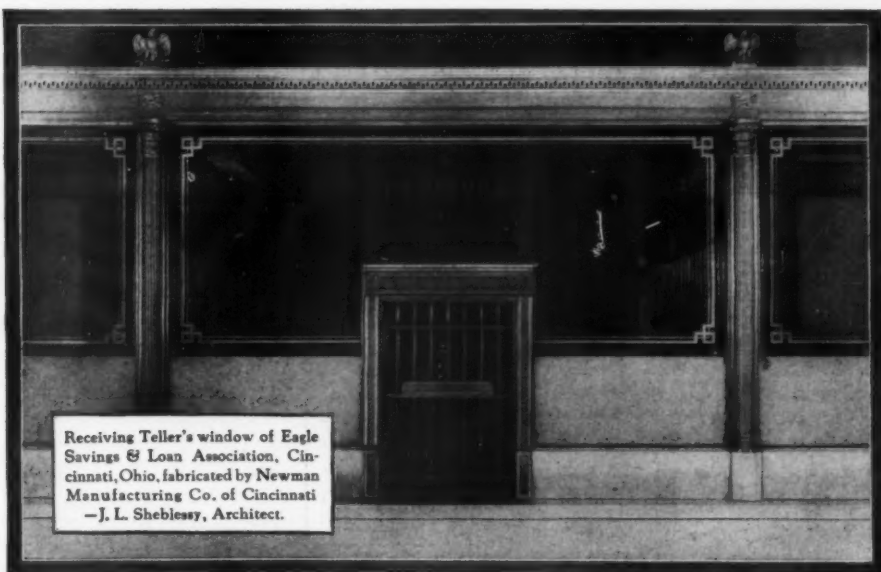
THE VALUE OF SUCH SKETCHES AS THESE IS THAT THEY EMBODY THE CLIENT'S VIEWPOINT, FURTHER THAN THAT THEY SHOW THE HOUSE IN RELATION TO ITS TRUE SETTING, ALLOWING THE CLIENT TO VISUALIZE THE HOUSE AS IT WILL ACTUALLY APPEAR WHEN COMPLETED



HOUSE IN UTICA, N. Y.—BAGG AND NEWKIRK, ARCHITECTS

A SMALL COMPACT HOUSE, WITH PORCH AND GARAGE ATTACHED, WITH ENTRANCE TO IT FROM THE SERVICE HALL. THERE ARE THREE BEDROOMS ON THE SECOND FLOOR, AND STORAGE SPACE ABOVE THE GARAGE. THE EXTERIOR WALLS ARE OF CLAPBOARDS AND THE ROOF OF SHINGLES



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SECTIONPILASTER
SECTIONHINGED-WICKET
SECTIONLEDGE
SECTIONANACONDA EXTRUDED BRONZE
SHOWN IN SOLID BLACKReceiving Teller's window of Eagle
Savings & Loan Association, Cin-
cinnati, Ohio, fabricated by Newman
Manufacturing Co., of Cincinnati
—J. L. Sheblessy, Architect.

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THE LAW AS TO ARCHITECTURE

By CLINTON H. BLAKE, JR., of the New York Bar

IT would be obviously unreasonable to expect the architect to advise the client to any general extent with respect to his legal rights and liabilities. He is ordinarily under no such duty. If the client desires protection, he must look, broadly speaking, to his lawyer and not to his architect.

There are certain limits, however, within which the architect should be prepared to advise and direct his client as to legal requirements. Where the requirements are such that they should be known to a reasonably well posted and careful architect, his failure to acquaint the client with them may indeed amount to negligence and open the way to a claim for damages against him.

Every architect in active practice, for example, is supposed to know the essentials of the building laws and ordinances under which his work is carried on. These may be in the form of state laws or of municipal ordinances, or both. It makes no very great difference, so far as his liability is concerned, so long as they directly affect or control the job in hand. If the architect prepares plans which violate a local ordinance or other statutory requirement, if he allows the client to go ahead and spend money on work which can not legally be approved, if he fails so to direct the work that it will not run foul of the building inspector or the tenement house department or some similar official functionary or body, if he cause unnecessary delay and expense by failing to provide plans which will readily be approved, he will have failed to do his legal duty and the client may well hold him to account.

Many states have laws with respect to the effect on the lien rights of the contractor and materialman and sub-contractor of the filing or recording of the contract. Here a filing may protect the owner against certain liens. Again, in another state, recording may be a necessity. Again, it may be necessary that the specifications be placed on file, if the owner is to be protected. It may be necessary to do this, before any work whatever is started. It may be necessary only to file before the particular part of the work for which a lien is claimed is undertaken.

There is a surprising difference in these requirements as between the different states. The careful architect will take the time necessary carefully to study and to understand the requirements of the locality in which his work is carried on. There is necessarily a dividing line always between the cases where the architect is under obligation to be posted and to advise in such matters and the cases in which he is under no such obligation. It is not an easy matter to draw the line sharply or to state a rule which is much more than a general one. The point is that the more freely the architect can acquaint himself and advise or post his client in matters of this kind, the stronger and safer is his position.

I do not mean at all that he should swing to the other extreme and try to act as the general legal adviser of the client in the building operation. He will do extremely well to steer clear of anything of the kind. I do mean, however, that he should, on legal points which are of necessity fundamentally related to his work, advise the client to the extent at least of letting him know that he would do well to get competent legal advice.

The client will, I know from experience, resent his failure to do so, and on the other hand, be correspondingly pleased to find that his architect is sufficiently on the job to avoid legal red tape and delays, and to point out to him precautionary measures which it will be advantageous for him to adopt. The architect who inspires in his clients the feeling that he has a good business head and the ability and desire to understand and apply legal and business fundamentals affecting his client's satisfaction and pocketbook with respect to the job on hand, will draw larger dividends in the form of clients who are boosters and not knockers.

To do this, the architect need not delve in law books or give much time to study. He must only take a bit of care to understand the few fundamentals involved, and to see that they are applied by him or by his client as necessity demands. All that will be necessary or expected of him in most cases will be cautionary suggestion. It will then be incumbent upon the client to seek special advice, if it be needed, and to take such steps as may be necessary to protect his interests. The important thing is that the architect should be prepared to give such suggestions of this kind as fall within his special sphere and province. He is not expected to be acquainted with matters which are not related with reasonable directness to the building operation. It is, however, reasonable to expect that in matters which do relate to it, he shall be sufficiently well posted as to legal requirements, so that he may at least suggest precautionary measures and put the client upon his guard with respect to steps which it is advisable or necessary he should take for his protection. If he does this, he can not be accused of any negligence in this connection.

LEGAL DECISIONS

THE client employed an architect to design a theatre building and agreed to pay him three per cent of the cost of the building for the preparation of the plans and specifications. When the plans were first prepared, it was found that the cost of the proposed work would exceed the amount which the owner desired to spend. At this point, the architect amended the plans and assured the owner that the proposed building could be constructed under the



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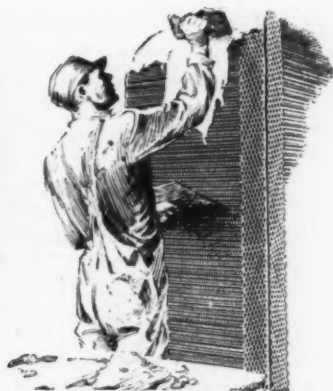
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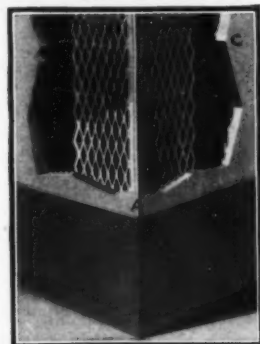


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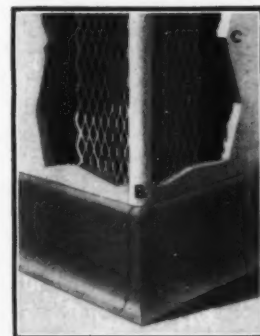
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"B"—Expansion Bull Nose Corner Bead No. 10 [Pat'd]; "C"—Stay Rib Metal Lath No. 1.



amended plans for \$19,785. Subsequent to this, the owner in large measure abandoned the plans and constructed a building which cost in the neighborhood of \$40,000. The trial court gave the architect judgment for three per cent on the amount of \$19,785. The architect appealed, claiming that he was entitled to three per cent on the \$40,000, the actual cost of the building as finally constructed. On appeal, the court held that the architect could recover only his agreed percentage on the cost of the building which he designed and that, inasmuch as the building as constructed differed materially from that which he designed, he could not base his recovery on the cost of the building erected. The court accordingly affirmed the judgment and limited the architect to the three per cent on the \$19,785, less the amount already paid to him on account thereof.

Saad vs. Bates, 208 Kentucky 542.

(NOTE.) It does not appear from the report of the case what services, if any, the architect performed in connection with the building as finally constructed. The decision would seem to indicate that the plans which he prepared, while they were radically modified, nevertheless entered into the construction of the building. It does not appear whether he supervised its construction or to what extent he was called upon for services in connection with the final alterations of the plans or the prosecution of the work to completion. If he performed services in this connection, the correctness of the decision would seem to be questionable. Where a client changes his mind and erects a building costing more than the amount called for under the original plans and the architect is continued on the job in connection with the new building, he certainly should be entitled to have his fee based on the cost of the building finally erected. If, on the other hand, as it would seem must have been the case in this instance, his plans are, in effect, wholly abandoned and the client then proceeds without him to erect an entirely different building, the architect's recovery might well be limited to the cost of the building for which he had prepared the plans.

THE plaintiffs entered into a contract with a firm of general contractors for excavation and backfilling work for a contract which the general contractors had entered into for the erection of a city filtration plant. The plaintiffs never knew the terms of the contract under which the general contractors had undertaken the work and they never saw the plans or specifications until they had quit the job. After performing a part of their work, they claimed that the general contractors had breached the contract, refused to proceed further and brought suit

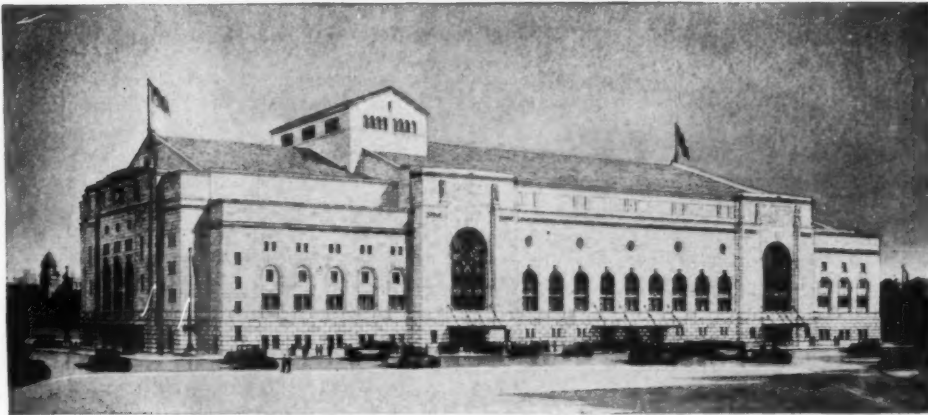
against the general contractors, the surety company being made a defendant. The surety company bond provided "for the payment by the contractor of all subcontractors and for the payment of all labor performed and materials furnished." The surety company, in defending the suit, claimed that the plaintiffs were not, properly speaking, subcontractors and that they therefore could not recover as such under the bond. The plaintiffs were allowed to recover on the basis of the contract price for the excavating and backfilling which they had done. Defendant claimed that this was erroneous, since the price fixed under the contract was an average price for the whole and the most extensive portion of the excavating and backfilling work was left undone.

On an appeal being taken from a recovery by the plaintiffs, the judgment was reversed. The court held that the contract between the plaintiffs and the general contractor was nonapportionable and that the trial court was in error in allowing the plaintiffs to recover on the basis of the contract price, and that any recovery by them would have to be on the basis of quantum meruit for the reasonable value of the work which they had done. The court held further that, under the conditions which existed, the plaintiffs were not subcontractors and defined a subcontractor as,

"One undertaking the performance of the whole or part of an existing contract under which another, with whom he contracts, is obligated to perform some specified work, and agrees, not only to do the work, but to do it in accordance with the pre-existing agreement of which he must, in the very nature of undertaking the performance of the undertaking of another, have knowledge of its terms and provisions. There must be brought into the subcontract, by reference at least, the agreement that the original contract shall be the standard by which the performance of the subcontract shall be judged. . . . To be a subcontractor one must become an under-contractor, taking under the original contract and agreeing to perform in accordance therewith."

The court held that, as the only reference in plaintiffs' contract to the plans related to backfilling and was not such as to make the performance of the contract dependent in any way upon the terms of the original contract, and as they did not know the terms of the original contract and did not see the plans or specifications while their work was being carried out, they could not properly be classed as subcontractors.

People vs. Fidelity & Deposit Co., 232 Michigan 238.



MINNEAPOLIS MUNICIPAL AUDITORIUM
Minneapolis, Minnesota



Architects and Engineers—CROFT & BOERNER,
Minneapolis, Minn.
Gen. Contractors—NATIONAL CONTRACTING CO.,
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CONTRACTS AWARDED MOST ACCURATE INDEX OF NATION'S CONSTRUCTION ACTIVITY

SURVEY OF AUTHORITATIVE OPINION DEFINITELY SHOWS THAT BUILDING PERMITS' IMPORTANCE HAS BEEN OVER-EMPHASIZED AND NOT GENERALLY ACCEPTED AS RELIABLE
NATIONAL BAROMETER—BETTER DATA NEEDED AS INDICATOR

LEADING statisticians and building authorities are almost unanimous in the opinion that contracts awarded statistics are the most accurate barometer of the nation's building progress.

This fact was disclosed by an investigation just completed by the *American Builder-Economist*, published by The American Bond and Mortgage Company, in an effort to clear up the confusion in the public mind as to which is the best index of building activity—contracts awarded or building permits.

"The views of more than a score of foremost economists, building authorities and statistical organizations were obtained on this subject," states the *American Builder-Economist*. "With few exceptions they were in general agreement that building permits were somewhat erratic and misleading and fail to approach the accuracy of contracts awarded as a construction index.

Some authorities considered permit records useful in checking local operations, but warned, however, that too much emphasis placed on building permits sometimes led economists into unwarrantedly pessimistic views regarding business prospects.

"There is a real need for better data in the construction field that will give a more accurate picture of building progress," comments the *American Builder-Economist* editorially. "There appears to be ample room for further development of statistical information in the field of construction. Both the building permit and contracts awarded reports can undoubtedly be improved. Gathering data as to the employment of building trades labor, a real indicator of activity, would also be very helpful.

Probably the greatest progress in statistical effort has been the steady perfection and extended collection of information and data regarding contracts awarded. As a result of the efforts in this direction, building permits today have been almost completely discarded as indicators of construction volume, except in a few narrow circles where attempts are made to justify unfounded predictions of building slump in 1927. Their importance has been greatly depreciated by facts and figures which show that contracts awarded give a more accurate and complete picture of the amount of building.

Canvass of opinion of practical economists and statisticians who have made a thorough study of this particular question, definitely shows that contracts awarded are the only true indicators of our building progress.

This view is also shared by Secretary of Commerce Herbert Hoover and officials of his Building and Housing Division, who have announced that building permits are being discarded as building indicators, as contracts awarded afford the most generally accepted index of building activity in this country.

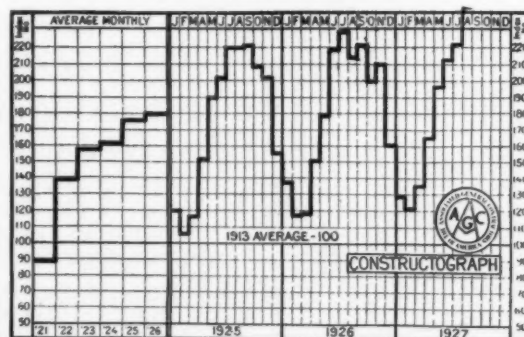
Realization of the unreliability of permit figures and the unsound practice of endeavoring to estimate the true amount of building operations from their valuations, further emphasizes the need of perfecting and further extending the system of collecting contracts awarded statistics, so as to cover thoroughly the entire building field in this country. Contracts awarded should also cover the smaller work going on in the districts outside of the larger cities, as well as the smaller housing projects which are increasing in volume the suburban areas of the larger cities.

It must be remembered that construction is going on in every community in this country and that it is one of our most important industries, employing nearly two million men and producing an annual product valued at approximately seven billion dollars; therefore we should not neglect our statistical efforts to the end that all who are interested in this vast construction program can foresee the future and gauge their efforts accordingly.

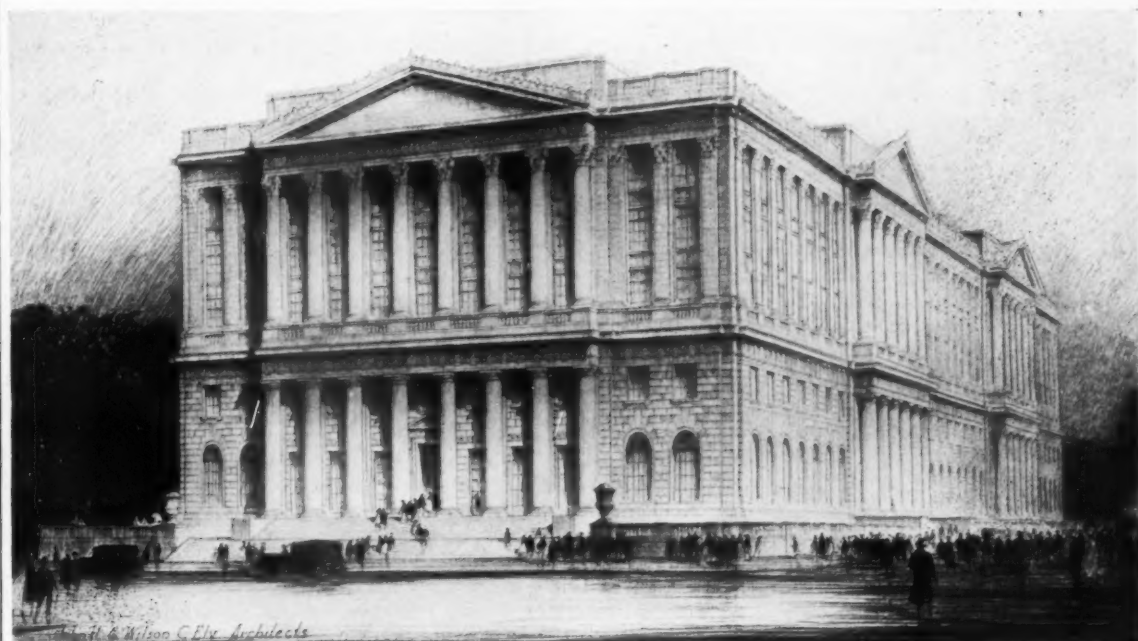
CONSTRUCTION COSTS DURING AUGUST

THE greatest volume of construction operations ever carried on in this country during a single month was established in August, according to

VOLUME OF CONSTRUCTION



statistics just compiled by the Associated General Contractors of America. Registering an increase of eight per cent over the July volume, building ac-



When a Great Insurance Company Builds—

The best and most economical materials are purchased. Naturally, Duriron acid-proof drain pipe was specified to carry the destructive corrosive wastes from the photostat department and chemical laboratory of The Mutual Benefit Life Insurance Company's Home Office Building at Newark, New Jersey.

The assurance of everlasting protection to valuable property and elimination of future repairs prompted the installation of Duriron.

This "paid-up policy" against corrosion, bought by this Insurance Company, is obtainable only with Duriron drain lines.

Duriron is produced only by
***The* DURIRON COMPANY**
DAYTON • OHIO

* Specifications of most products advertised in THE AMERICAN ARCHITECT appear in the Specification Manual

tivities last month reached a total well above the previous record, set in July, 1926.

All types of building, it is stated, are included in these statistics, which are based upon actual shipments of basic construction materials.

Last month's construction record brought the total volume for the first eight months of this year up to a figure four per cent in excess of the total registered for the corresponding period of 1926. Leading builders consider this to be especially significant in view of the fact that the total volume for the twelve months of last year was the greatest ever recorded for a similar period.

A huge volume of contracts already awarded for future construction work bolsters forecasts that a new mark will be set by 1927. The volume of awards made during the first seven months of this year exceeds by seven per cent the corresponding total for 1926.

A scale which places the 1913 average at 100 as its basis shows the index number for the August volume of actual operations to be 238. Figures for preceding months are: January, 129; February, 121; March, 135; April, 165; May, 197; June, 212; July, 221.

GERMAN ARCHITECTS VISIT US

A GROUP of architects and engineers, numbering approximately one hundred and sixteen, from all parts of Germany, Austria and Switzerland, have recently been visiting New York prior to a nationwide inspection of matters throughout the United States in which they would be logically interested. These German architects, in common with architects from all over Europe, were, to use the enthusiastic words of Heinrich Schubart of the Union of German Architects and Engineers, "really overwhelmed by the first sight of America's skyscrapers and modern buildings." Believing that Berlin would never construct buildings of such unusual size and height because the increased volume of traffic would be too difficult to handle, he said that the tall building was purely a New York problem and that Berlin had ample room to expand without concentrating so much at one point. As guests of the City of New York, this group of German professional men have been entertained by the city and have visited all the more important buildings and large manufacturing centers under the guidance of a representative of New York's entertainment committee.

ELECTRIC NIGHT BY RADIO

MILTON B. MEDARY, President of The American Institute of Architects, has accepted an invitation of the General Electric Company to participate in the nation-wide broadcasting program on the evening of October 21st in celebration of the birth of the electrical industry in the development of the

incandescent lamp by Thomas A. Edison forty-eight years ago.

Utilizing radio broadcasting, the latest outstanding development of the electrical industry, an excellent musical program will be provided through a hook-up of broadcasting stations, starting at ten o'clock Eastern Standard Time. Following this musical feature the program will be localized through each station from which there will be ten-minute talks by two speakers, one representing the producers and the other the consumers of electrical service.

As Mr. Medary will be attending a conference in Washington on the date of this anniversary, arrangements have been made to broadcast his remarks from station WRC, which operates on a wave length of 469 meters. Speaking for the architectural profession, Mr. Medary will discuss the very important part that electricity plays in the construction, equipment and operation of modern buildings.

It may be expected that many architects throughout the country, as well as others identified with the building industry, will "tune in" their receivers on WRC at 469 meters on October 21st and enjoy Mr. Medary's talk and the excellent musical program preceding it.

The musical program will be followed at 10:40 Eastern Standard Time by a ten-minute talk from station WRC by W. F. Ham, President of the Potomac Electric Power Company, Washington, D. C., as a representative of the producer interests, and at 10:50 o'clock Eastern Standard Time (9:50 o'clock Central Time; 8:50 o'clock Mountain Time) Mr. Medary will speak as representative of consumer interests.

LINCOLN ARC WELDING PRIZE

THE competition for the Lincoln Arc Welding Prize for 1927, which closes January 1, 1928, is in charge of the American Society of Mechanical Engineers. The purpose of the competition is to encourage improvements in the art of arc welding, the pointing out of new and wider applications of the process, the discovery of improved methods of testing welds to assure their integrity, or indicating advantages and economies to be gained by its use. It offers many interesting and unusual problems and should warrant the attention of members of the architectural and engineering professions whose knowledge and interest especially fit them in furthering developments in building construction.

COLD STORAGE DOOR MANUFACTURERS MERGE

ANNOUNCEMENT has been made of the consolidation of the Stevens Cold Storage Door Company, Chester, Pa., and the Jamison Cold Storage Door Company, Hagerstown, Md. Both of these



Side and end matched to perfection—Maple makes a one-piece floor of lasting beauty.



MFMA No. 108—Orchid



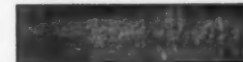
MFMA No. 107—Pastel Green



MFMA No. 104—Silver Gray



MFMA No. 101—Early American



MFMA No. 106—Royal Blue



MFMA No. 105—Dove Gray



MFMA No. 102—Spanish Brown



MFMA No. 103—Autumn Brown

Choose Any Color— *it can now be yours in a floor of enduring Maple*

MAPLE floors in color! Picture the charm and comfort they will lend to the rooms of the home. Today you can have them—at moderate cost.

By a process recently discovered, Maple flooring—hitherto available only in its natural golden hue—is made to take a permanent, even stain of any tone you choose.

From light, cool green to deep, mellow brown, from delicate sky blue to rich, rare ebony!

And with this transparent staining, the delightful natural pattern of the wood becomes more visible—develops a richness never before seen in any floor.

Thus Maple, long known to be the smoothest, most resilient and comfortable, most enduring of all fine flooring

materials, now offers you a wealth of distinctive new opportunities for color harmony throughout the home.

You know that, in specifying Northern Hard Maple, you are assured of flooring satisfaction that will last as long as the home itself. Write for the free illustrated booklet, "The New Color Enchantment in Hard Maple Floors."

MAPLE FLOORING MANUFACTURERS ASSOCIATION
1775 McCormick Building, Chicago, Illinois

Guaranteed Floorings

MFMA The letters **MFMA** on Maple, Beech or Birch flooring signify that the flooring is standardized and guaranteed by the Maple Flooring Manufacturers Association, whose members must attain and maintain the highest standards of manufacture, and adhere to manufacturing and grading rules which economically conserve these remarkable woods. This trade mark is for your protection. Look for it on the flooring you use.

Floor *with* Maple

Specifications of most products advertised in THE AMERICAN ARCHITECT appear in the Specification Manual

concerns rank among the oldest and largest manufacturers of cold storage doors. The authorized statement announcing the merger indicates that there will be no change in the titles of the two companies, nor in their policies. The full line of products of each company, including cold storage doors and ice chutes, will continue to be made as heretofore. It is stated that the combining of manufacturing facilities, distribution and experience will result in increased service efficiency.

EXHIBITION OF ADVERTISING NOVELTIES IN JAPAN

THE Osaka Municipal Office, Department of Commerce and Industry, announces that it proposes to hold an exhibition of advertising novelties of both domestic and foreign origin. The idea is to introduce to the general public of Japan such advertising novelties as may be prepared by firms for demonstration of their firm names or specialties.

Osaka is the largest distributing and manufacturing center of Japan, with a population of 2,200,000. Many of the manufacturers and producers there are studying specialty advertising, or need to procure advertising novelties of appropriate design that will attract the attention of the general public and create business inquiries from interested parties.

For further particulars, address M. Vashiba, Director, Department of Commerce and Industry, Osaka Municipal Office, Osaka, Japan.

SUNNY HOUSES COST MORE

IN the course of a recent hearing on rents by the Middlesborough municipal committee, reported in the British newspapers, one official stated that many landlords were charging extra rent for houses on the sunny side of the street. This extra rent was supposed to equalize the tenant's saving in fuel bills.

WOOD PRESERVING INCREASE

THE wood-preserving industry in the United States is growing steadily. Statistics for the year 1926, the latest that have been compiled, show that during the year 289,322,079 cubic feet of wood were treated with preservatives as compared with 274,474,538 cubic feet in 1925, according to the United States Forest Service. Last year a total of 226,628,746 gallons of preservatives was used in the treatment of timber to prevent decay and prolong its usefulness.

The wood treated during 1926 included 187,963,614 cubic feet of cross-ties; 49,511,088 cubic feet of poles; 31,147,287 cubic feet of construction timbers; 12,420,977 cubic feet of piles; 3,689,424 feet of wood blocks; 1,344,406 feet of cross-arms and 3,245,283 cubic feet of miscellaneous wood products.

The preservatives used during the year included 185,733,180 gallons of creosote; 13,317,022 gallons of petroleum; 2,541,563 gallons of paving oil; 24,777,020 gallons of zinc chloride, and 259,961 gallons of miscellaneous preservatives.

At the close of last year there were in existence in the United States 187 plants for the preservative treatment of wood in various forms. Of this number, 180 were in active operation and seven idle. During the year fourteen new plants were constructed. There were thirteen more plants in operation in 1926 than in 1925.

PERSONALS

Roger K. Nissen, 222 Mira Mar Avenue, Long Beach, Cal., would be pleased to receive manufacturers' catalogs and samples.

Colton & Knecht, architects, are now located in their new offices at 724 Grand Rapids National Bank Building, Grand Rapids, Mich.

Dwight H. Perkins has withdrawn from the firm of Perkins, Fellows & Hamilton, architects, and is now associated with Melville C. Chatten and C. Herrick Hammond under the name of Perkins, Chatten & Hammond, architects, with offices at 160 North La Salle Street, Chicago, Ill.

Theodore Rider Jacobs has closed his offices in the Farmers & Merchants Bank Building, Long Beach, Cal., and is now associated with Louis L. Door, architect, with offices at 1040-1042 Subway Terminal Building, Los Angeles, Cal. Manufacturers' catalogs and samples are desired.

Marston, Van Pelt & Maybury, architects, announce the dissolution of their firm. Garrett Van Pelt, Jr., has opened offices at 16 South Oakland Avenue, Pasadena, Cal. Sylvanus B. Marston and Edgar W. Maybury will practice under the firm name of Marston & Maybury, retaining the present offices at 25 South Euclid Avenue, Pasadena, and 402 Union Oil Building, Los Angeles, Cal.

William K. Fellows, John L. Hamilton, Laurance E. Wilkinson and James F. Gerrity have formed an architectural partnership to succeed the firm of Perkins, Fellows & Hamilton. The new firm will practice under the name of Hamilton, Fellows & Wilkinson. Both Mr. Wilkinson and Mr. Gerrity have been associated with the firm for many years. The offices will remain at 814 Tower Court, Chicago, Ill.

THE AMERICAN ARCHITECT

IN TWO PARTS

PART II

SEPTEMBER 20, 1927

TOPICAL ARCHITECTURE SECTION

DORMERS



DORMER OF A FARM BUILDING IN NORMANDY, FRANCE

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FARM HOUSE NEAR BEAULIEU, NORMANDY, FRANCE



PEASANT'S HOUSE, CHEVERNY, NORMANDY, FRANCE



PEASANT'S HOUSE, NORMANDY, FRANCE

705
v. 132 pt. 2

THE PUBLISHERS' PAGE

WE call attention to an editorial in a recent issue in which we discussed the possibility of naming a five-foot shelf of architectural books. We are publishing on another page one of several replies to our request for suggestions. The list comprises twenty-two books, all valuable and worth while publications. A question comes into our minds, however, as to whether the list is a practical one. Among the books included are certain ones which, we think, are out of print. And others are so expensive that the cost of this five-foot shelf, if it were possible to duplicate it, is beyond the means of the architects that we imagine would be interesting in starting a library with this five-foot shelf as a nucleus. We would welcome more suggestions.

Speaking of libraries, we wonder how many subscribers realize what a complete library is included in the twenty-four issues of THE AMERICAN ARCHITECT published every year? Among the buildings illustrated in the various issues are houses, churches, municipal buildings, libraries, educational buildings, and so on. While we do not profess to publish all of the best material that this country produces, it is our ambition to publish photographic illustrations and scale drawings of a goodly share, and in the collection of this material, too, we ask our subscribers' assistance. We seldom devote an entire issue to one particular subject, for the reason that we feel it does not have the same general appeal to our readers that an issue covering different types of buildings possesses. Moreover, there is an element of timeliness in the selection of various subjects for publication, and to devote an entire issue to one subject or type of building is to ignore other subjects of equal timely interest. The publication that devotes an entire issue or number to one subject, partakes of the nature of a book more than it does of a magazine.

Kirkham and Parlett were the architects of the home office building of the Massachusetts Mutual Life Insurance Company in Springfield, Mass., which will be illustrated in an early issue of this journal. This excellently planned and dignified administrative building should be found of interest to many of our readers. We are informed by the architects that after the preliminary studies for the building were completed, many recently erected insurance buildings in the United States and Canada were inspected before final plans were developed. It is of interest to note that this structure has been designed for both horizontal and vertical expansion.

Our subscribers may be interested in learning that the series of working photographs selected from the collection made by Dwight James Baum, architect, will be continued indefinitely as a regular feature of this journal. The favorable comment accorded this series of illustrations leaves no doubt as to their value.

Among other interesting material that will be presented in the near future is the recently completed gymnasium at the University of Illinois designed by Charles A. Platt, architect, and James M. White, associate architect. A simple, straightforward and altogether pleasing solution of the problem is demonstrated in this structure.

The practical article by Harry F. Tapp, technologist of the American Oil Burner Association, entitled Heating the House with Oil, and presented in our Department of Engineering and Construction, issue of September 5th, was both timely and instructive. Mr. Tapp's simple, direct style removes much of the "dry as dust" aspect usually present in articles of similar character. In the current issue there appears a second article by Mr. Tapp. We are confident that it will be as well received and widely read as the first. The second article covers, in the same unbiased and easily understood text as the first, another field of oil burning for heating. Oil as a heat supplying fuel has become an important consideration in the design of heating equipment for all types of buildings. We feel that all of our readers will be well repaid for the time taken to read both of Mr. Tapp's articles. If you did not read the first contained in the issue of September 5th, may we suggest that you do so now.

Glass in building construction is used principally for the glazing of doors and windows, vault lights, skylights and ceiling lights. Glass for lighting fixtures might also be properly included in this list. In this issue the reader will find an interesting description and numerous illustrations of cast glass used as a decorative and structural product. This product, more commonly referred to as relief glass, is one developed in Europe and recently introduced into the United States. While largely used for ceilings, relief glass has many other uses that are suggested by the illustrations. Others will no doubt occur to those who read the text and carefully examine the engravings.

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DESIGN FOR AN ORNAMENTAL FRAME

FROM THE ORIGINAL IN WASH COLOR BY N. VASSILIEFF

VASSILIEFF
THE AMERICAN ARCHITECT
BOSTON 1913