

ENCIL POINTS 1936

JANUARY



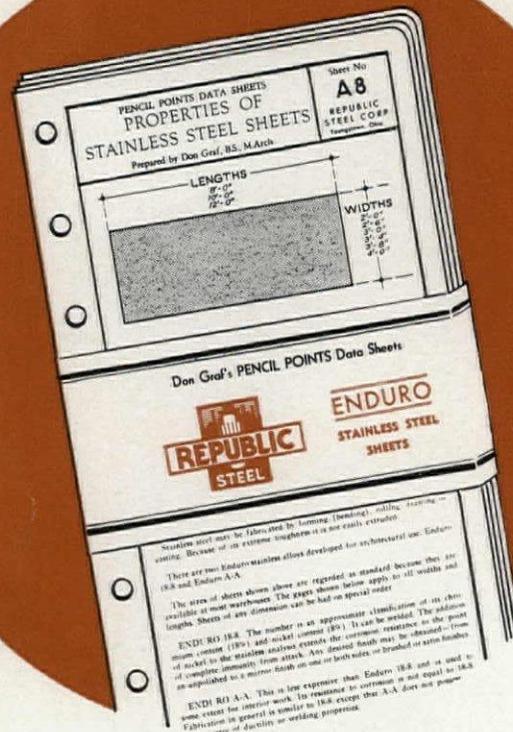
CONTAINING THE PROGRAMME FOR THE 1936
ENCIL POINTS ARCHITECTURAL COMPETITION

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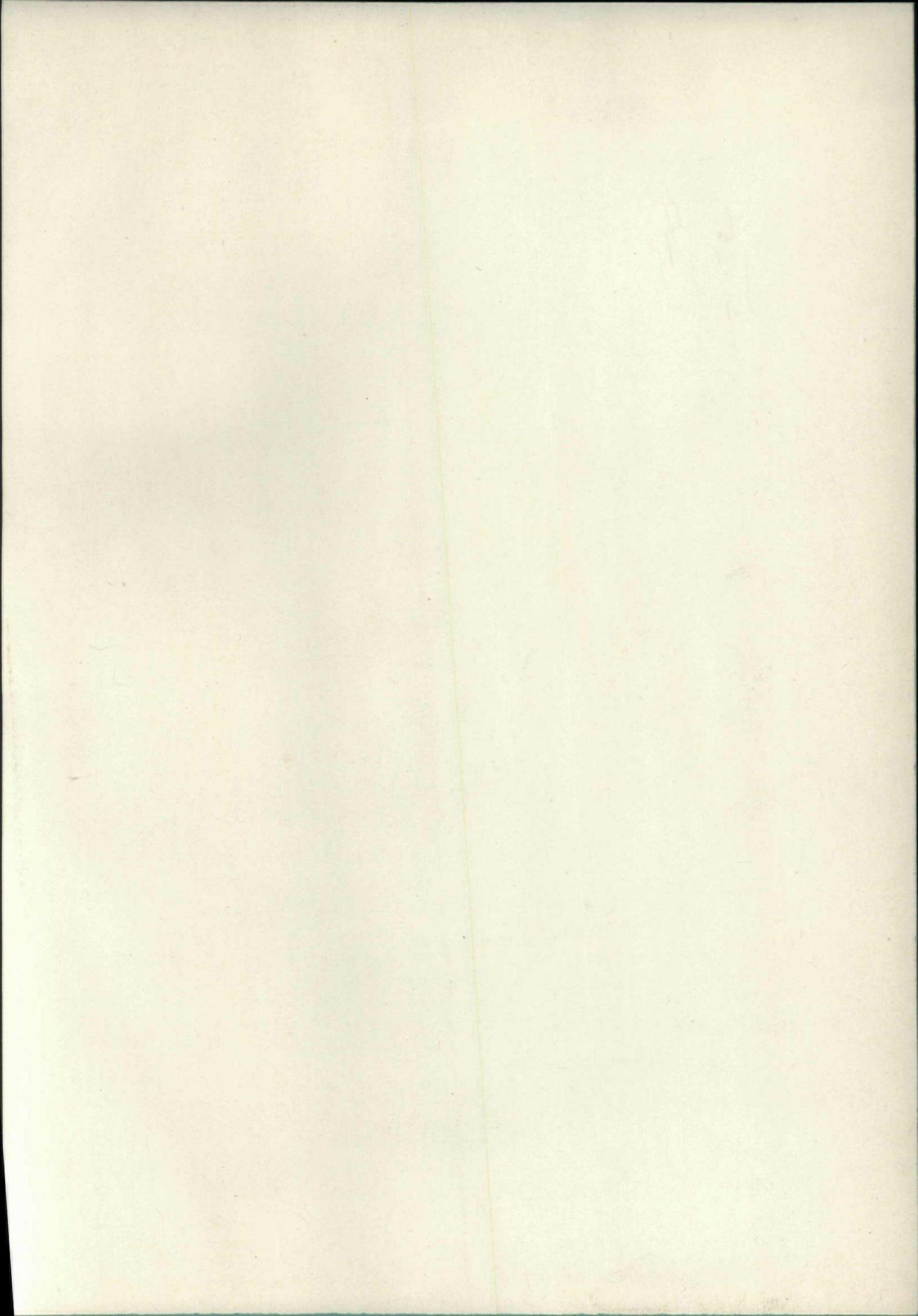
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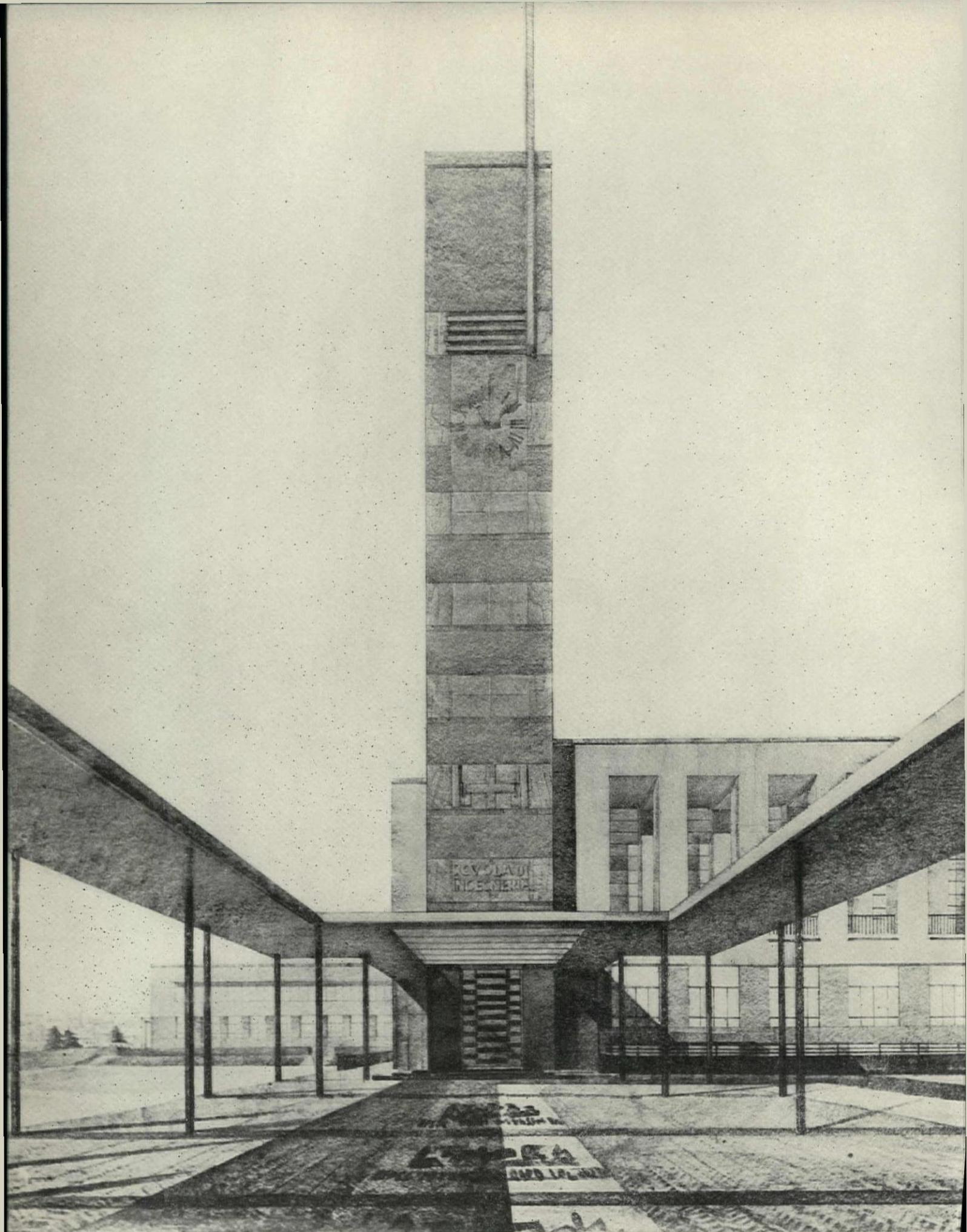
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A sketch of the School of Engineering in Bologna as it was built from the design by Giuseppe Vaccaro. On this project he tried to combine the traditional Italian mediæval tower, particularly common in Bologna, with the modern building required by the program. The result is typical of the highly individual character of present-day architecture in Italy. See the article on Vaccaro beginning on page 7

PENCIL POINTS - PORTLAND CEMENT ASSOCIATION PROGRAMME TWO SIMULTANEOUS ARCHITECTURAL COMPETITIONS

For Designs of

FIRESAFE CONCRETE HOUSES

Each not to exceed 24,000 cubic feet total cubage, including Garage

Problem "A": A HOUSE SUITABLE FOR "NORTHERN" CLIMATES

Problem "B": A HOUSE SUITABLE FOR "SOUTHERN" CLIMATES

Authorized by Reinhold Publishing Corporation
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DAVID J. WITMER, F.A.I.A., Los Angeles, California, *Associate Professional Adviser*

KENNETH REID, P.C.R., New York, *Assistant Professional Adviser*

THE AWARDS

46 Cash Prizes Totaling \$7,500.00

REINHOLD PUBLISHING CORPORATION agrees to pay the winners, immediately after the Judgment, the following Prizes in Cash:

First Prize—Problem "A"	\$1500.00
First Prize—Problem "B"	1500.00
Second Prize—Problem "A"	750.00
Second Prize—Problem "B"	750.00
Third Prize—Problem "A"	500.00
Third Prize—Problem "B"	500.00
20 Mentions—Problem "A" each \$50	1000.00
20 Mentions—Problem "B" each \$50	1000.00

The above Prizes are *net*—no further drawings will be required of any competitor as a condition of receiving an award.

ALL ARCHITECTS AND DRAFTSMEN IN CONTINENTAL U.S.A. ARE CORDIALLY INVITED TO PARTICIPATE

A competitor may submit any number of solutions for either or both Problems. All designs entered by any competitor are eligible for Prizes.

NOTE: Under a ruling by the A.I.A. Committee on Competitions, THE AMERICAN INSTITUTE OF ARCHITECTS does not oppose participancy of its Members in this Competition.

This Competition closes at 8 P. M., Standard time, Monday, March 9, 1936

THE PURPOSE OF THIS COMPETITION

THE annual architectural competitions, authorized by PENCIL POINTS, the magazine of Architecture and Draftsmanship, present an opportunity and an incentive to the members of the profession to exercise and develop their skill in solving contemporary architectural problems. By contesting with his peers, with brain and hand, the architect or the draftsman gains strength for his private practice. These competitions

are frequently the means of discovering new talent. They also furnish encouragement to those of proven ability. They offer the possibility of gaining, through the wide publicity that is given the authors of the winning designs, added professional prestige in the eyes of potential clients.

The 1936 Competition is sponsored by Portland Cement Association, "a national organization to improve and extend the uses of concrete." This Association believes that the results of this Competition will show the man in modest circumstances that the architecturally trained man can solve his small house problem from both a practical and an aesthetic point of view.

The competition provides an extra stimulus for architects to refresh their knowledge of an important building material—CONCRETE—and an opportunity for the profession to demonstrate the many, as yet unrevealed, design possibilities and advantages of Portland Cement products in house construction.

THE PROBLEMS, MANDATORY

Truman Foresight and Conrad Crete were "Buddies" in the American Expeditionary Force. "True" hailed from California and "Con" called "Down-East" his home. After the Armistice they traveled together in Europe and finally landed in New York. A firm of Certified Public Accountants gave "True" a job while "Con" worked for a general contractor, popular with architects. After several years, Foresight went South as an Accountant. He married the girl from his home town on the Pacific Coast and now has two children, a boy seven and a girl four years old. Crete became a Quantity Surveyor for his firm, which operated throughout the Northern Section of the United States. He continued his friendship with True Foresight, and it so happens he has kept pace with him in the matter of a family. "True," in his letters to "Con," has urged the sound economics of home ownership, while "Con," from his knowledge of the value of an architect's services, has insisted that when the time arrived to build "True" should commission an architect to design his home.

Each man, urged by his "better-half," has now decided to build a small concrete house in a suburb of the town in which he has been "doubling-up" during the 1930-35 depression. Each has his eye on several lots and the funds to pay for the one most suitable for his needs. Both families explain their problems to an architect, remarking that they are not prejudiced either for or against any particular architectural style. They want a smart looking, substantial, up-to-the-minute house, designed for comfortable, convenient, and healthy living.

"Con" and "True" have discussed FHA insured loans with their local lending agencies and are convinced that they can finance the kind of homes they wish to build and be in full possession of them at the end of twenty years by paying regular monthly installments. The lending institutions are happy to do business with these borrowers, for their plans show houses built of concrete. They know they will be permanent, firesafe, proof from the ravages of termites, and that well designed houses of this character are a sound investment. "True" and "Con" realize that cheap first cost does not assure low operating and maintenance costs. Looking ahead in point of time, all parties

to the transactions insist upon sound construction, using stock sizes insofar as possible, so that after years of use the houses will remain as valuable to new owners, should the occasion to sell arise, as they were when first built.

Both clients are confident they will soon be able to purchase small automobiles and want to provide for garages. They express no preference about location on the lot, leaving it to the ingenuity of the designers to provide connection with the houses which will afford protection in inclement weather.

The space requirements of both families are practically the same. They do not think, positively, in terms of the number of rooms and the necessary circulations and accessories and their arrangement. They insist that the children be provided with adequate sleeping quarters and a place to play indoors, when occasion demands. Rooms serving more than one major purpose would not be frowned upon, if planned for such specific uses. Both clients know the importance of having places "to put things," for both run their households without full-time servants.

Mr. Foresight's problem ("B") differs from Mr. Crete's problem ("A") only in that his house is to be built in a section of the country where the so-called "Southern" climate prevails, while Mr. Crete's must take into consideration the average "Northern" temperatures and precipitation of rain and snow.

Several level, inside, rectangular lots, each 50 feet front by 150 feet deep, facing various points of the compass, are available to each of the clients. The orientation of the houses, therefore, may be established by the contestant. It must be made clear to the clients on the drawings which lot should be purchased for the proper development of the project. In all cases, no building can be placed closer than five feet to the side and rear lot lines.

CONSIDERATIONS OF THE JURY OF AWARD:

1. The architectural merit of the design and the ingenuity shown in the development of the plans to fit the requirements of the Problem.
2. The adaptability of the design to the materials of construction.
3. Practicability and economy of construction.

4. The value of the house as an investment during a twenty-year amortization period.

Excellence of delineation, while desirable, will not have undue weight with the Jury as compared with the above considerations.

COMPUTATION OF TOTAL CUBAGE: Mandatory. The cubage shall be the entire cubic space enclosed within the outer surfaces of the outside or enclosing walls and contained between the outer main surface of the roof and a plane six inches below the finished surfaces of the lowest floors. Garage, penthouses, enclosed porches and porches within the bearing walls and other enclosed appendages are to be included as part of the cube of the building. Any permanently roofed porches or terraces outside the bearing walls shall be computed at one-fourth their gross cubage, measured from outside face of wall, outside face of columns or posts, finished floor, and finished roof.

Designs found, upon checking, to exceed 24,000 cubic feet total cubage, including the garage, will not be considered.

PRESENTATION DRAWINGS: Mandatory. The drawings shall be made in full black ink and shown on one sheet of opaque white paper trimmed to exactly 26" x 36". Single border lines are to be drawn so that space inside them will be exactly 25" x 35". Diluted ink, color, or wash; cardboard, thin paper, or mounted paper is prohibited. The sheet shall be composed with its long dimension vertical.

The following drawings are required:

- ✓ **1. Perspective** of the house, rendered in pen-and-ink, clearly indicating the character of the exterior finish and the surrounding landscape. Heights are to be measured on the corner of the building nearest the spectator at scale of $\frac{1}{4}"$ equals 1'-0".
- ✓ **2. Plans** of each floor, at scale of $\frac{1}{4}"$ equals 1'-0". When portions of the basement or roof form a part of the living quarters, the corresponding plan or plans shall be shown at scale of $\frac{1}{8}"$ equals 1'-0". The use of each room or space must be indicated and the dimensions clearly set out in numerals. The walls and partitions are to be solid black. Lettering must be large enough to be easily read when original drawing is reduced to one-quarter size.
- ✓ **3. Elevations**, at scale of $\frac{1}{8}"$ equals 1'-0", of the two façades not shown by the rendered perspective.
- ✓ **4. Details**, at scale of $\frac{3}{4}"$ equals 1'-0", of Wall, Floor, and Roof Sections. Bearing walls shall be of reinforced concrete, concrete masonry or any other practical concrete system. *Non-Bearing Partitions* shall have a fire resistance rating of at least one hour. *Sub-Floors* of either reinforced concrete or precast concrete joists with concrete slabs or a combination of these. The type of floor covering or finish is optional with the contestant. *Roof* of any approved concrete construction or if pitched the roof may be built of frame construction covered with fire resistant material carrying Class A label of the Underwriters Laboratories. *Exterior Finish*, the concrete may be left untreated or given any finish which the contestant may select. If painted or stuccoed, should be painted with portland cement paint or stuccoed with portland cement stucco.
- ✓ **5. Plot Plan**, at small scale, showing location of house and garage on the lot and suggesting the development of the property to add to the completeness and attractiveness of the design.
- 6. Cubage Diagrams:** (1) A small, clearly drawn, dimensioned Section. (2) Single line *Plan Diagrams*. (3) A *Tabulated Schedule*, in a space not to exceed 4" x 2" surrounded by single border lines, showing the calculations of the total cubage figures.
- ✓ **7. The drawing** shall bear the title, *Design For a Fire-safe Concrete House* with a sub-title, *Pencil Points-Portland Cement Association Architectural Competition*, and shall be signed by a *nom de plume* or device. Immediately below the *nom de plume* or device

must be the indication of the Problem of the Competition in which the design is submitted, as Problem "A" or Problem "B."

COMMUNICATIONS: Mandatory. As this is an open competition, no queries will be answered. The contestants shall not communicate on the subject of this competition with either the Professional Advisers or any member of the Jury or any other person in any way connected with the Jury except anonymously and in writing.

ANONYMITY OF DRAWINGS: Mandatory. The drawings submitted shall contain no identifying mark other than the *nom de plume* or device. No competitor shall directly or indirectly reveal his or her identity to the Professional Advisers or to any member of the Jury of Award. With each drawing there must be enclosed a plain, opaque, sealed envelope containing the true name and complete address of the contestant. The *nom de plume* of the contestant shall be placed on the outside of the envelope. The envelope will be opened by the Professional Adviser in the presence of the Jury only after all the awards have been made.

DELIVERY OF DRAWINGS: Mandatory. The drawings shall be securely wrapped, in a strong tube, not less than 2½" in diameter, or flat and addressed to Russell F. Whitehead, Professional Adviser, PENCIL POINTS-Portland Cement Association Competition, 330 West 42nd St., New York, N. Y. Contestants sending drawings by registered mail or by express must obliterate the return name or name on express label and must not demand return receipt.

Drawings shall be delivered to PENCIL POINTS office—330 West 42nd Street, New York, or placed in the hands of the post office or express companies not later than 3 P. M., Standard time, Monday, March 9th, 1936. The receipt stamp will serve as evidence of delivery. Drawings will be accepted at any time before the close of the competition. They will be fully insured from the hour of their receipt.

Drawings submitted in this competition are at the competitor's risk. Reasonable care will be exercised, however, in their handling, safekeeping, and packaging for return.

EXAMINATION OF DESIGNS: The Professional Adviser will examine the designs and records of their receipt to ascertain whether they comply with the mandatory requirements of this Program. The Jury will place out of the competition and make no awards to any design not complying with mandatory requirements.

The Professional Adviser alone will have access to the drawings until they are placed before the Jury of Award. No drawing, whenever received, will be shown or made public until after the Awards by the Jury.

ANNOUNCEMENT OF THE AWARDS: The Professional Adviser will send, by mail, to each competitor, the names of the winners of the Prizes and Mentions as soon as possible after the awards have been made and the envelopes have been opened. The announcement will be published in the April, 1936, issue of PENCIL POINTS. Requests for this information by telephone and telegraph will not be answered.

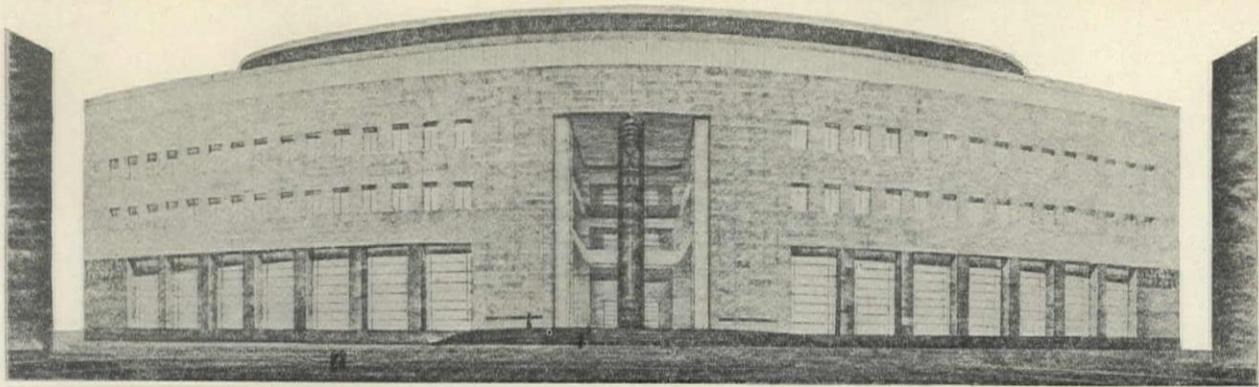
REPORT OF THE JURY: The winning designs and a full report, stating the reasons for the awards and offering helpful criticism and comment upon designs not premiated, will be published in PENCIL POINTS. A copy of the Report will be sent to each competitor. Meritorious designs, selected by the Jury, will also be published in subsequent issues of PENCIL POINTS.

THE PRIZE DESIGNS: The designs awarded Prizes and Mentions are to become the property of PENCIL POINTS. The right is reserved by the Publishers and by the Sponsors to exhibit or to publish any or all of the designs premiated or non-premiated. In every case where a competitor's design is shown it will be clearly and fully identified as his or her work.

RETURN OF DRAWINGS: Non-premiated designs which are not reserved for exhibition or publication will be returned to the competitors within a reasonable time, postage and \$50.00 insurance prepaid.

NOTICE TO COMPETITORS

ANY Architect or Draftsman who has any difficulty in securing a sheet of paper of the size called for by the mandatory requirements of the foregoing programme will be provided by PENCIL POINTS with a sheet of Whatman's or some similar brand of paper Hot Pressed, Double Elephant size, for fifty cents. This price includes the paper, shipped prepaid, in a tube suitable for remailing the finished design. Address your remittance to PENCIL POINTS, 330 West 42nd Street, New York.



ARCHITECTS OF EUROPE TODAY

8—*Giuseppe Vaccaro, Italy*

By GEORGE NELSON

WHILE present-day developments in architecture in most European countries are along lines closely related, the movement in Italy differs so greatly in many of its essentials that it might be well to take some note of them before going on to consider one of its exponents.

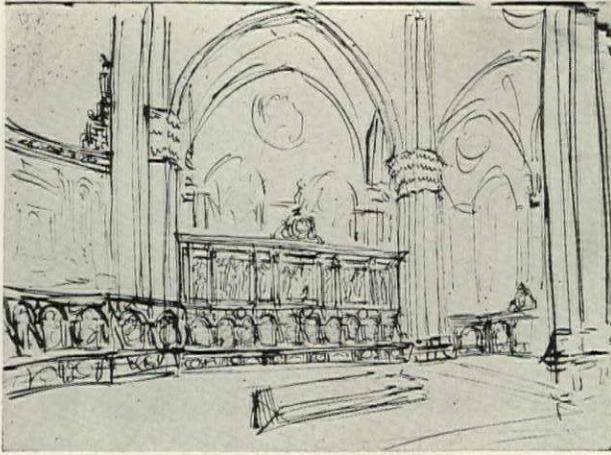
Unlike the post-war movement in Germany, which was due to an enormous economic pressure, combined with a popular determination to make a clean break with forms reminiscent of a distasteful past, the Italian attempts to solve the æsthetic problems raised by new and radically different methods of construction are comparatively recent and due in large part to one man. It is true that before the war there were architects like Sant'Elia whose forecasts were startlingly accurate, but whose influence at that time was practically nil. Also the various factors in operation throughout the world have combined to make a break with old forms imminent. But it was not until Mussolini put his official stamp of approval on the so-called new style that it made any progress worthy of the name. He may or may not have acted from æsthetic convictions, but the fact remains that it was an excellent political move. Augustus, by calling attention to the great improvement he had made in the appearance of a Rome he had found built of brick, got much good advertising for his regime, and the wily Duce is following in his footsteps. That Mussolini will leave his Rome in red stucco instead of marble is beside the point, and whatever its color, the new style fits admirably into the program of his party and goes well with his highly advertised predilection for youth. And at the present moment, since the only game in favor is "follow the

leader" one finds even the virtuosi of the old school having a try at the style so arbitrarily decided upon.

Obviously there are certain difficulties; a new style of architecture cannot be created out of whole cloth, regardless of how well it suits party aspirations, and we find Italy following the only course indicated in such a situation: it looked around to see what its neighbors were doing. A bit of German influence, a spot of Scandinavian, a large dose of Le Corbusier, all modified by the Italian sun, a lack of comprehension of the structural meaning of the new forms, and a constitutional inability to forget their beloved Barocco, and you have a new style under way. A parallel between this process and what went on a few centuries ago when Gothic was imported with the same lack of understanding of its essential characteristics is rather striking. Today a new element complicates matters. The dangerously intense spirit of nationalism which is sweeping Europe has nowhere reached a higher pitch than in Italy, and architecture has not been spared. Yesterday, perhaps, it was clever to borrow a trick from Holland, let us say, to help solve a difficult corner—today it is high treason. All corners must be Italian,



A church, designed and drawn by Vaccaro when he was nine years of age, demonstrating his truly remarkable precocity



This boldly handled pen and ink sketch of an imaginary interior was made by Giuseppe Vaccaro at the age of fifteen Fascist if possible. Another thing: Italy, alone among European countries, is doing a vast amount of monumental building. Now it is one thing to do a commercial or industrial job: the practical aspects are so compelling that often a thorough understanding of them is the solution. The building that is also a monument presents problems infinitely more difficult, especially at just this time, and here we find the greatest interest and strongest individuality of modern Italian architecture.

In such a situation as the one described there is a good bit of confusion, inevitably. The architect

must work in an imperfectly developed style; his problems are not unlike those of other countries, but his solutions must be different. Particularly in the monumental work, where he is guided less by necessities of plan and construction than by a desire to do something distinctive and arresting, it is small wonder that he has produced buildings more remarkable for their fantastic qualities than anything else. The work of Vaccaro is especially interesting at the present time because in it one can find the best characteristics of contemporary Italian architecture in their clearest form. Moreover, he is fortunate in being old enough to have been through first years of change but is still young enough to have his sympathies definitely with the new order.

He is fortunate in many ways, this man. He has an inexhaustible fund of energy, which during our interviews kept him restlessly pacing up and down while he expressed his ideas in a rapid-fire Italian, each word of which landed with the impact of a bullet. And he has considerable personal charm and a frank manner which inspires confidence. He is the only man I have ever met who decided upon architecture as a career before going through the stages of wanting to be a sailor, fireman, or painter. By the age of six his mind was apparently made up once and for all. He began to draw at a phenomenally early age, but the most remarkable thing about these early efforts is that they con-



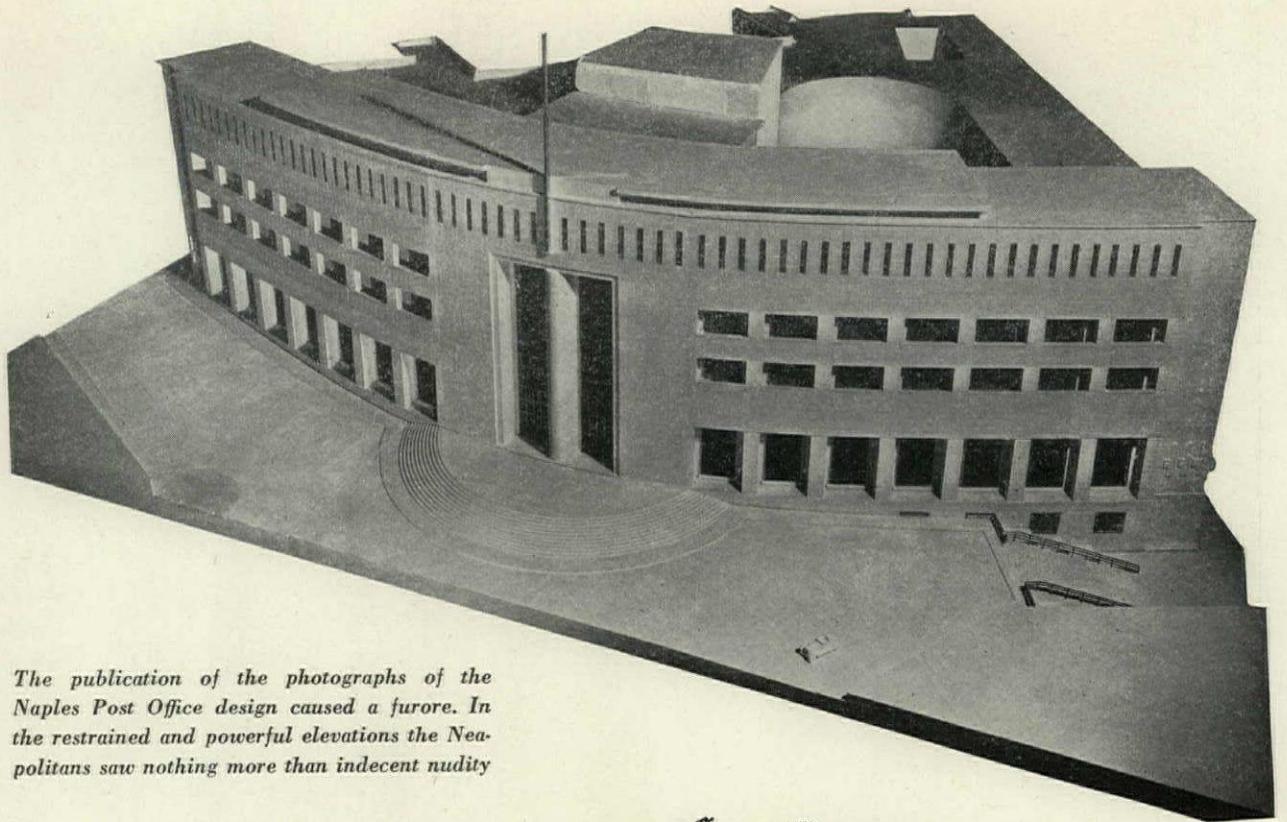
The Ministry of Corporations in Rome, first of the "modern" Italian government buildings



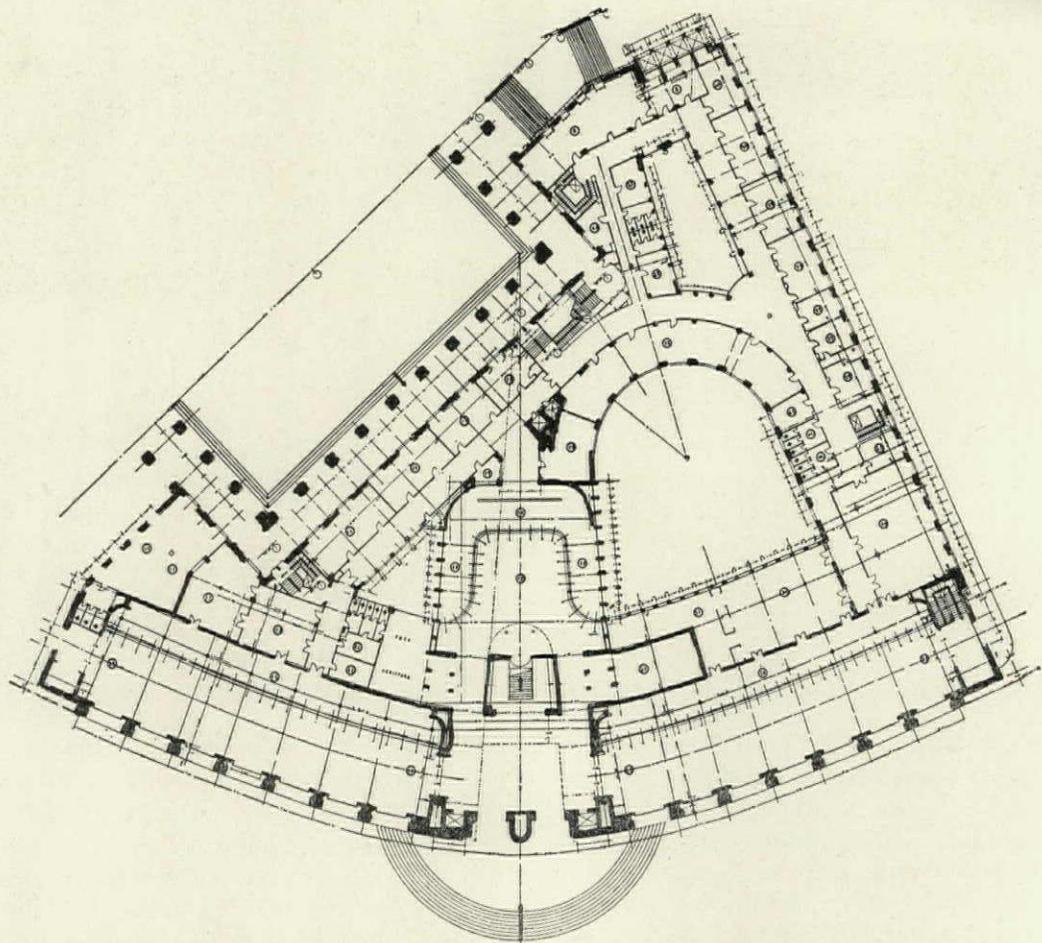
Model for the Naples Post Office. The curious split entrance is a typical example of the persistent use of the Fascist symbol in new Italian government architecture

cerned themselves with buildings, not the more dramatic objects that ordinarily engage a child's attention. He made huge quantities of sketches. The prevailing taste at the time was atrocious, but there was no excess of ornamentation, no multiplicity of parts that was too much for this boy. He showed me many of these sketches over which we

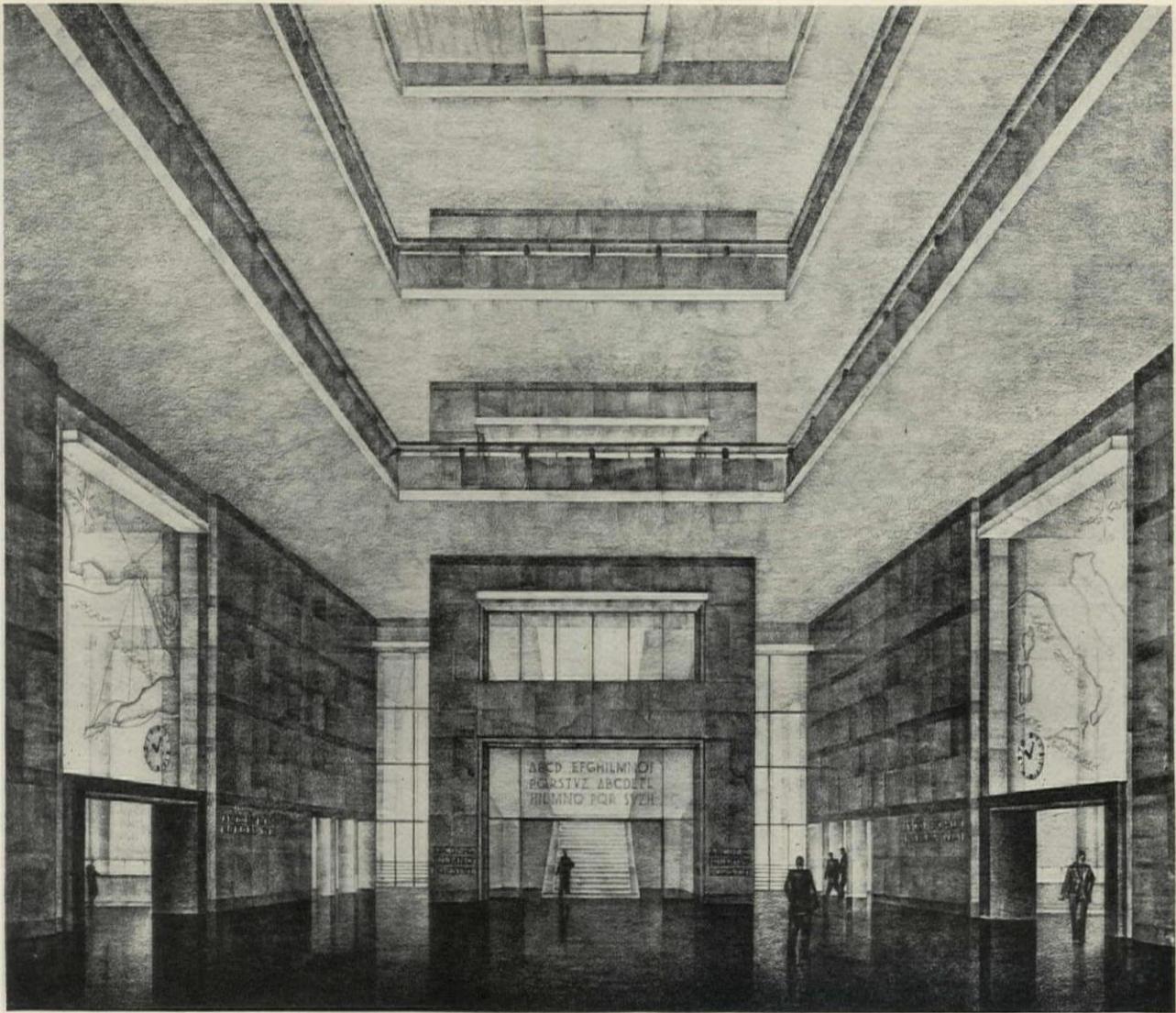
both laughed, but there was nothing laughable in the power of draftsmanship displayed. None were in elevation; he seems to have felt the building as a three-dimensional form and drew it that way. In due course of time he entered the school of engineering at Bologna, found that his mountain of sketches had given him more than his courses in



The publication of the photographs of the Naples Post Office design caused a furor. In the restrained and powerful elevations the Neapolitans saw nothing more than indecent nudity



The plan, with its interior court and large open stair hall, is definitely old-style. It was only in the Engineering School in Bologna that Vaccaro broke away from the typically academic plan and designed a building that was modern in conception as well as exterior treatment



Vaccaro's rendering of the main lobby interior for his Naples Post Office

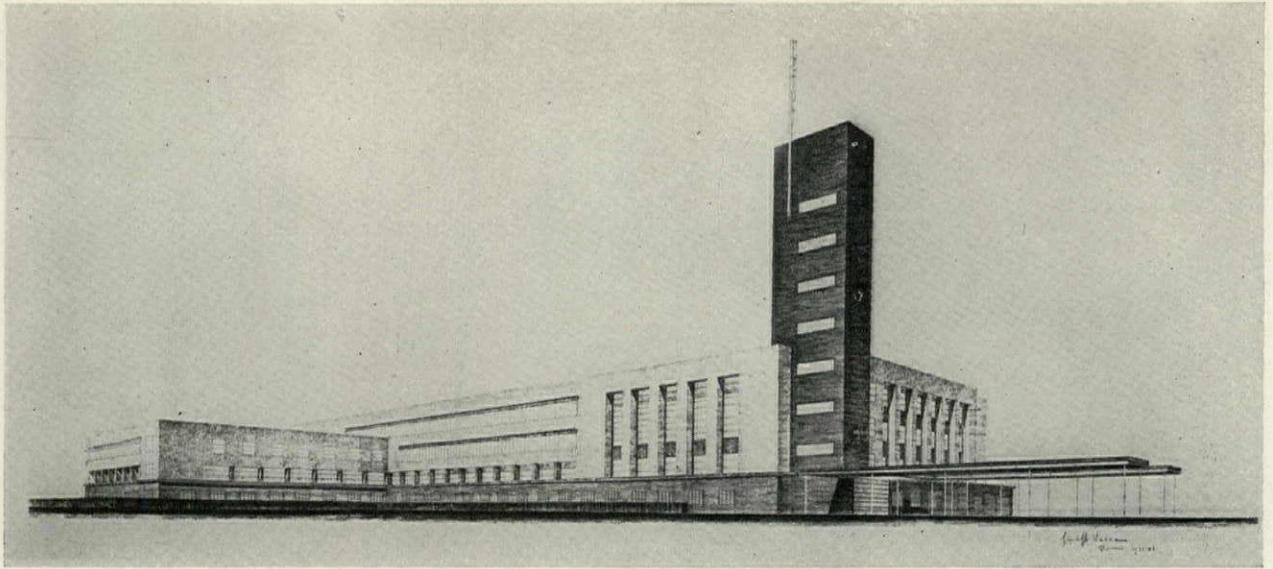
design could, and he concentrated on acquiring an excellent technical background. He did very well indeed, and in 1921, the year after his graduation, he was back on the faculty. A year of this was enough. Teaching was no job for an ambitious young man, and he hurried down to Rome. There, with the sure instinct of the man predestined to success, he entered the office of Marcello Piacentini, later official architect for the government. Here again he stayed only a year. He had gone in to learn how an office functions; he learned, left, and opened one of his own. Five years later he and Piacentini were collaborators on the great building for the Ministry of Corporations in Rome.

Such a rise would be considered rapid anywhere. In Italy it was meteoric.

The path of the young Italian architect starting out on his own is rather definitely marked. Private commissions are scarce and, in any event, go to the older men. So, unless a beginner has phenomenal luck and exceedingly influential backing, his only course is to try to get one of the numerous govern-

ment commissions which are given out on a competition basis. It is not easy. Added to the normal difficulties of competitions there is the fact that many of them are anything but straight. But a young man with nothing to lose can take the chance, and if he gets one or two of the unimportant ones he begins to acquire a certain prestige which will help him in the larger ones. This was the course Vaccaro followed. The first year out he won a small competition for the redesigning of a piazza in Rome. The next year it was a war memorial in his native city, Bologna. In 1926 he was taken in by some older men to compete for the Palace of the League of Nations. They won a first prize. In 1927 he was judged co-winner with Piacentini of the competition for the Corporations building in Rome.

This building underwent some rather curious changes which show in a particularly illuminating fashion how buildings sometimes reach their final form in a country where speed is not of prime importance. The winning design was liberally

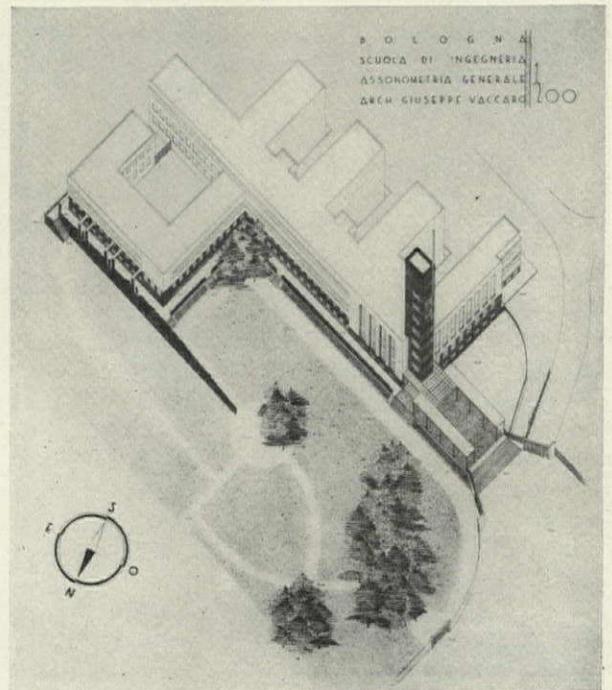
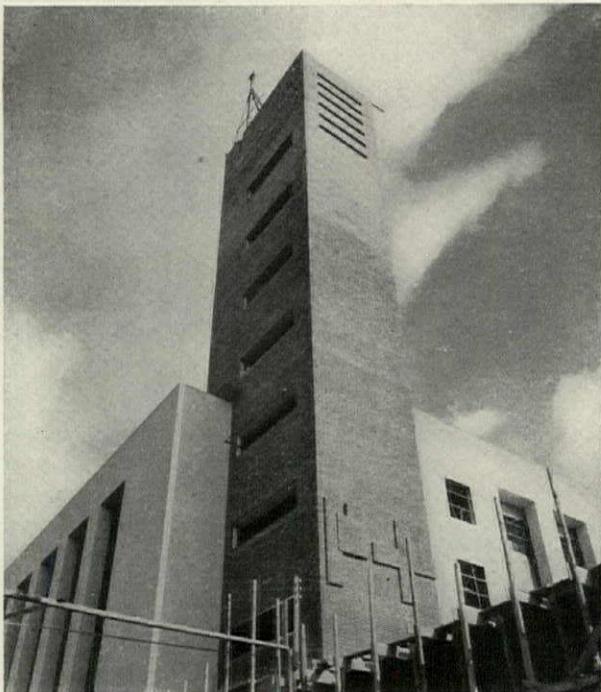


Final perspective drawing of the School of Engineering in Bologna

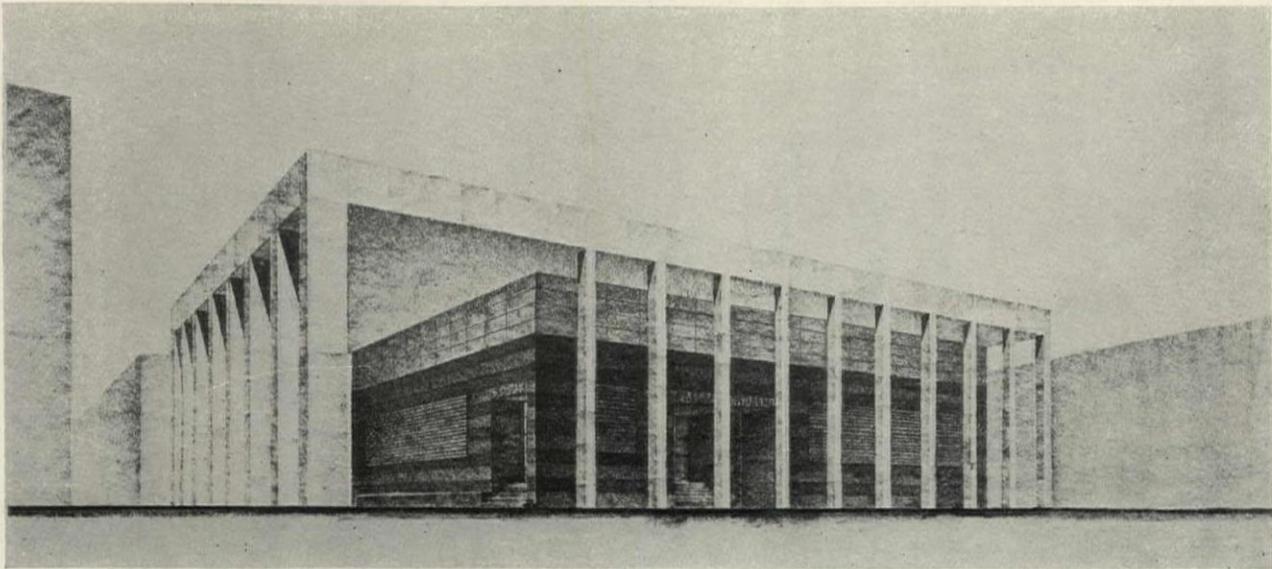
sprinkled with the various architectural accessories considered so necessary by juries at the time. The finished building, on the other hand, is of striking simplicity. Most of the changes in the design were made after the concrete framework was up. For example, the main façade, a long curved affair, consisted originally of a series of fairly gaudy arches, while the framework was a pier and lintel construction. Vaccaro, while on the job one day, was so struck by the power of the naked forms that he had the useless arches eliminated, much to the improvement of the building, and

once started, other similar changes followed. It was a good lesson—since then he has designed no hung arches.

His last successful competition, the large new Post Office for Naples, is his biggest job up to date. Once again, knowing his jury, he turned in a design that satisfied the more than slightly decadent Neapolitan tastes, scrapped it as soon as he won. On publication of the final drawings the howl of surprise and rage that went up from the startled citizenry turned into a storm of protest so overwhelming that he was completely stopped. He cut



The tower is the only traditional motive in the design. In its plan particularly the Engineering School is a definite departure from the accepted Italian forms. Refer to the frontispiece for a closer view



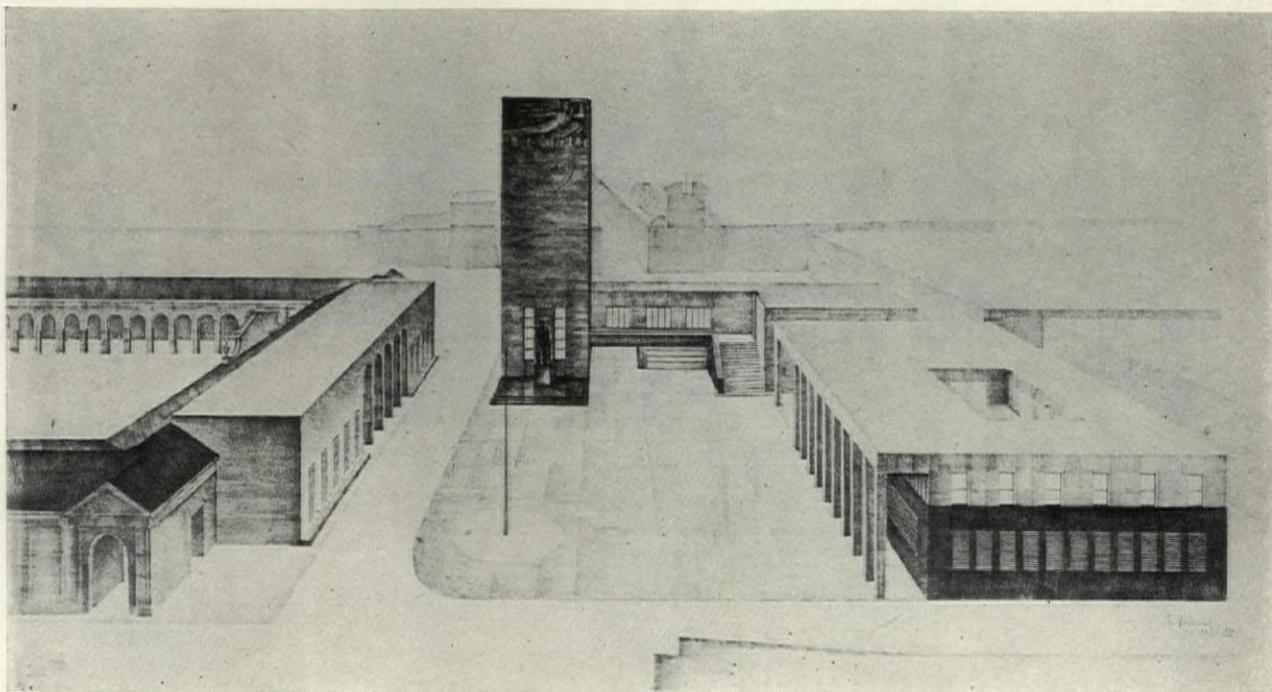
The Savings Bank, a portion of the winning design for a new town center in Lugo

through the opposition characteristically enough.

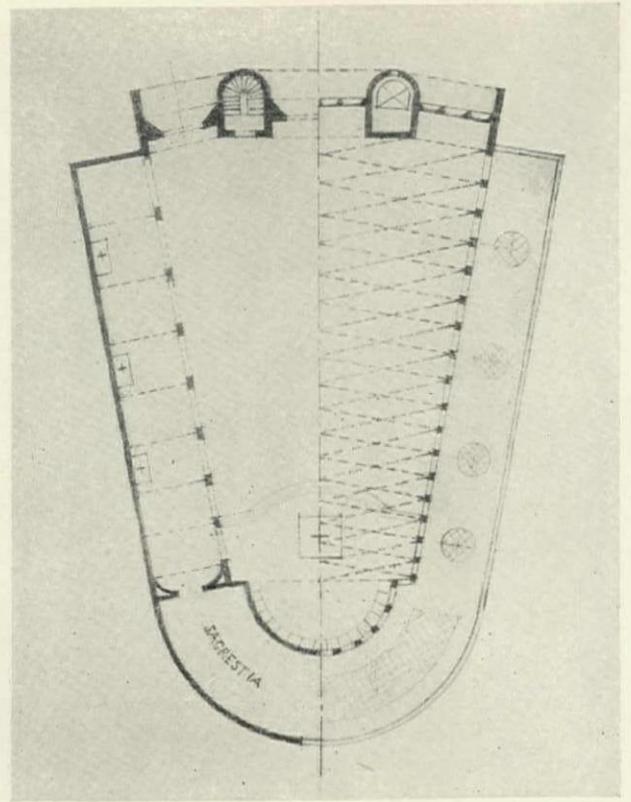
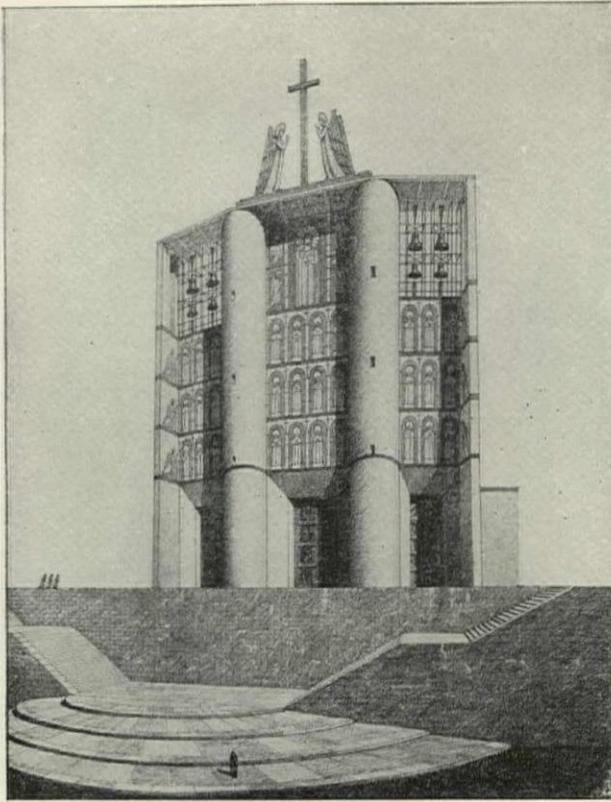
"I asked for an interview with the Duce, and it was granted," he said. "I brought the old designs and the new ones. He instantly grasped the situation. A post office is not a monument, primarily; it is a highly complicated mechanism. It can't be hidden behind a fake palace façade." Going to the head of the government to settle the dispute may seem odd to citizens of a country noted for indifference in such matters, but it wasn't the first time Mussolini had intervened, and he showed great interest. Perhaps it was the opportunity to

play the benevolent despot, giving the misguided Neapolitans what was good for them instead of what they wanted. Perhaps he liked the respectful but vigorous arguments of the young architect. Or it might have been the building. In any event, his decision was definite and rapid. "Go ahead," he said. "The Neapolitans will like it!"

Other jobs now began to come by themselves. Bologna gave him the new School of Engineering to do. Showing a strong influence from the north, it nevertheless fits its surroundings very well. The loose open plan was adopted to save the trees on



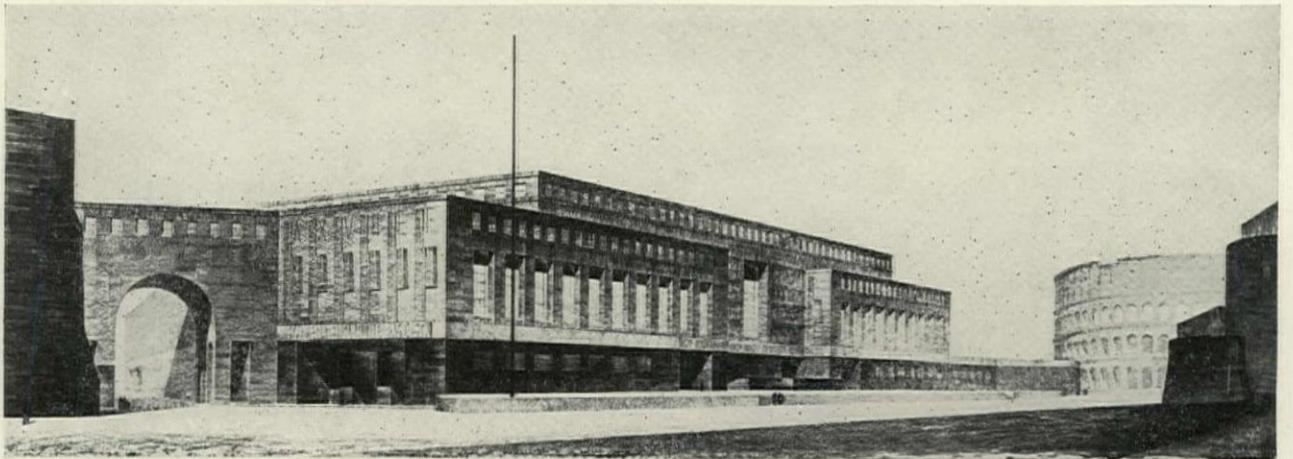
A view of the square, Lugo. In the center is the usual memorial tower and speaker's stand, with Fascist headquarters behind it. The bank, with its row of windows under the loggia, shows the effect of climate



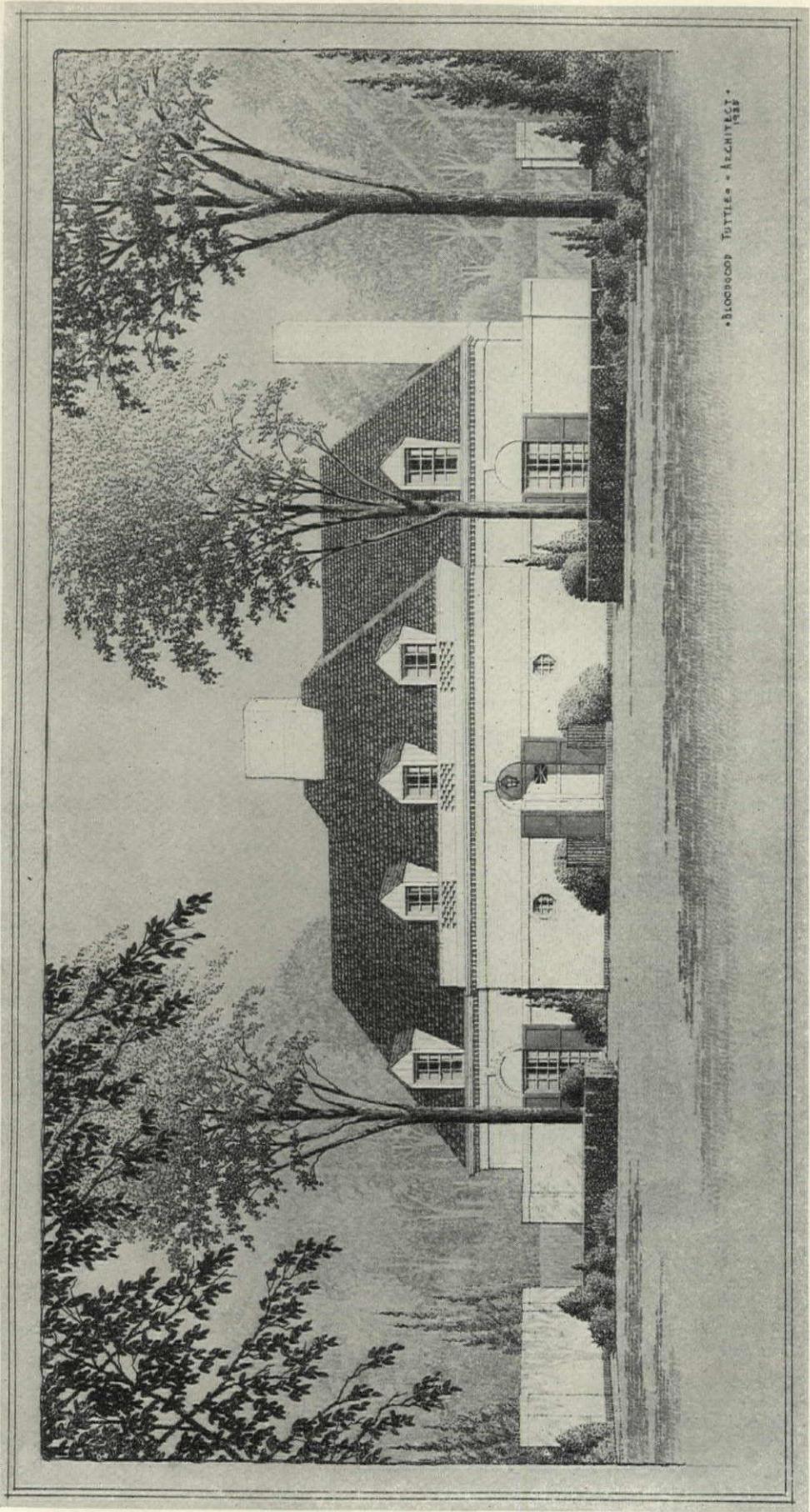
Design for a reinforced concrete church. Interesting technically, it is not in Vaccaro's best manner

the site, and the tower is not out of place among the magnificent towers that have come down from the middle ages. Of late he has been working on small houses, trying to develop a simple and cheap fireproof construction. His latest and most ambitious attempt is the competition for the Palazzo del Littorio, a huge building set down in the Roman Forum, destined to become the center of Fascist activities. A typical gesture on the part of the Duce, who likes to visualize himself as a true descendant of the Caesars, it is one whose wisdom is dubious. Questions of appropriateness aside, how-

ever, it is the greatest of a series of important competitions, and Vaccaro's sound, unsensational design was selected as one of the fourteen permitted to enter the final competition. There is no predicting the outcome, even whether the thing will ever be built or not—Italy has plenty to worry about besides monuments at the moment—and whether Vaccaro's personal influence and increasing prestige will have sufficient weight against his more experienced opponents is questionable, but in any case, one may be sure that his project will have few superiors in directness, dignity, and strength.

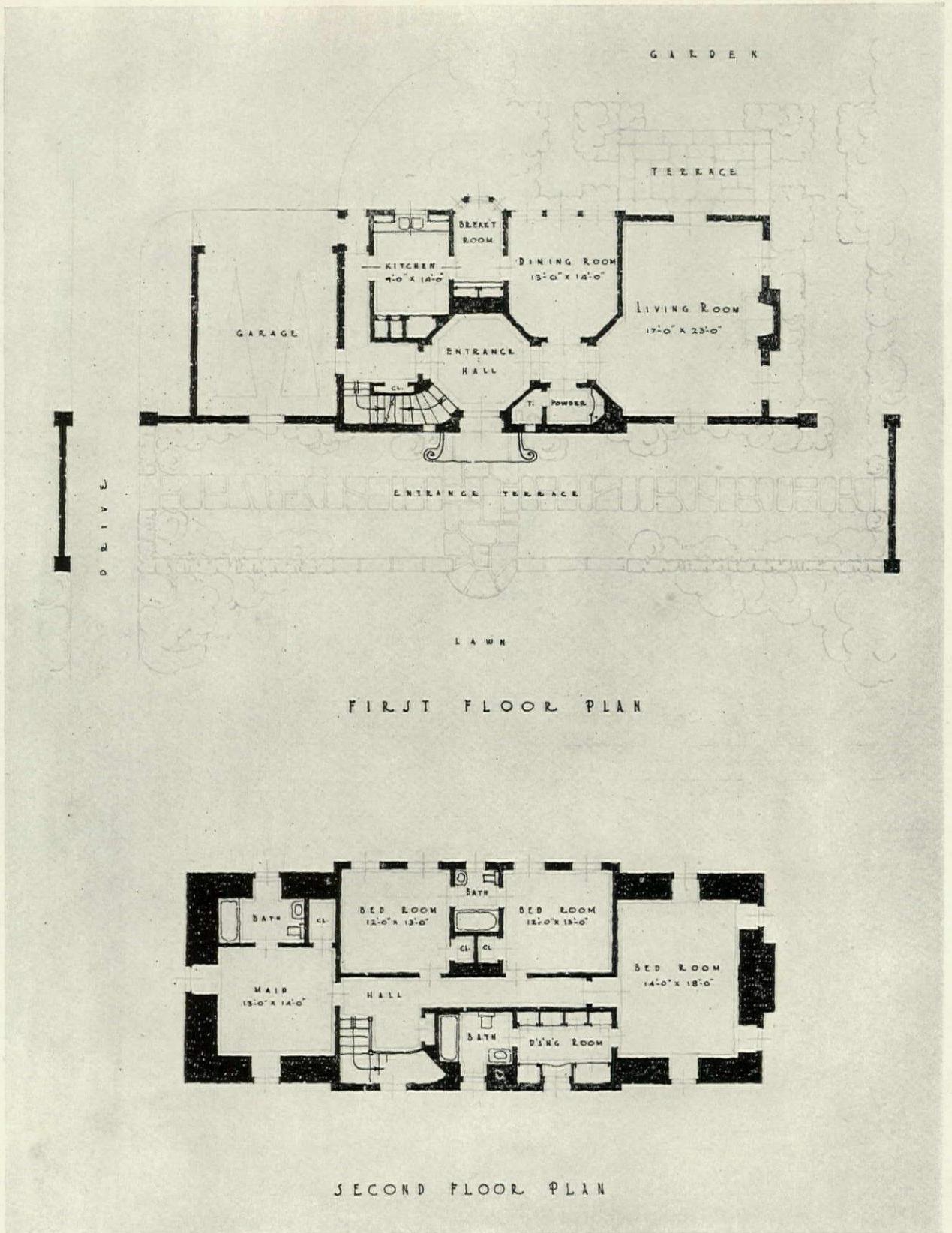


Perspective sketch by Vaccaro of his competition design for the Palazzo del Littorio in Rome. More severe and formal than most designs submitted, its author was selected as one of the fourteen finalists



BLOODGOOD TUTTLE • ARCHITECT •
1883

A residence designed and rendered by Bloodgood Tuttle, Architect. Drawn on a sheet of light gray David Cox water color paper with pen and ink, water color, colored pencils, and crayons. Opaque white used for indication of painted brick façade, walls, and chimneys. Original, 28" x 15"



Plans of house shown on reverse of this page. Bloodgood Tuttle, Architect

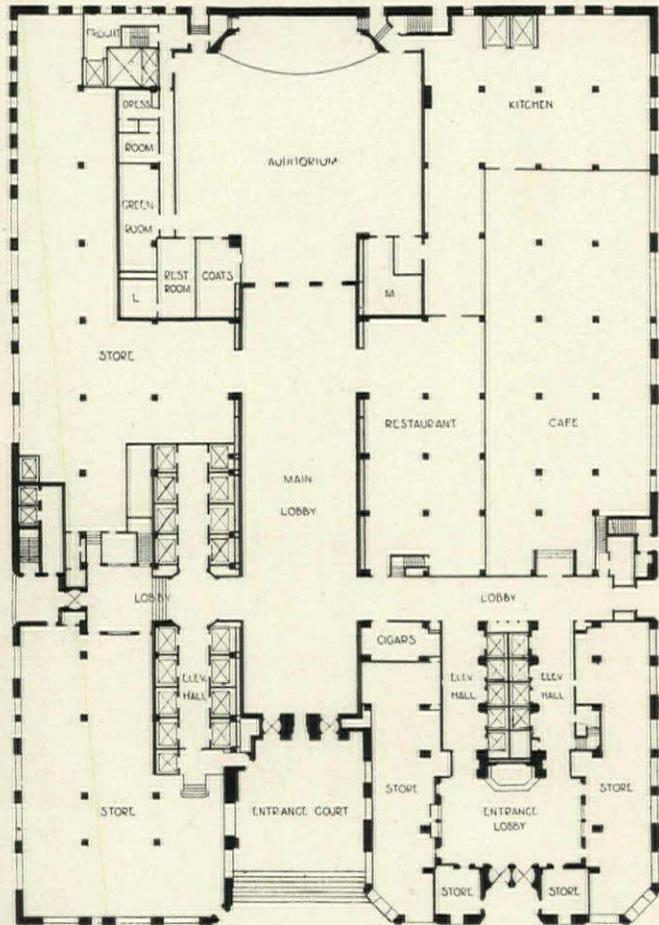
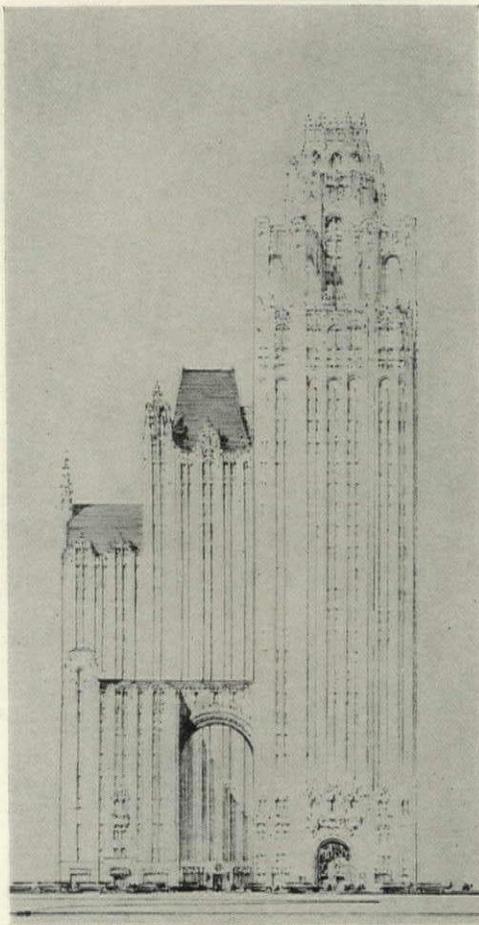
ADDITION TO TRIBUNE TOWER

WGN Broadcasting Station is Base for Future Building

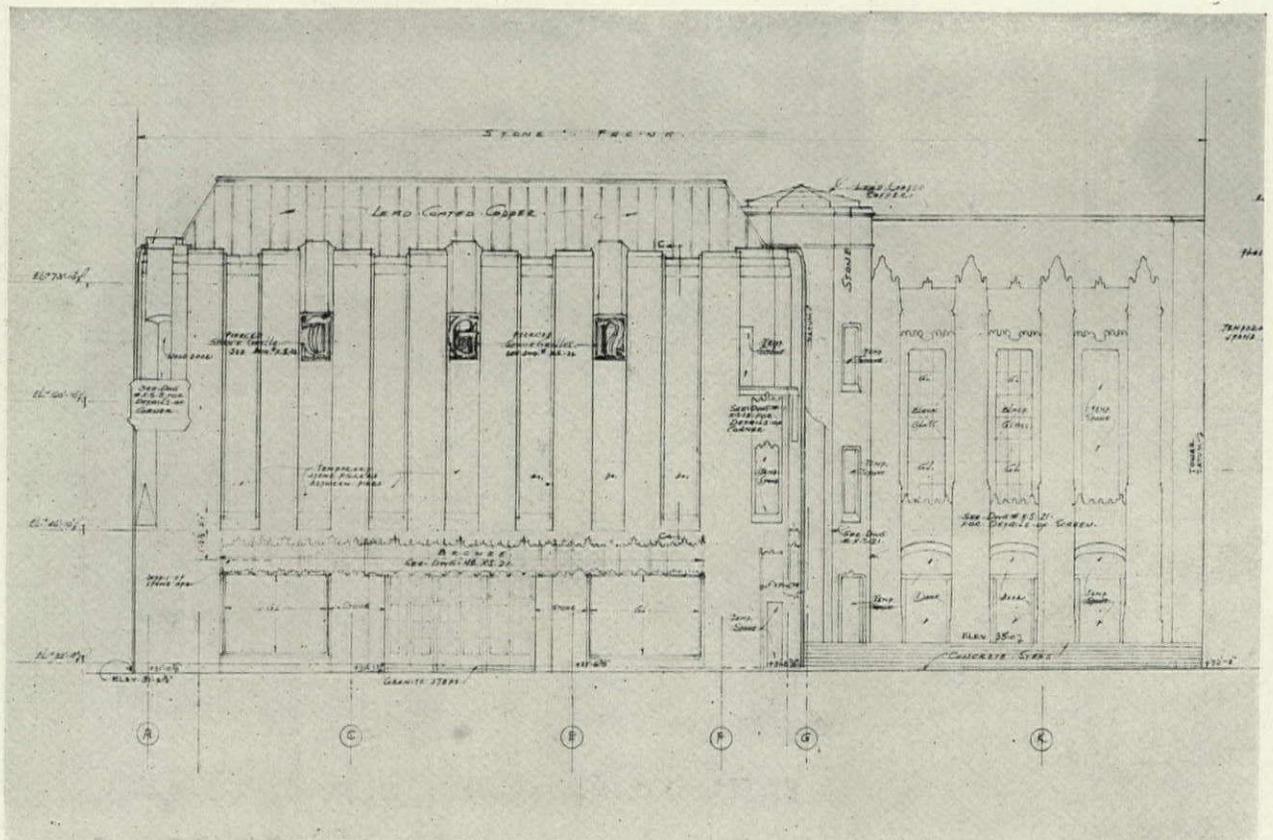
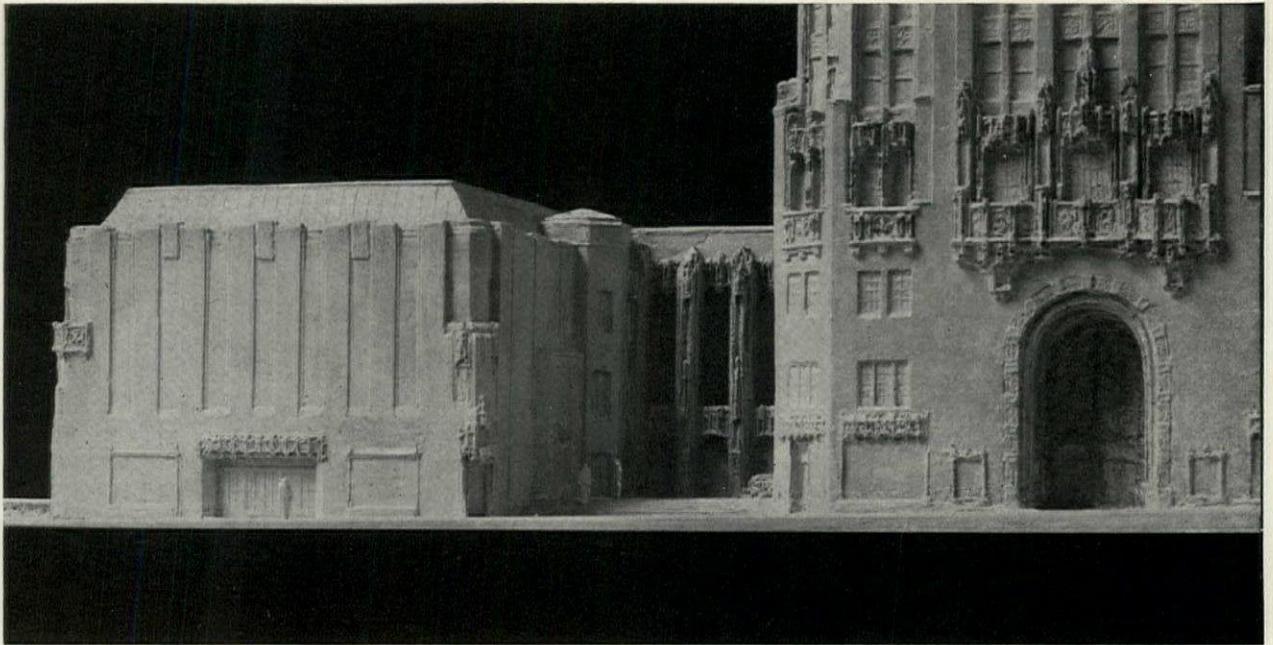
ON this and the following pages are presented a group of drawings and models showing the Broadcasting Station for WGN for which John Mead Howells and Hood & Fouilhoux were the Architects, assisted by Leo J. Weissenborn, Chicago Associate; also some of the details of the seventeenth-story office building which is eventually to develop

from the three-story Broadcasting Studio to complete the proposed North Addition to the Tribune Tower. The building occupies the northwest corner of the property of the Chicago Tribune and is connected to the tower by a linking structure treated as an architectural screen. The link has a reception room for the studio on the ground floor, a women artists' room on the second floor, and a house musicians' room on the third floor. The Broadcasting Studio is built over the press room of the newspaper and is consequently carefully insulated against vibration and sound.

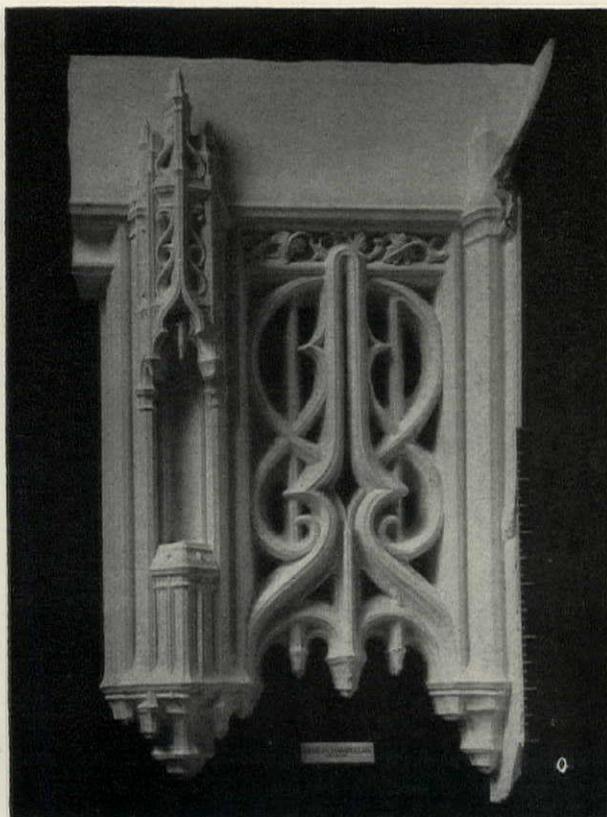
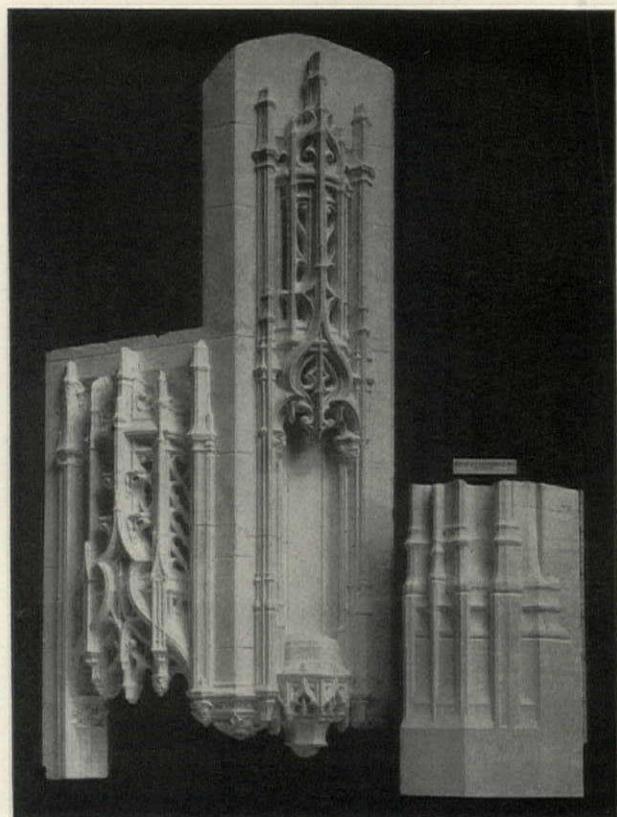
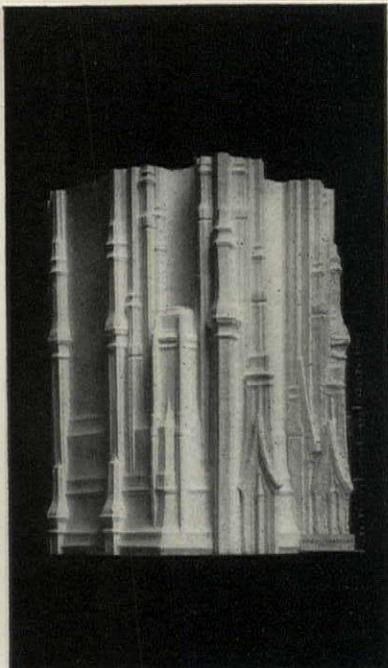
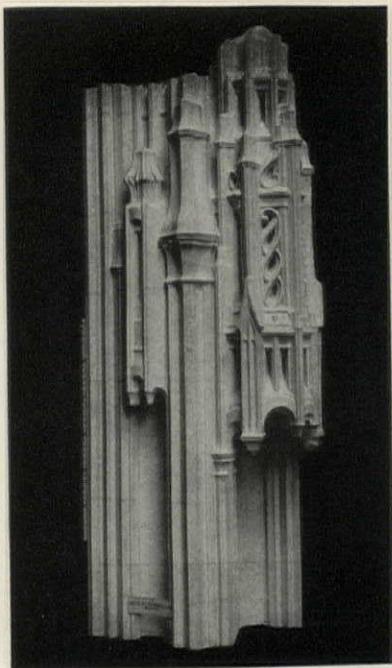
As it is the intention of the owners to cover the entire property some day with a huge office building, of which the present tower is to be the chief architectural feature, the Broadcasting Station was constructed with the necessary steel in its walls to carry the proposed upper stories. When this development takes place the necessary interior columns will be put in. At that time the present studios will be converted into shops and stores.



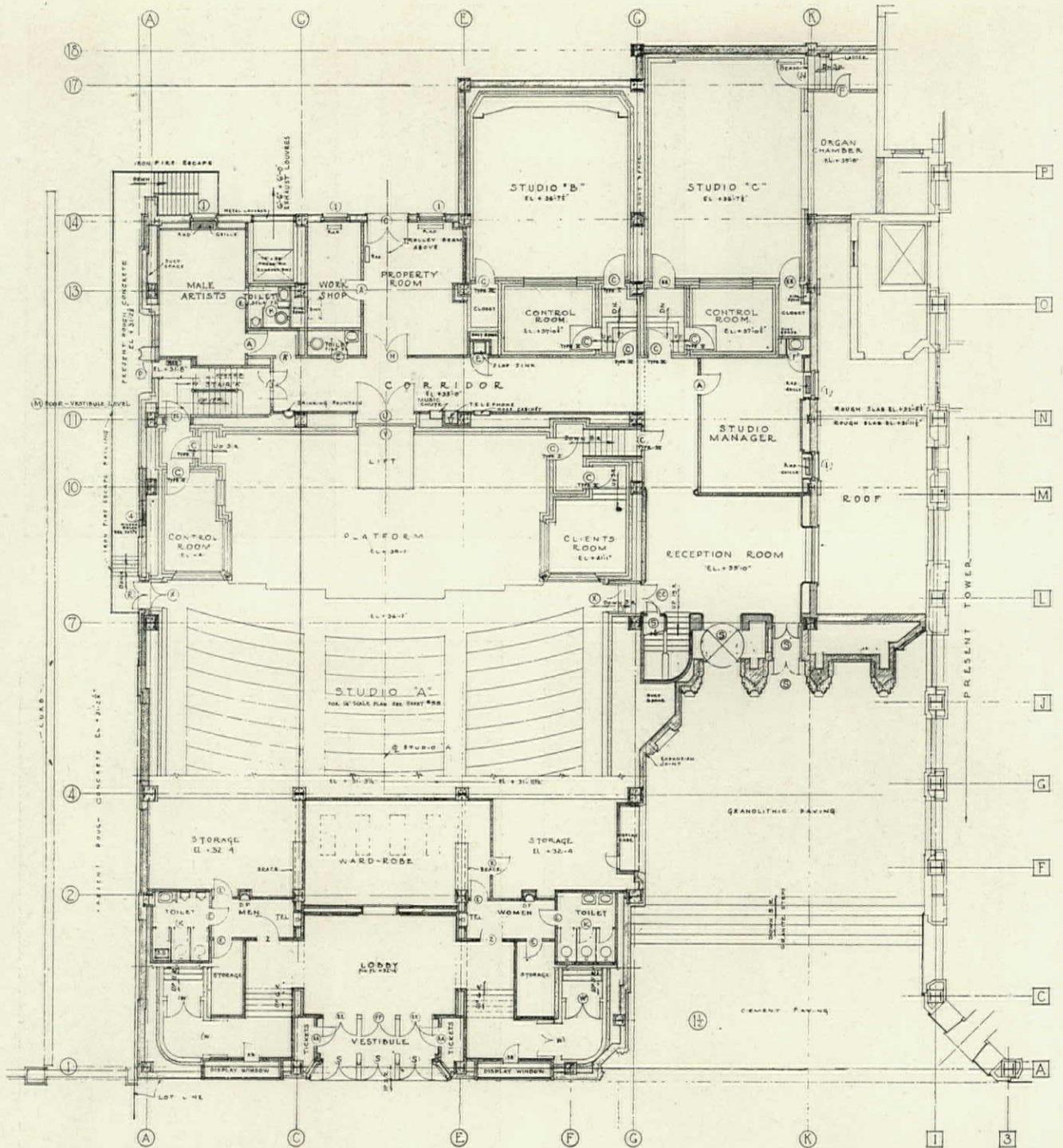
Elevation and plan showing the proposed eventual additions to the Chicago Tribune Tower. The portion in the lower right-hand corner of the plan, as far back as the transverse lobby, is the ground floor of the existing tower. The architectural screen between the entrance court and the main lobby is the face of the link between the tower and the broadcasting station, now completed. The remainder of the plan shows contemplated construction for some future time. It will be noted that the space at the lower left-hand corner, where the broadcasting station is now built, is shown on this plan as converted into store space. Compare with plans on following pages which show the present condition of the station



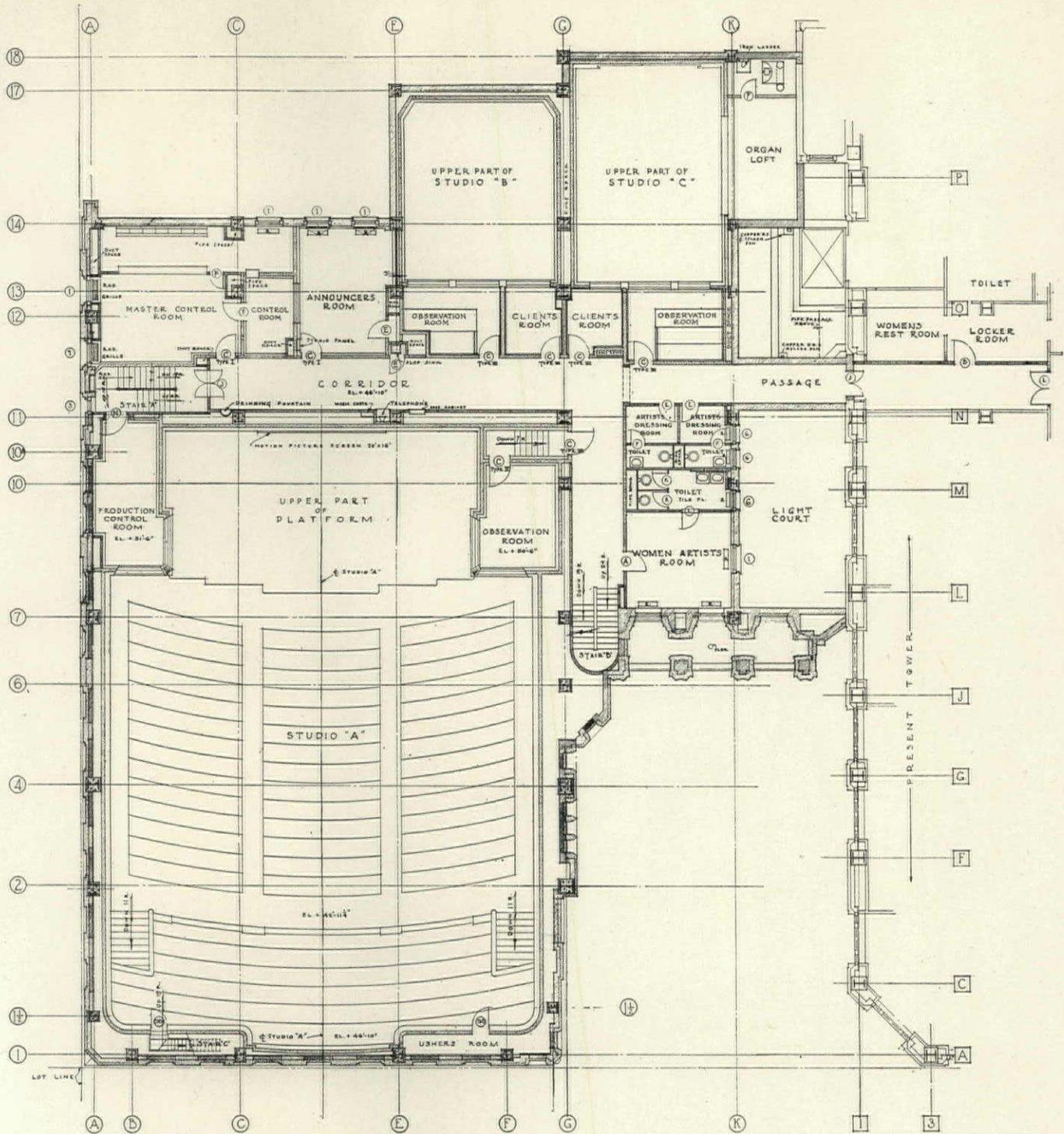
Model and elevation of WGN broadcasting station, designed for ultimate conversion into the lower stories of a portion of the proposed large north addition to the Tribune Tower. The ground floor space will be converted into stores. Two show windows are already provided for in the front, which will be used by the newspaper and broadcasting station for display purposes. The wide entrance in the center of the front will become a store front. The small door at the corner nearest to the Tribune Tower will become an entrance to a shop; until then it will remain blocked up with stone



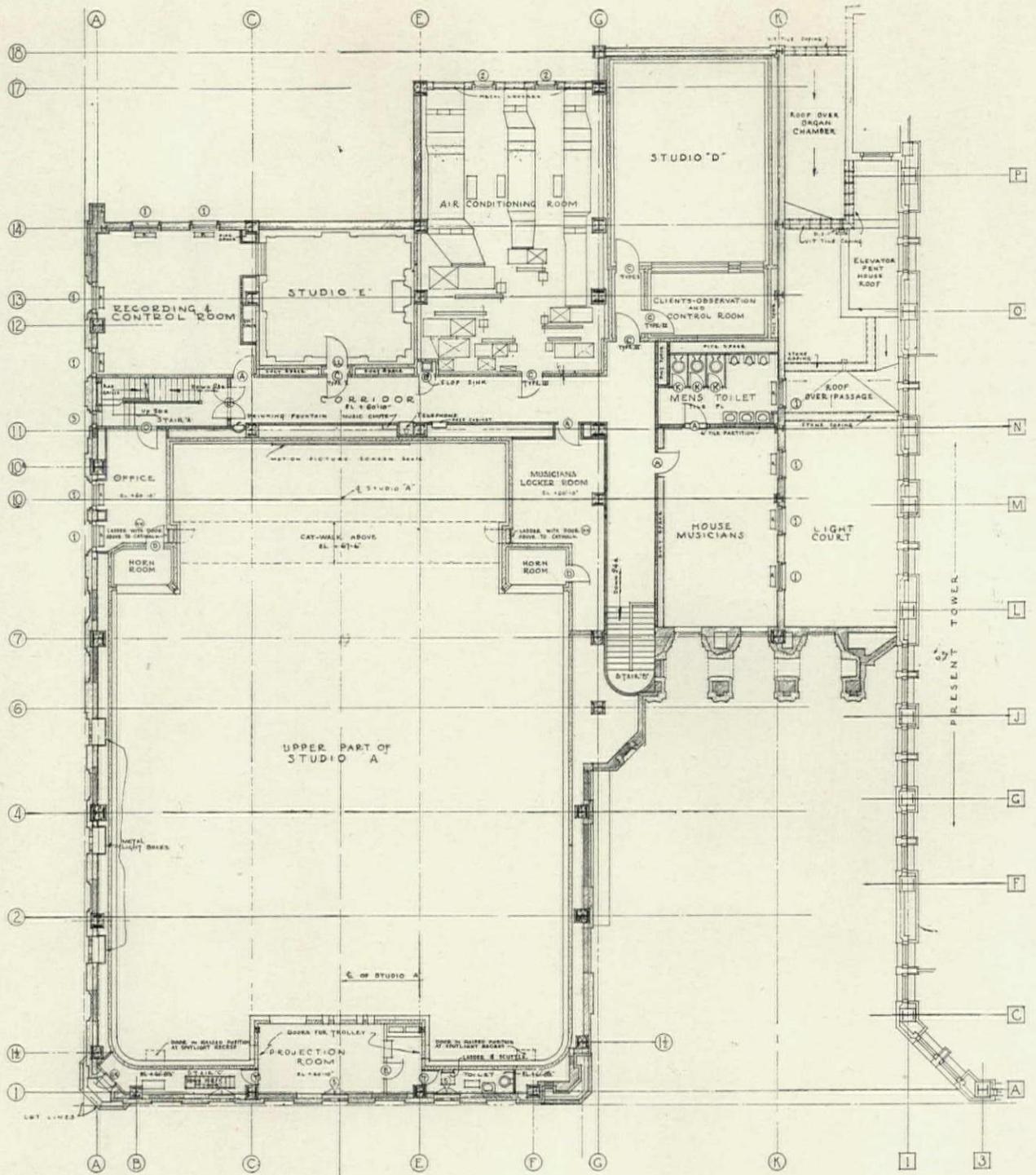
Full size plaster models were made by René Chambellan, Sculptor, showing various architectural details of the entrance court screen, buttresses, canopies, etc. These give an idea of the character of the ornamental carved limestone that will decorate the North Addition to the Tribune Tower



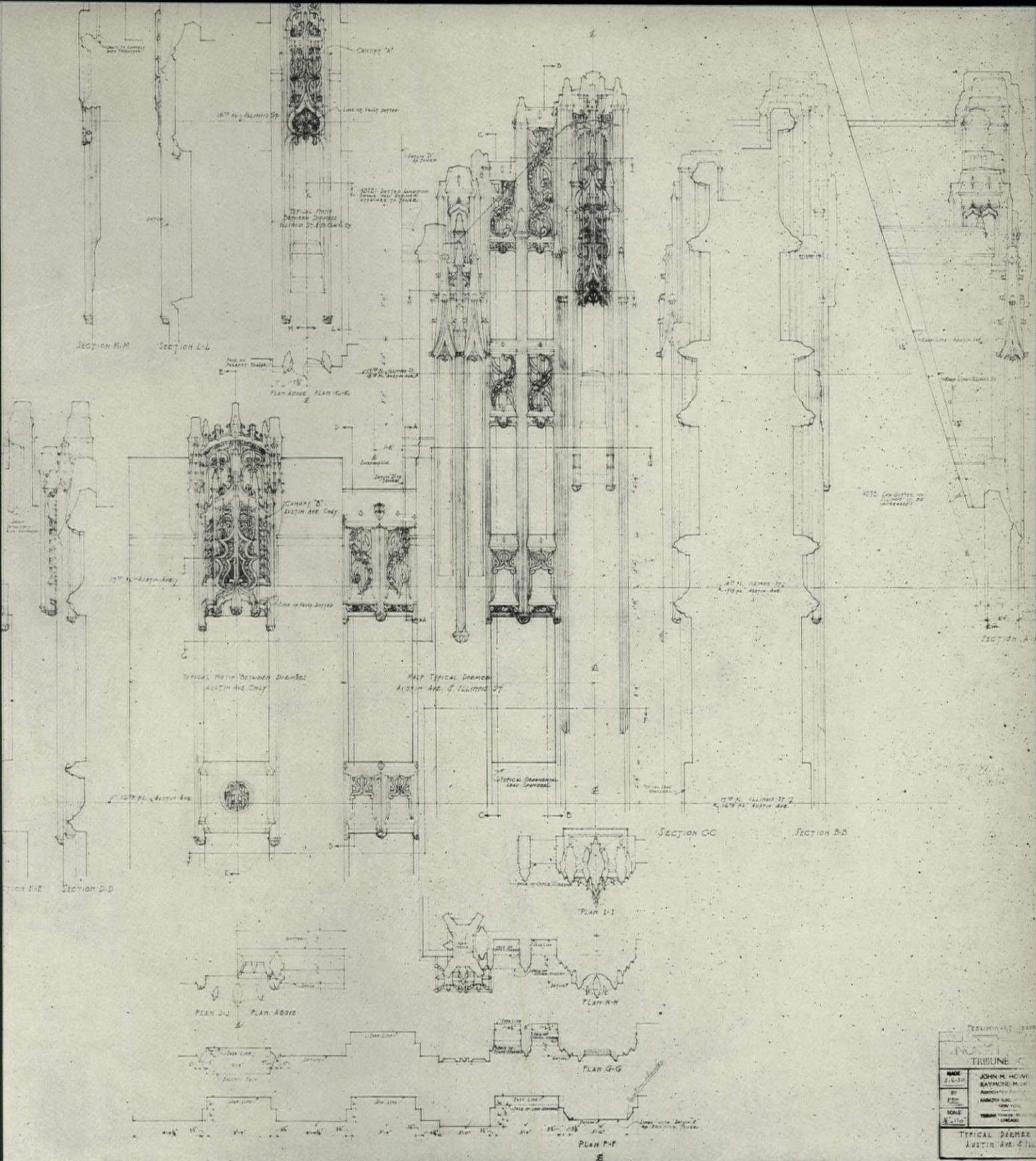
Ground Floor Plan, The Broadcasting Station for WGN, an addition to the Tribune Tower, Chicago. John Mead Howells and Hood & Foulhoux, Associated Architects. Leo J. Weissenborn, Chicago Associate. Designed to eventually be the lower three stories of the 18-story North Addition to the Tribune Tower. Interior steel columns will be added when the upper stories are built. See the plan on page 17



Second Floor Plan, The Broadcasting Station for WGN, an addition to the Tribune Tower, Chicago. John Mead Howells and Hood & Foulhoux, Associated Architects. Leo J. Weissenborn, Chicago Associate. The interior design of Studio A was made the subject of a competition held a year ago and won by Ernest A. Grunsfeld, Jr., of Chicago. His design was published in Pencil Points for March, 1935

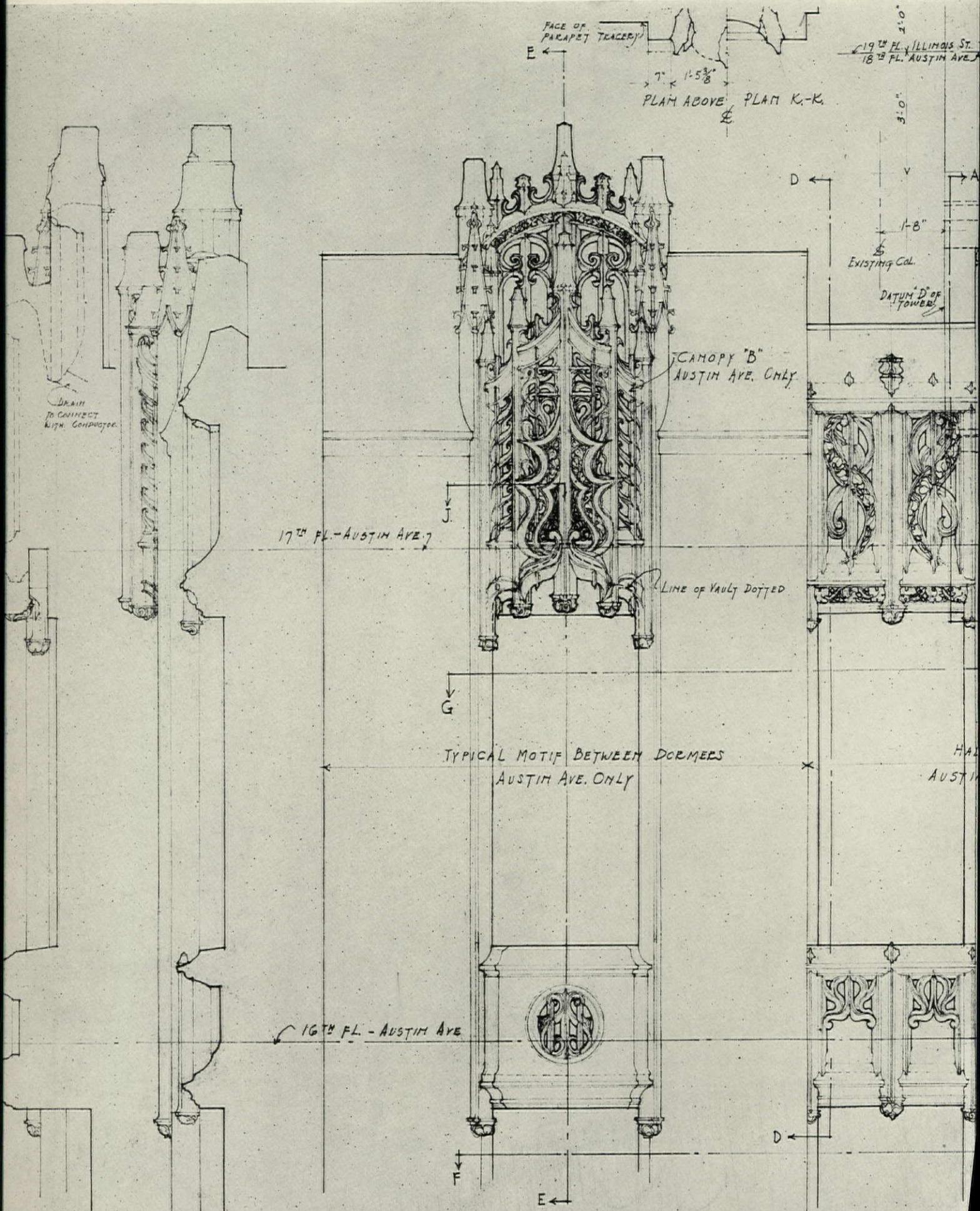


Third Floor Plan, The Broadcasting Station for WGN, an addition to the Tribune Tower, Chicago. John M. Howells and Hood & Foulhoux, Associated Architects. Leo J. Weissenborn, Chicago Associate. Note that while this building is being used as a broadcasting station the window openings are temporarily blocked up. The interiors are artificially lighted and completely air conditioned. When the tower is completed and it is turned into an office building the indicated windows will make their appearance



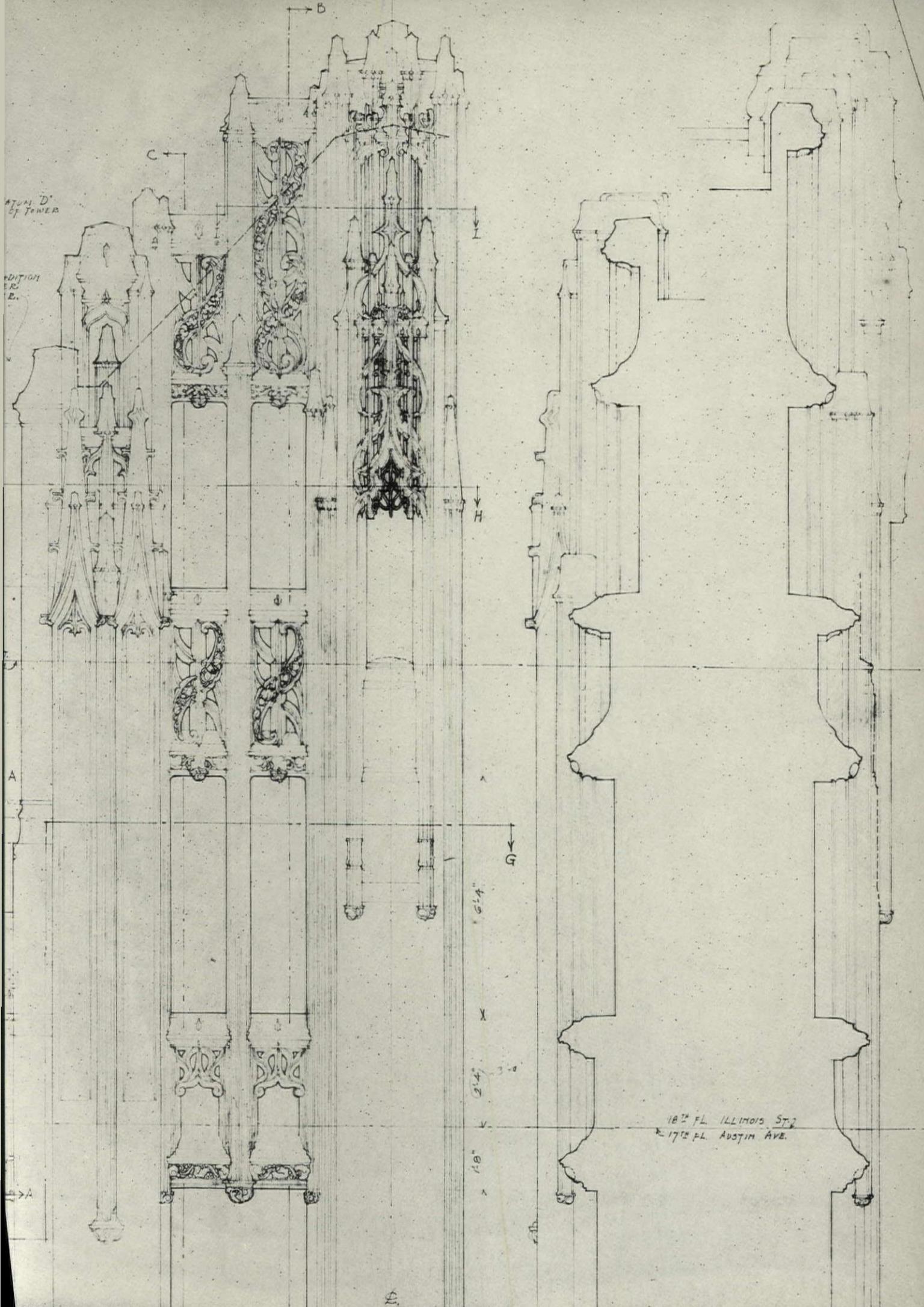
Typical Dormer Details, North Addition, Tribune Tower, Chicago. John Mead Howells and Hood & Foulhoux, Associated Architects. Leo J. Weissenborn, Chicago Associate. The two following pages show portions of this sheet at larger size so that the character of the detail is more clearly visible. They are especially interesting as examples of draftsmanship. The originals were in pencil

This and the facing page show portions of the sheet reproduced on page 23.
 From the office of John M. Howells and Hood & Foulhoux, Associated Archi-
 tects for the Tribune Tower, Chicago. Details of North Addition upper stories

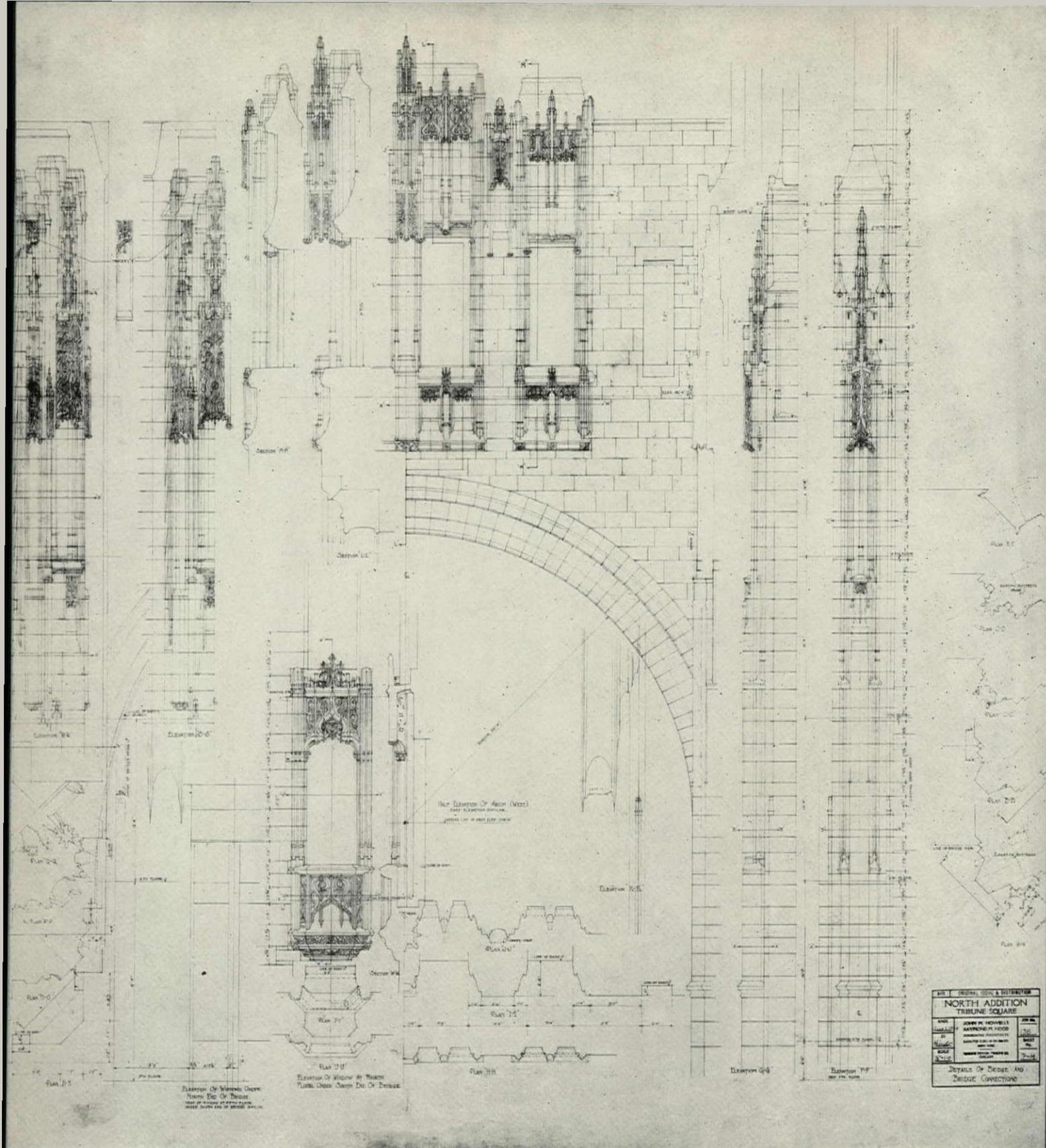


SECTION E-E SECTION D-D

ADDITION
TO
D.
OF TOWER

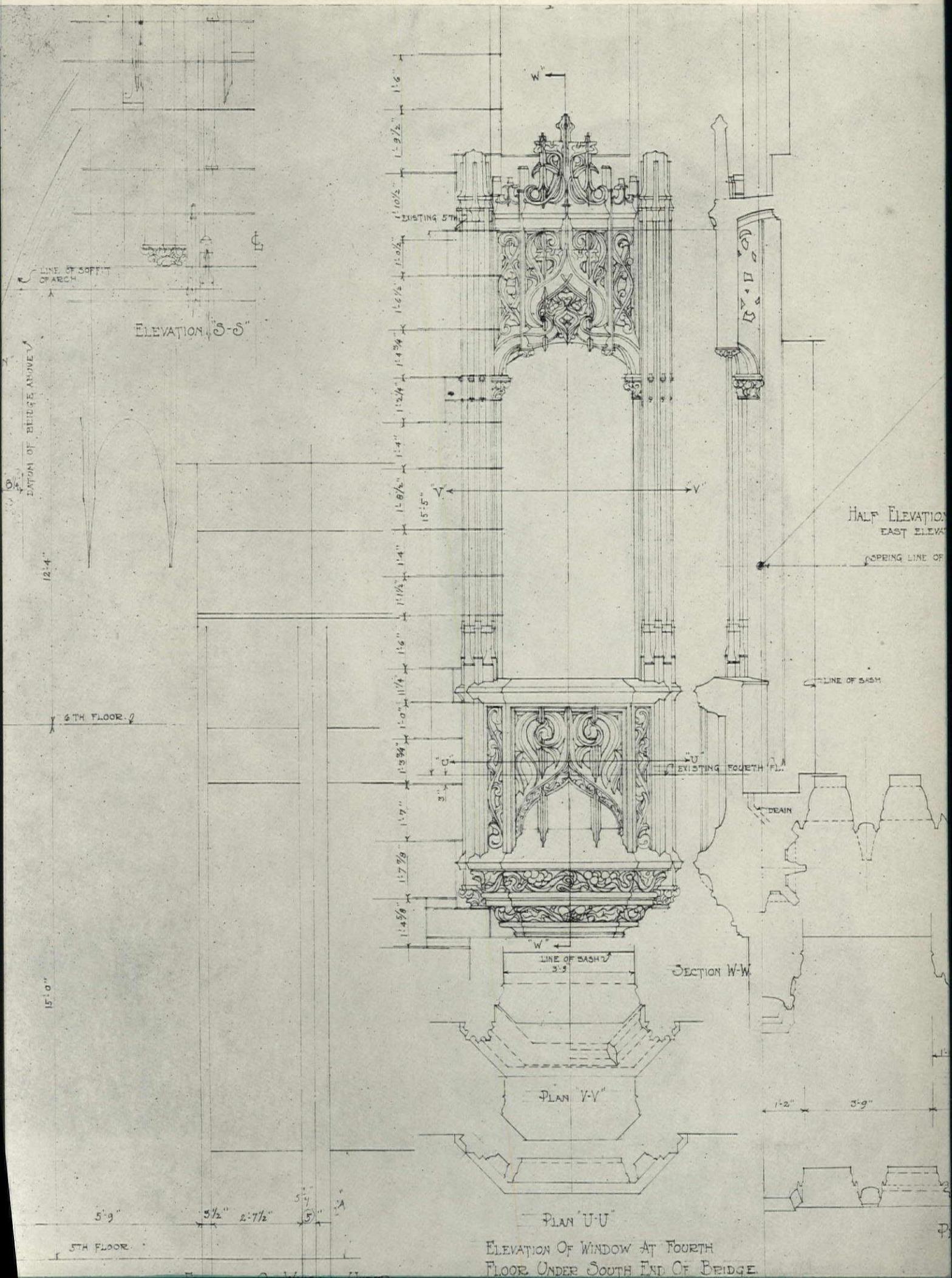


10" FL. ILLINOIS ST.
17 1/2" FL. AUSTIN AVE.

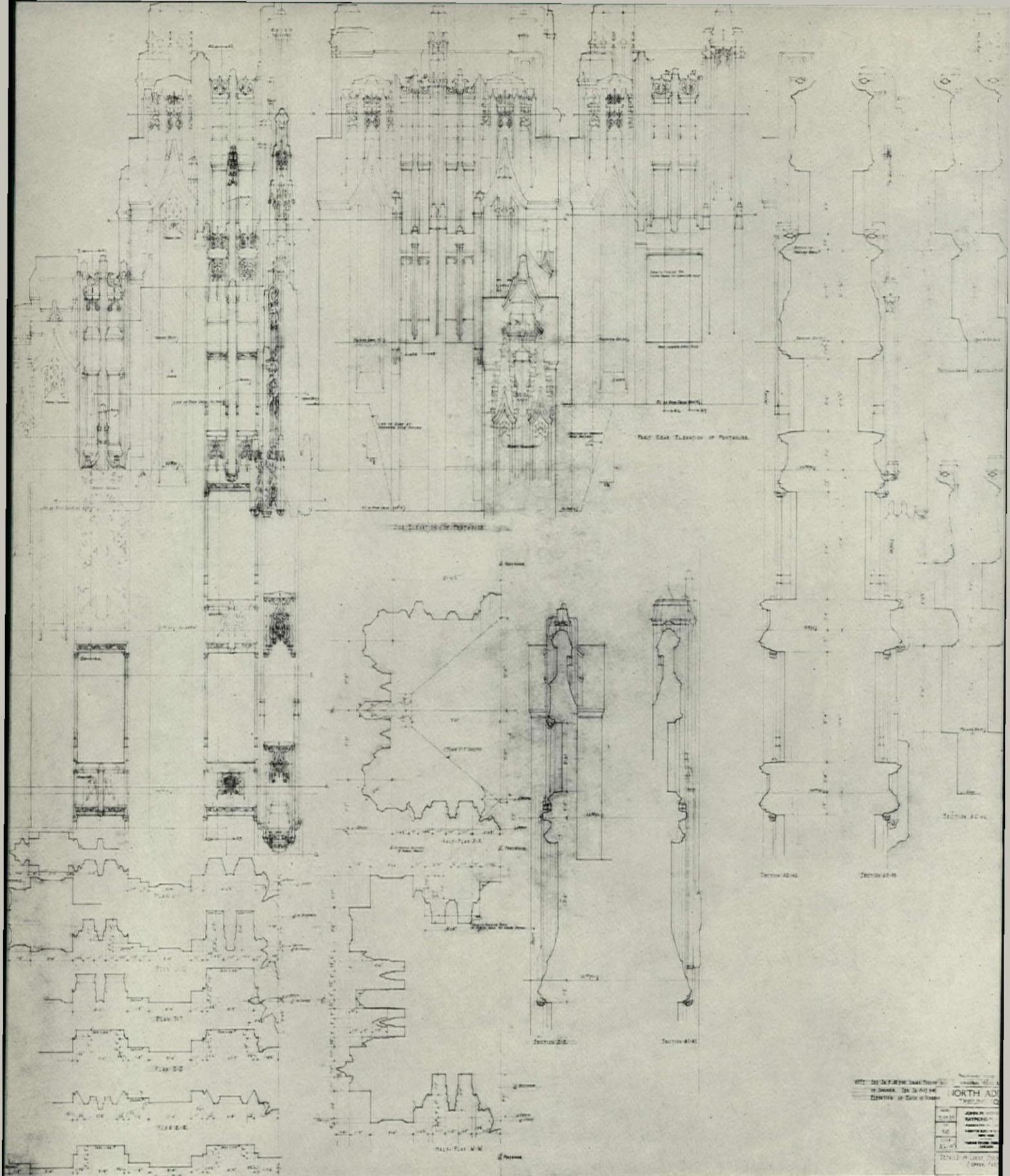


GENERAL NOTES & DISTRIBUTION			
NORTH ADDITION TRIBUNE SQUARE			
DATE	JOHN M. HOWELLS	SCALE	1/4" = 1'-0"
DESIGNED BY	ANDREW H. HOOD	CHECKED BY	W. H. BENT
DRAWN BY	W. H. BENT	APPROVED BY	J. M. HOWELLS
SCALE	1/4" = 1'-0"	DATE	1936
DETAILS OF BRIDGE AND BRIDGE CONNECTIONS			

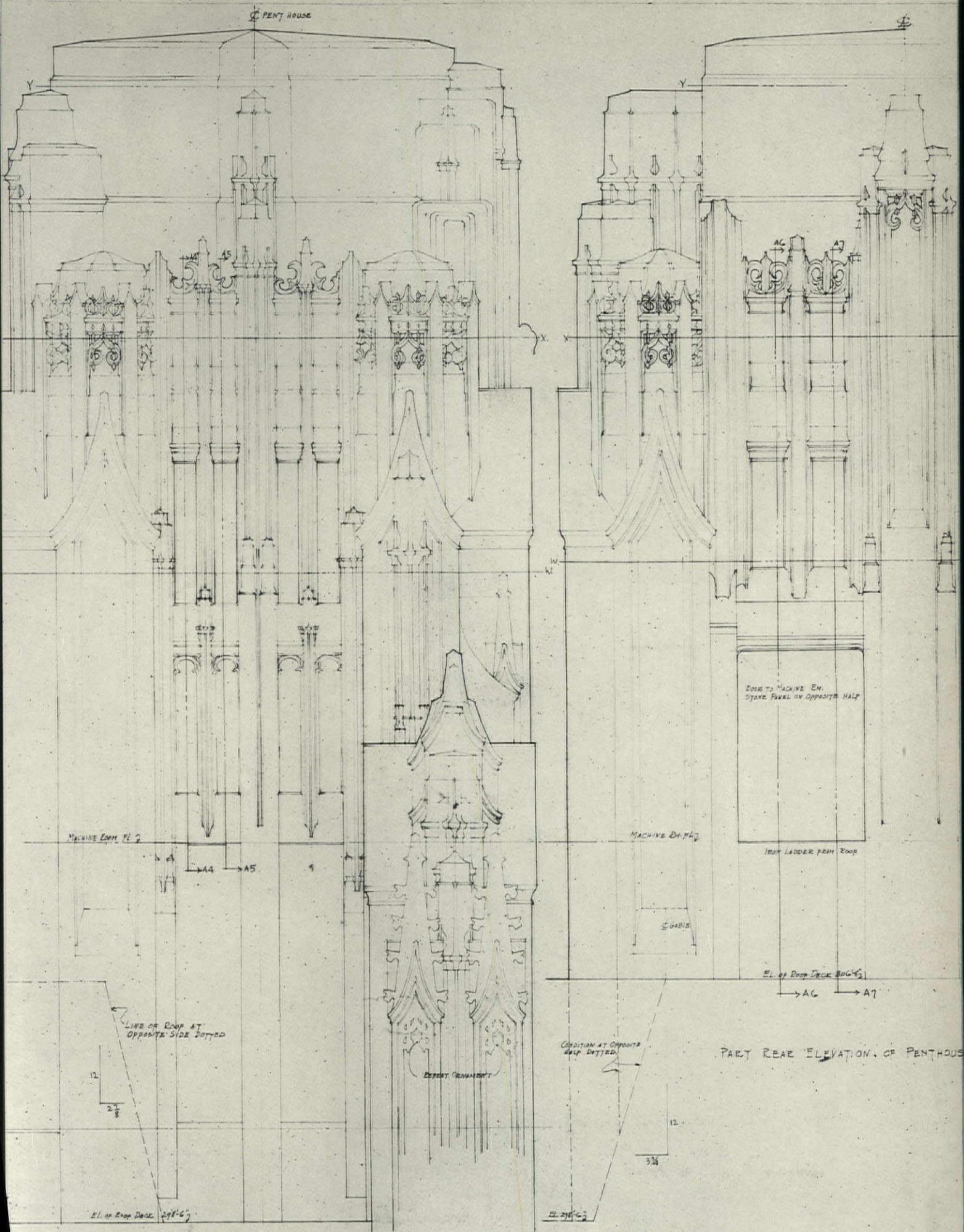
Details of Bridge and Bridge Connections, North Addition, Tribune Tower, Chicago. John M. Howells and Hood & Fouilhoux, Associated Architects. A portion of this sheet is shown at larger scale on the next page. The Bridge is to form the connection between the tower itself and the North Addition to be completed



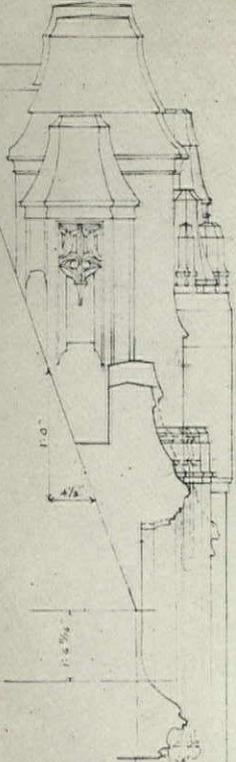
ELEVATION OF WINDOW AT FOURTH FLOOR UNDER SOUTH END OF BRIDGE



Details of Large Dormer, Illinois Street side, North Addition, Tribune Tower, Chicago. John M. Howells and Hood & Foulhoux, Associated Architects. A portion of this sheet is shown on the next page, enlarged for clearer reading



SIDE ELEVATION OF PENTHOUSE



1'-0"

4/8"

1'-8 3/4"

SEE LATER DETAIL FOR NORTHWEST CORNER CONNECTION.

D

D

C

ROOF LINE

17TH FLOOR

16TH FLOOR

A

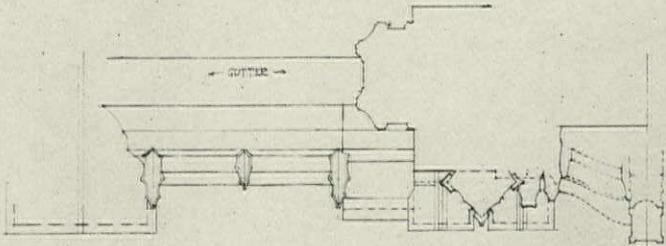
D

A

1'-0" 6"

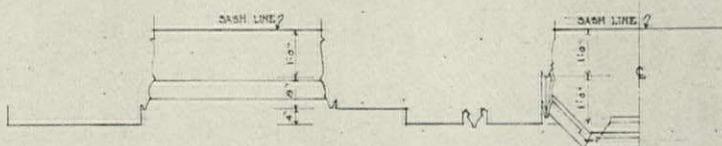
SECTION D-D

SECTION E-E

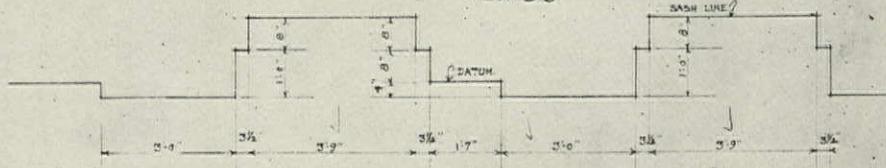


PLAN C-C

DETAIL OF TWIN DOOR
WEST ELEVATION
(ADJACENT TO TOWER)
SCALE 1/2"=1'-0"

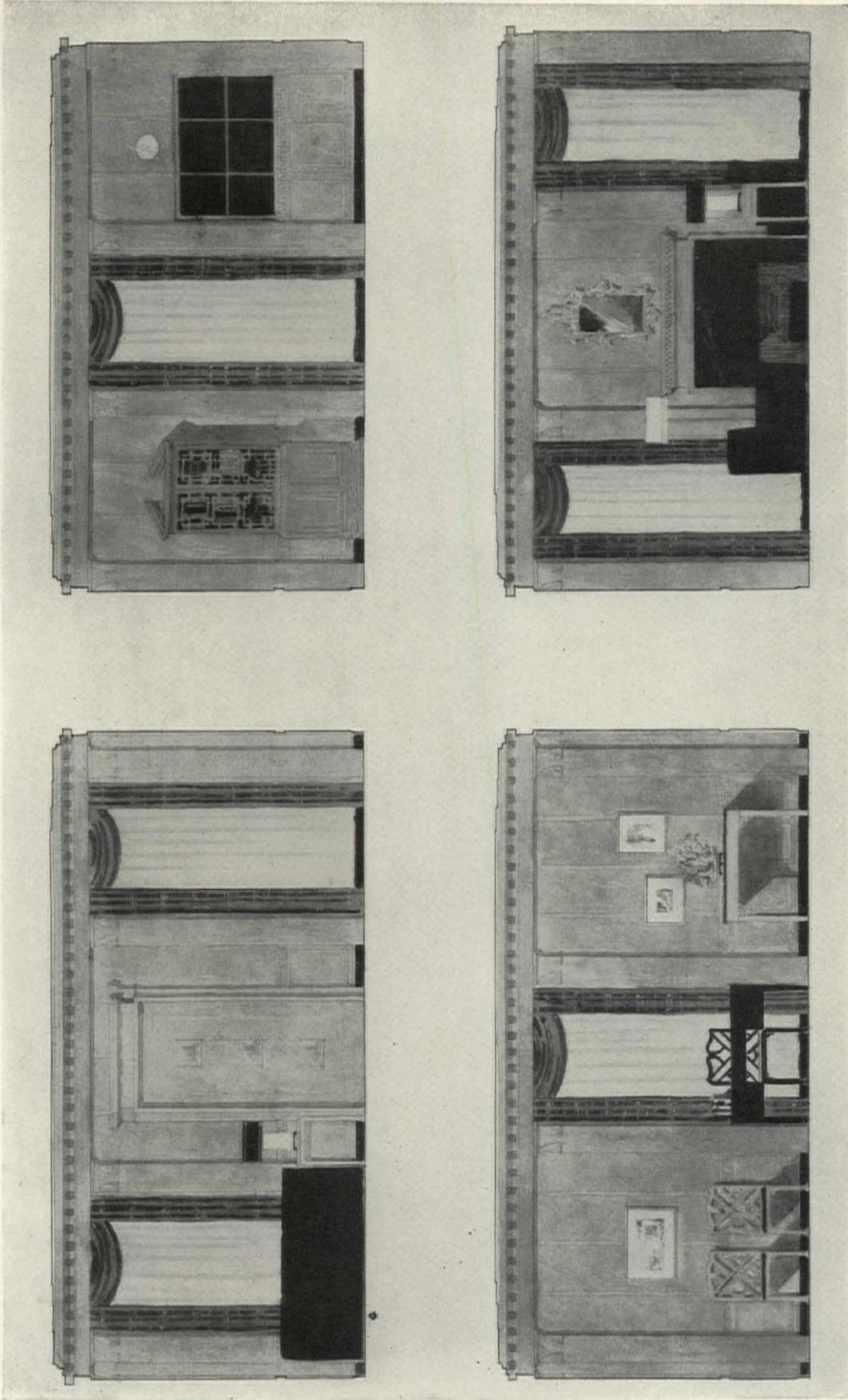


PLAN B-B

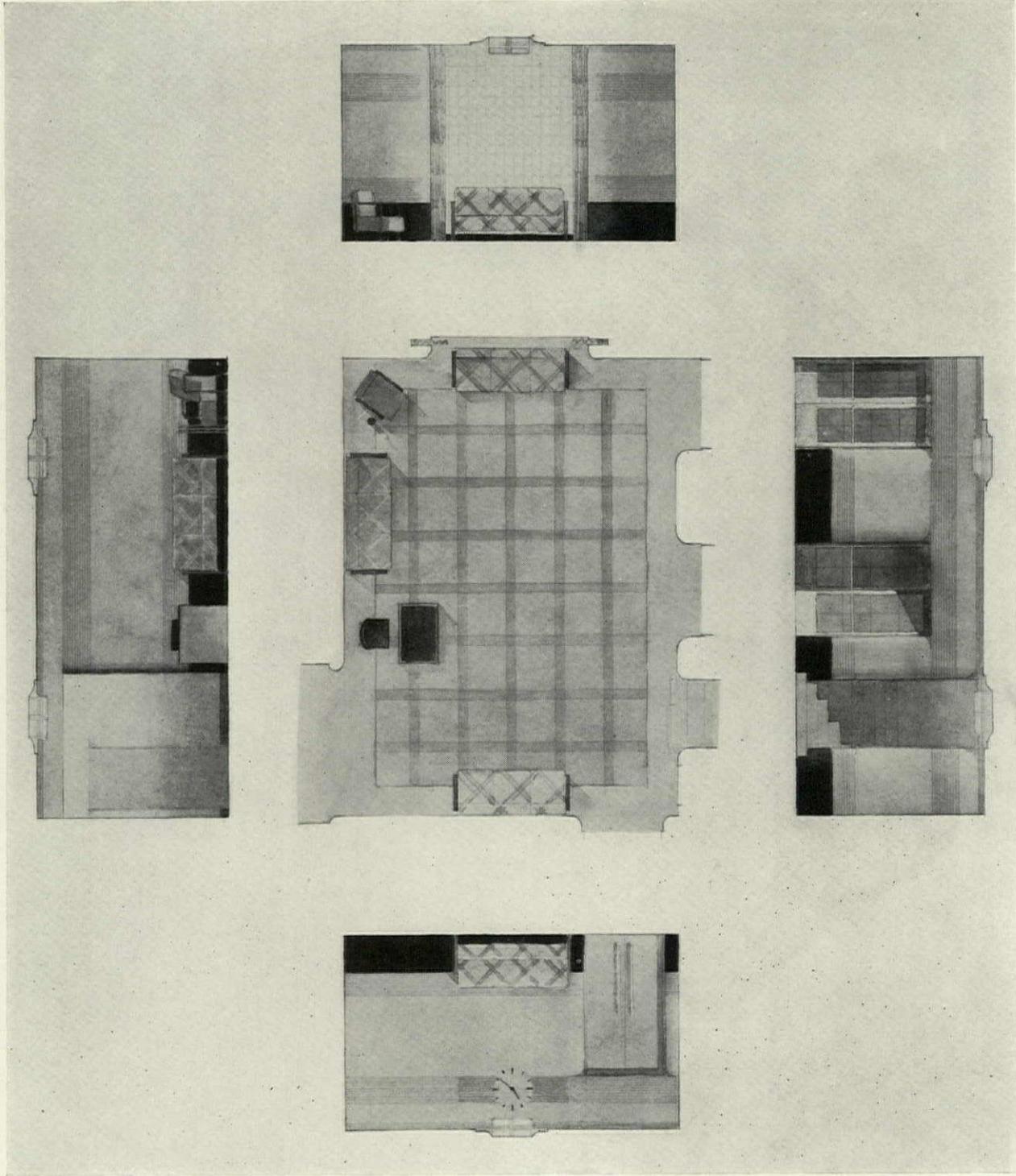


PLAN A-A

DATE	ORIGINAL ISSUE & DIS
NORTH ADDIT TRIBUNE SQUA	
MADE <i>Mar 26</i>	JOHN M. HOWELL RAYMOND M. HOOD ASSOCIATED ARCHITECT
BY <i>Hard</i>	RADIATOR BLDG. 48 W. 42nd ST. NEW YORK
SCALE 1/2"	TRIBUNE TOWER TRIBUNE SQ CHICAGO



*Design for interior of small Studio "E" on third floor of Broadcasting Station for WGN, Chicago.
John Mead Howells and Hood & Foulhoux, Architects; Leo J. Weissenborn, Chicago Associate*



*Design for interior of Reception Room on ground floor, Broadcasting Station for WGN, Chicago.
John Mead Howells and Hood & Foulhoux, Architects; Leo J. Weissenborn, Chicago Associate*

A GLOSSARY ON DOOR LOCKS

By DON GRAF, B. S., M. ARCH.

UNCONSCIOUSLY perhaps, the merchants and vendors of hardware have built up a smoke screen of mysticism around locks. About the only thing that the average architect has been able to find out about this intriguing subject is a more or less complete (and more or less funny) collection of stories having to do with peeking through keyholes. Perhaps some day an inspired lock manufacturer will print a catalog explaining all the mysterious terms which they now bandy about so skilfully. The archie will then give up his long practiced deceit of nodding and smiling knowingly when locks are discussed. Having a pessimistic conviction that this eventuality will be realized only in some distantly remote time, the following Glossary is offered as a sort of Rosetta Stone to be used in deciphering the strange language of the hardware catalog as it is now written.

The prototype of the Glossary is that prepared by Henry R. Towne many years ago, a copy of which was kindly supplied by the Yale & Towne Manufacturing Company. The thanks of the author is tendered to this company, and the Russell & Erwin Mfg. Co. and P. & F. Corbin, for data required to illustrate and bring the text up to date.

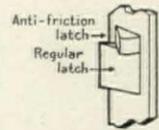
In U. S. Department of Commerce Simplified Practice Recommendation No. 18, entitled "Builder's Hardware," the following rules are promulgated, which are of especial value to the architect in detailing properly:

- 1.) The face width of stiles for all standard $1\frac{3}{8}$ " and $1\frac{3}{4}$ " doors shall be not less than $4\frac{1}{8}$ ".
- 2.) The term "French Window" should be applied to glazed, narrow-stile openings hinged at the side, which do not extend to the floor. The face width of stiles for such openings shall be not less than 2".
- 3.) The term "French Door" should be applied to glazed, narrow-stile openings hinged at the side which do extend to the floor, and the face width of stiles for such openings shall be not less than 3".
- 4.) All rabbets shall be eliminated as a standard practice, and where unavoidable a $\frac{1}{2}$ " square rabbet, not beveled, should be used.
- 5.) The setback for door trim (casings) shall be not less than $\frac{3}{8}$ ".

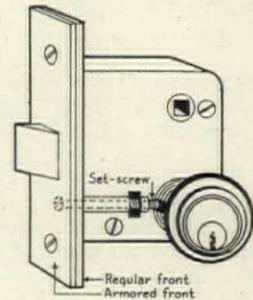
6.) It is unnecessary and impracticable to mount knobs at the exact center of the door stile.

Locks for doors are classified as Mortise or Rim. Each of these are further divided into three types according to the obstacle preventing movement of the bolt—the warded lock, lever tumbler lock, and cylinder lock. Now go on with the story.

ANTI-FRICTION LATCH. A small additional latch connected with the regular latch bolt. It engages the strike and retracts the regular latch. It prevents friction between latch and strike, strain on the lock, and permits the door to close more easily. Recommended for doors equipped with closers.

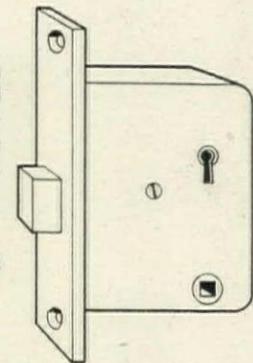


ARMORED FRONT. A false front secured to the regular front and covering it. It guards the set screw that checks the cylinder. It should be removed during painting or while the lock is being mortised, thus protecting it during the performance of these mechanical operations.



ASTRAGAL FRONT. A lock front having a form coinciding in shape with the edges of a door having an astragal molding along its stile.

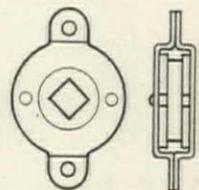
ASYLUM LOCK. One for use on doors of insane asylums, simplified to prevent tampering. The one illustrated operates by knob from either side, and may be dead-locked by key from either side.



Asylum Lock

AUXILIARY LATCH. See "Guard Latch."

AUXILIARY SPRING. A device applied under the rose to hold a lever handle in a horizontal position.



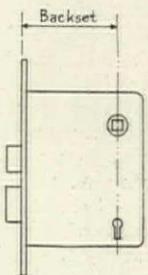
Auxiliary Spring

BACKSET. The horizontal distance from the front of a lock to the center line of its knob or key hole.

In flat front locks the backset is measured from the outside face of the front to the center of the hub or key hole.

In bevel front locks the backset is measured from the center line of the front to the center of the hub or key hole.

In rabbeted front locks the backset is measured from the outside face of the lower step of the front to the center of the hub or key hole.

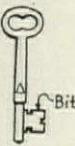


Illustrating Backset

BEVEL OF BOLT. The inclined face of the latch bolt. See "Hand and Bevel of Locks."

BEVEL OF LOCKS. Locks are designated as to bevel, which refers to the inclination of the latch bolt or the lock front, or both. See "Hand and Bevel of Locks."

BIT. A projecting blade which engages with and actuates either or both the bolt and the tumblers of a lock. Same as "Wing."



BIT KEYED LOCKS. Same as "Lever Tumbler" locks.

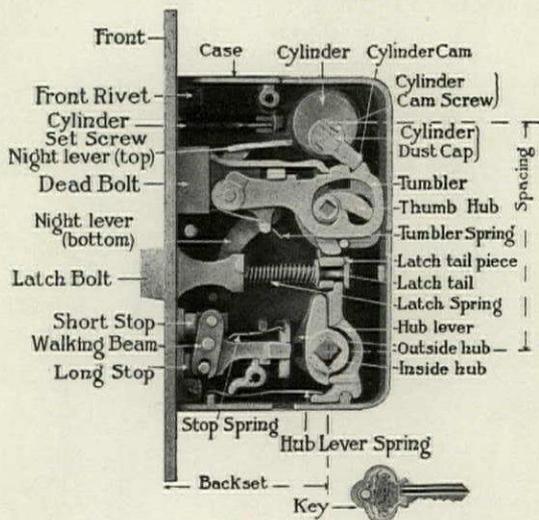
BITTING. The cuts or indentations on that part of a key which acts upon and sets the tumblers.

BOLT. See anti-friction b., dead b., double-throw b., knob b., latch b., split dead b.

CASE. The box containing the bolts and other mechanism of a lock. In giving dimensions the vertical is first, the horizontal second.

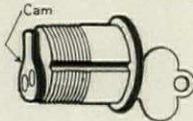
CHANGE KEY. That key of a master-keyed lock which differs from all others of the same series and will operate only its own lock. Sometimes called a "Room Key." Used in contradistinction to "master key."

CYLINDER LOCK. The U. S. Simplified Practice Recommendation No. 18 defines this term as applying only to a locking mechanism which is fitted with pin tumblers and

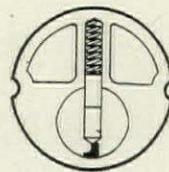


Cylinder Front Door Lock

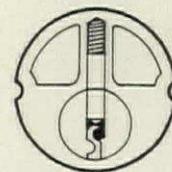
a paracentric or milled key: and a standard cylinder is one with not less than five pin tumblers and not less than 1 1/8" in diameter of cylinder back of the head. The cylinder is a short case containing the key way, cam, and tumbler mechanism of the lock, and is separate therefrom. It was formerly called "escutcheon." The cylinder is composed of two parts; cylinder plug and cylinder shell. The plug is prevented from rotating by a number of round pins. At varying positions each pin is divided, the lower part being the "pin" proper, and the upper part being the "driver." When the key is inserted the pins are raised to exactly the right height so that their points of separation coincide with the joint between the plug and shell, and the plug may then be rotated with the key. A cam at the end of the plug actuates the bolt mechanism of the lock.



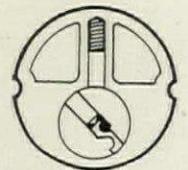
In some cylinders the pins rest on ball bearings. This makes the entrance of the key easier, and is designed to



Pin tumbler at bottom



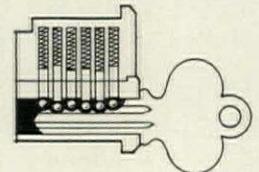
Pin tumbler raised by key to correct height



Plug partly rotated carrying pin tumbler with it

prevent wear on the bottom of the pins and key which would eventually throw the points of separation between pins and plug out of alignment.

It is evident that every variation in the height of pins results in a different key biting to set the tumblers properly. By altering the section of the key way, or by increasing the number of tumblers, this number of changes can be further increased, almost to infinite. The cylinder type of lock is the most flexible and the most secure of any type of door lock as yet conceived.



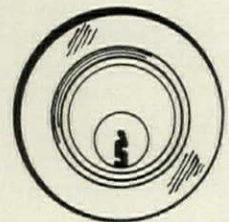
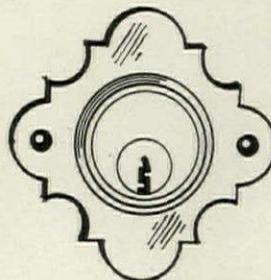
A ball-bearing six-tumbler cylinder lock with key inserted

CYLINDER RING. A rose or washer, placed under the head of a cylinder to permit the use of a long cylinder on a thin door.



Cylinder Ring

CYLINDER COLLAR. A decorative plate, placed under the head of a cylinder to give a finished appearance.



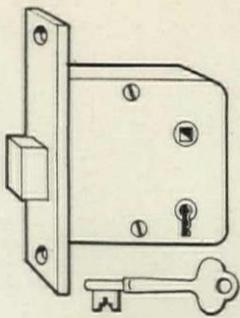
Illustrating two types of cylinder collars

COMMUNICATING DOOR LOCKS. A lock designed to secure a door from either side. Usually consists of a latch and two dead bolts which are thrown by thumb turns or keys, independent of each other, one being controlled from each side. A simpler type, which would be better named "Bathroom Lock," has a latch and a single dead bolt controlled only from the inside by a turn knob.

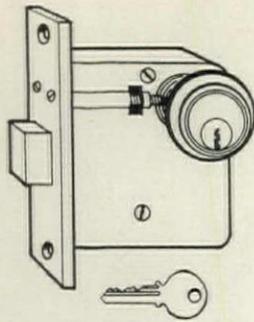
DEAD BOLT. A bolt moved positively by a key or turn knob in both directions. It is the dead bolt which protects a door from entrance by unauthorized persons. Opposed to "latch." See illustration of "Entrance Door Lock."

DEAD LATCH. Same as "night latch," which see.

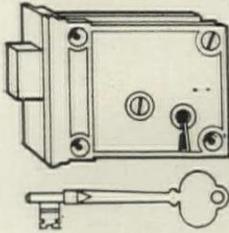
DEAD LOCK. One having a dead bolt only, without a latch bolt. The dead bolt may be controlled by either key or turn knob, from one or both sides.



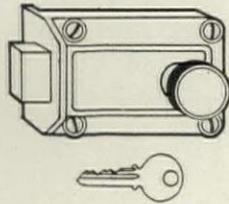
Lever Tumbler
Mortise Deadlock



Cylinder
Mortise Deadlock



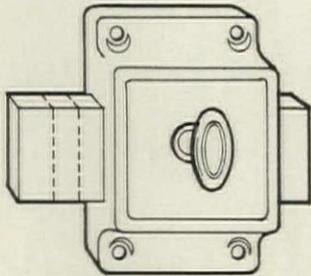
Lever Tumbler
Rim Deadlock



Cylinder
Rim Deadlock

DOUBLE THROW BOLT.

This is a special mechanism giving an extra long projection of the bolt. Two operations are required in order to keep the actuating bolt mechanism reasonably small in size, and still maintain a long projection of the bolt from the face of the lock. Sometimes required for fire doors, where the warping of the door under heat might pull a bolt of usual projection from the strike.

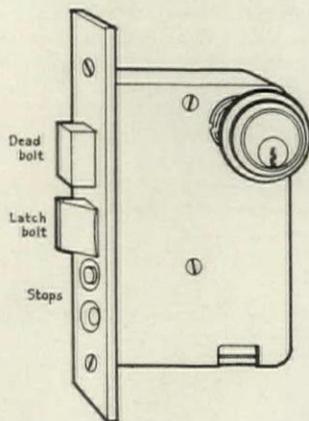


DROP KEY PLATE. A key plate, or escutcheon, having a swinging cover to protect the key hole.



EASY SPRING LATCH BOLT. A construction in which two springs are used, one acting only on the latch bolt, but both acting on the knob hub. The lighter, or "easy," spring acts on the latch bolt only, permitting the door to close easily. Both springs oppose the action of the knobs, giving them a lively action.

ENTRANCE DOOR LOCK. This term should be applied only to cylinder locks with thumb pieces (handles) on one or both sides. It usually consists of a latch controlled by thumb pieces from both sides, with the outer thumb piece capable of being rendered inactive by a stop. It also has a dead bolt. Both dead bolt and dead latch are controlled from outside by key.



ESCUTCHEON. A metal plate providing protection and finish for the key hole. It may or may not have a socket to receive the knob. Escutcheons combining the key hole and knob socket (rose) are sometimes referred to as "escutcheon plate" or "combined escutcheon." If the metal around the key hole is sunk to facilitate entrance of the key, it is a "cup" escutcheon. See also "Key Plate."



ESCUTCHEON KNOB. A door knob containing a key hole for the key which actuates the lock or controls the rotation of the knob. See "Unit Lock."

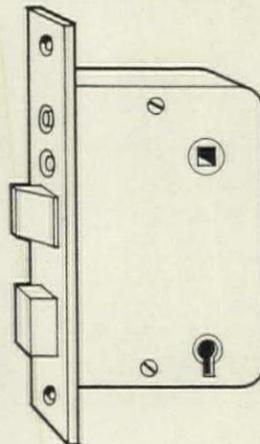
FACE. Same as "Front."

FENCE. A projection, usually on the bolt, which engages with the tumblers and enters or passes through the gating of the tumblers when the bolt is thrown or retracted. Incorrectly called "Stump." See "Lever Tumbler Locks."

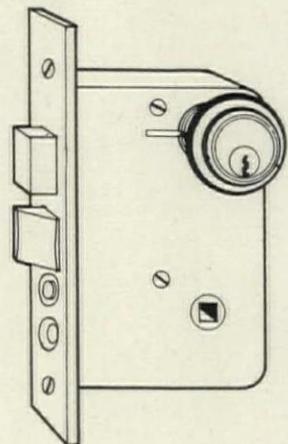
FRONT. The face plate of a mortise lock through which the ends of the bolt are projected. This plate conforms to the edge of the door and may be flat, beveled, rounded, rabbeted, or astragal. See also "Guarded Front Locks" and "Armored Front."

FRENCH SPRING. This is a heavy type of spring which is usually applied to the hub of a lock, intended to offset the over-balancing effect of the lever handle, and thereby relieving the strain which would otherwise be thrown on this sensitive spring of the latch bolt.

FRONT DOOR LOCK. This term should be applied only to locks having knob action on both sides, controlling the latch, outer knob may be set by stop. From outside both dead bolt and dead latch are controlled by key. From inside dead bolt is controlled by key or thumb turn, and latch is controlled by knob.



Mortise Lever
Tumbler Front
Door Lock

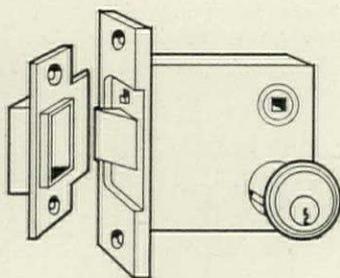


Mortise Cylinder
Front Door
Lock

GATING. The opening in the tumbler of a lock through which the "fence" passes during movement of the bolt during locking or unlocking. See "Lever Tumbler Locks."

GUARD LATCH. Also referred to as "Auxiliary Latch." The guard latch does not engage in, but rides on, the surface of the strike. This holds the Guard Latch depressed, and when the outside knob has been set the latch bolt cannot be retracted except by key outside or knob inside. It prevents any manipulation of stops in the lock front when the door is closed.

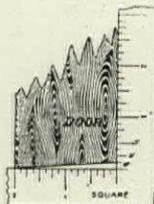
GUARDED FRONT LOCK. Also referred to as a "Recessed Front Lock." It has an especially constructed front and strike. When these are interlocked the latch bolt is protected against tampering through the crevice of the door. Especially adapted to use on Insane Asylum doors.



Guarded Front Lock

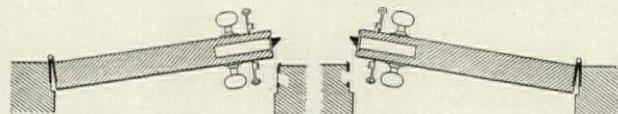
GUN SPRING. A heavy, flat spring of special construction especially adapted for use with lever handles, made of specially resilient steel.

HAND AND BEVEL OF DOORS. The free edge of thick doors is beveled $\frac{1}{8}$ " in 2" to clear the rabbet. The hand of a door is determined from the side on which the butts cannot be seen. From this position, if the door is hinged on the right, it is said to be a right-hand door. If on the left, it is a left-hand door.



HAND AND BEVEL OF LOCKS. The inclination of the latch bolt and of the lock face always correspond in direction with the bevel of the door (see above). All locks having the key function the same on both sides are said to be regular bevel. If no bevel is designated it is understood to be regular bevel. The hand of such a lock is the same as the hand of the door.

If the key function is not the same on both sides, the hand and bevel of the lock is determined from the side having the most important key function. From this position, if the

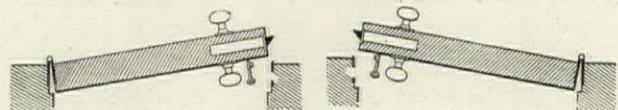


LEFT-HAND LOCK
(Door, left hand)

RIGHT-HAND LOCK
(Door, right hand)

Hand and bevel of door and lock determined from this side, the key function being the same from both sides.

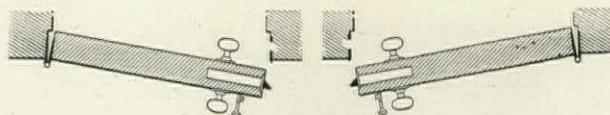
door opens away from you, it is regular bevel, and if it opens towards you it is reverse bevel. The hand of the lock is said to be right hand if the butts are on the right, and left hand if on the left. Notice the difference between the hand of the door and the hand of the lock.



LEFT-HAND LOCK
(Door, left hand)

RIGHT-HAND LOCK
(Door, right hand)

Hand of door and lock, and bevel of lock determined from this side, because the key function is from this side.



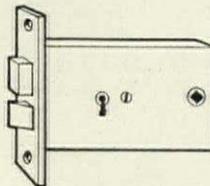
LEFT-HAND REVERSE
BEVEL LOCK
(Door, right hand)

RIGHT-HAND REVERSE
BEVEL LOCK
(Door, left hand)

Hand and bevel of lock determined from this side, because the key function is from this side.

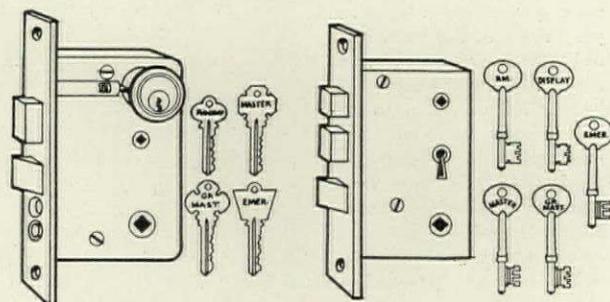
HINGED LATCH. See "Swinging Latch."

HORIZONTAL. Refers to a case whose width is greater than height.



Horizontal Case

HOTEL LOCK. This term refers to a type of master-keyed lock, usually having a latch bolt and either one or two dead bolts. The lock may be controlled from the corridor side by the "Guest's" or "Room" key, or by a floor master key for maid's use, or by a grand master key for the manager's use—unless the guest has locked the door from inside the room. A fourth master key, known as an emergency key, will unlock the door under all conditions, and is usually kept in the manager's safe.



Cylinder Hotel Lock

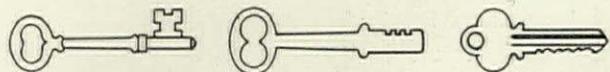
Lever Tumbler Hotel Lock

Additional keys for Hotel Locks are sometimes used. The Shut-Out Key prevents any lock in the series from being opened, except with the emergency key. The Display Key is an individual shut-out key. It is designed to protect rooms being used for display of goods, preventing the entrance of maids during the absence of the person responsible for the goods displayed.

HUB. A rotating piece within a lock, containing a central aperture to receive the knob spindle and engaging with the bolt or tail-piece whereby the motion of the knob is communicated to the bolt. See illustration of "Cylinder Lock." A hub having an elongated spindle hole to compensate for the shrinking and swelling of a door is called a compensating hub.

KEEPER. See "Strike."

KEY. The implement designed to operate a lock or series of locks. See Bit, Bitting, Change k., Master k., Warded k., Wing k., etc.



Bitted Key for
Lever Tumbler
Lock

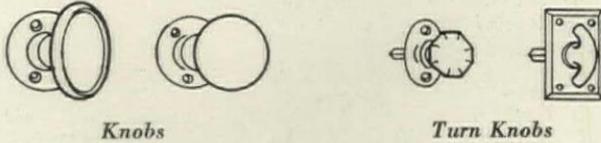
Flat Key for
Lever Tumbler
Locks

Paracentric Key
for Cylinder
Locks

KEY PLATE. A plate, either plain or ornamental, having one or more key holes but no knob socket, and adapted for attachment to the surface of a door. See "Escutcheon."

KEY WAY. The aperture which receives the key and engages closely with it throughout its length in a cylinder, as distinguished from the key hole of the common lock.

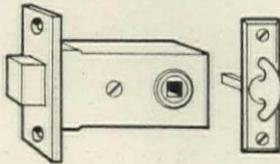
KNOB. A projecting handle, usually round or spherical, for operating a latch bolt. A small crescent or other shape of knob designed for operation with the fingers is called a *turn knob*, *thumb turn*, or *thumb knob*, and is usually employed to throw the dead bolt from the inside of a lock.



Knobs

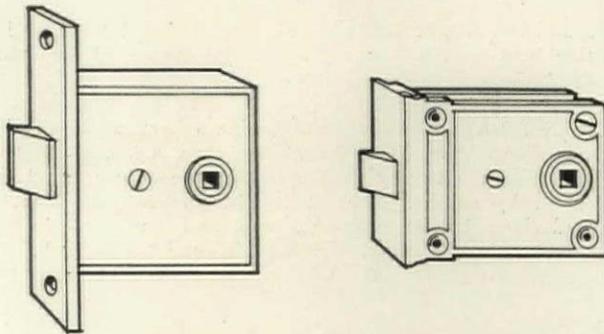
Turn Knobs

KNOB BOLT. A dead bolt which is controlled by a knob from either or both sides of the door, not one actuated by a key.



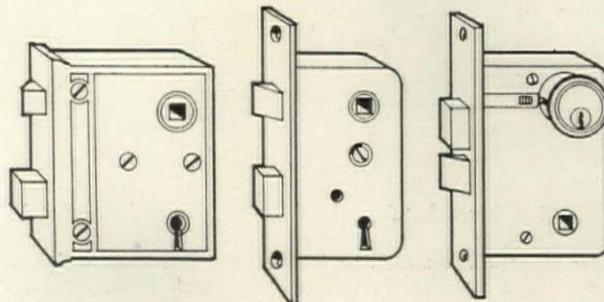
KNOB LATCH. A door fastening having a spring bolt operated from either or both sides by a knob, not one actuated by a key.

KNOB LOCK. A door fastening combining a knob latch and dead lock. The greatest share of "locks" used fall into this general group.



Mortise Knob Latch

Rim Knob Latch

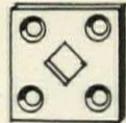


Rim Knob Lock (Lever Tumbler)

Mortise Knob Lock (Lever Tumbler)

Mortise Knob Lock (Cylinder)

KNOB PLATE. A small plate applied under rose or escutcheon plate to hold knob rigid.

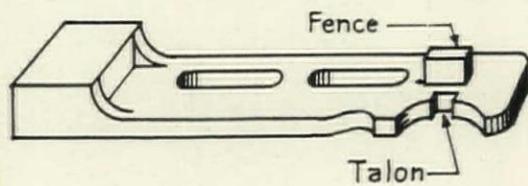
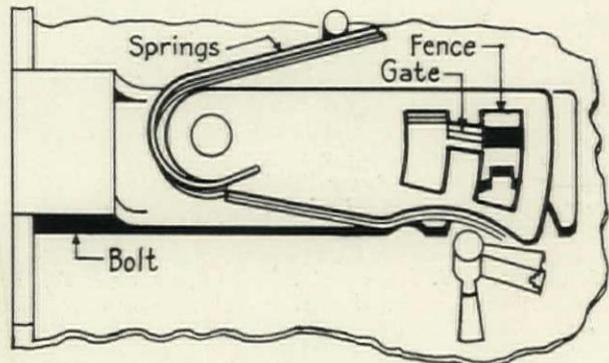


KNOB ROSE. See "Rose."

LATCH. A fastening device that has a latch bolt, but without key function or dead bolt. Rim and Mortise "night latches" are an exception to this rule. See Night L., Dead L., Knob L., Thumb L., Swinging L., Guard L., etc.

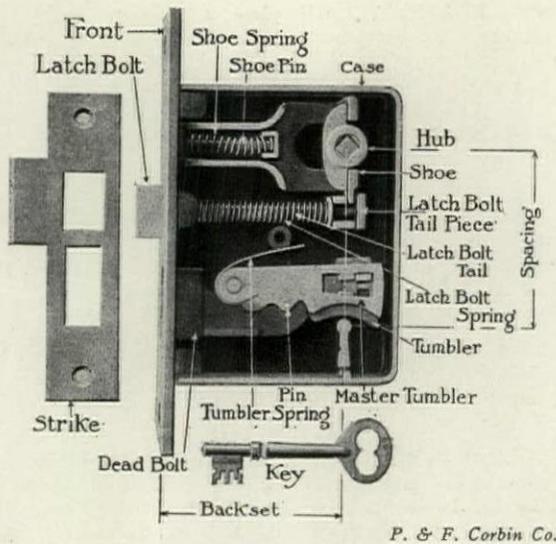
LATCH BOLT. One having a beveled head actuated by a spring. It is retracted by pressure against the strike and is automatically thrown forward when this pressure is released.

LEVER TUMBLER LOCK. Also called *bit keyed locks*. The obstacle in this type of lock consists of one to five tumblers. These must be lifted by the bittings or nicks in the edge of the key before the bolt can be thrown. On the side of the bolt projects a lug called a "fence." Openings in the tumblers fit over this fence. The "gatings" connect the openings in the lever tumblers. The gatings are all cut at different heights. When the key is inserted and revolved, the bittings of the key lift the tumblers to exactly the right height so that they will be in alignment and permit the fence to pass. The key engages simultaneously with the "talon" of the bolt and the bolt is thrown. The levers then drop through the action of the tumbler springs, holding the fence and preventing movement of the bolt.



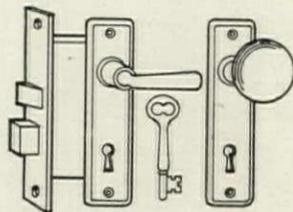
In lever tumbler locks the number of key changes varies with the number of tumblers. Side and end wards are added to increase the possible key changes, although these are of doubtful value in adding to the security of the lock. The wards or projections on the key hole edge are easily broken off or a thin key will pass them. The key changes may vary from four for a one-tumbler lock, to over 144 changes in a five-tumbler lock. Security against picking increases with the number of tumblers employed.

LOCK. A fastening having a dead bolt, as distinguished from one having a latch bolt. See Cylinder, Warded, Bit Keyed, Lever Tumbler, Office, Asylum, Entrance, Communicating Door, Store Door, Front Door, Hotel, Dead, Knob, Unit, Reversible, Vestibule, Sets, etc.



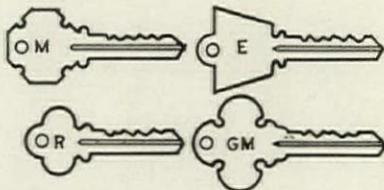
Lever Tumbler Lock

LOCK SETS. The complete lock hardware for a door made up in a set, consisting of lock, knobs or handles, escutcheons, keys, etc., which match in design, finish, and mechanism, and designed to be sold together.



Lever Tumbler Lock Set

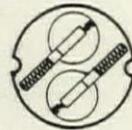
MASTER KEY. Sometimes called a "pass key." The key permitting operation of a series of locks which are different.



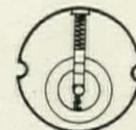
A Room Key and three Master Keys—the Master, Emergency, and Grand Master.

MASTER KEYING. A system of controlling a number of locks which all have different keys, through the use of a single key. Various methods are used by the different manufacturers to accomplish this end. In *Warded Locks* different obstructions are introduced in each lock to prevent the entrance or rotation of any but the proper key, and they are master keyed by making a key that will pass all the obstructions. In *Lever Tumbler Locks*, master keying is accomplished by the introduction of auxiliary tumblers which are not acted upon by the change keys, but when raised by the master key, set the remaining tumblers and permit the bolt to be thrown. *Cylinder Locks* may be

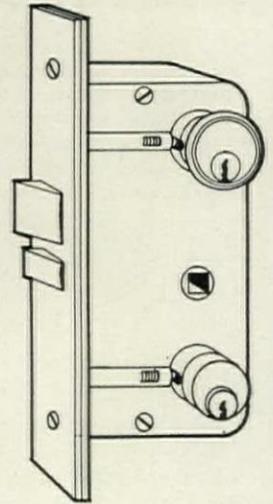
master keyed by having two separate cylinders acting on the same bolt, the first cylinder for the change key, and the second cylinder for the master key. In the Yale "Bicentric" method, two plugs with their own keyways are incorporated into the same cylinder, both plugs acting on the same cam. In the Corbin "Concentric Ring" method, the pin tumblers are divided into three parts. The change key sets the tumblers so that the inner plug can revolve, the master key sets the tumblers so that the concentric ring and plug revolve together.



Bicentric



Concentric Ring



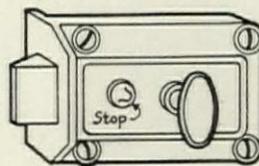
Duplex

By altering the section of the keyway, the number of changes can be increased, and the master key is made to pass all the various sections. In institutional work, hotels, etc., the locks are often arranged in groups, each group having a *sub master key*, several groups together having a *master key*, and the entire organization having a *grand master key*. In apartment houses, the keys to each apartment are different, but the lock on the main entrance door is arranged to be operated by all the different apartment keys. See also "Hotel Locks."

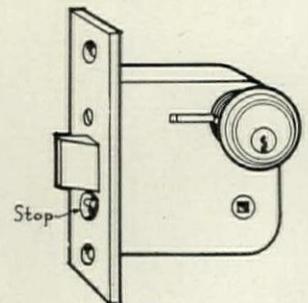
MASTER KEY LOCK. One of a series of locks, each one of which may be operated by two or more different keys. The master key will control all locks in the series, the change key will operate only its own particular lock.

MORTISE LOCK OR LATCH. One designed for installation in a mortise, not applied to the surface of the door. See "Rim."

NIGHT LATCH. A fastening having a latch which can be only operated from the outside by a key. Often has a stop to render the latch bolt inoperative, the door being held closed by another true latch. Night latches are seldom used alone, but have either a separate latch or one in the same case. Also called "Springlatch," and "Dead latch."



Rim Night Latch



Mortise Night Latch

OUTSIDE. Term used to indicate the side from which the hand and bevel of locks are determined. Usually the outside of an entrance door, the hall side of a room door, and the room side of a closet door. It is less confusing to determine the hand and bevel of a *lock* from the side having the most important key function, or if key function is the

same on both sides, from the side on which the butts are hidden. Note that the hand of a door is *always* determined from the side on which the butts are hidden. See "Hand and Bevel of Doors and Locks."

OFFICE LOCKS. Usually a latch controlled on both sides by a knob, with the latch arranged to be set by stops so that outside knob may be rendered inoperative and entrance can only be gained by key. The inside knob is always operative. If stop is set, the door locks when closed. A dead bolt or knob bolt may also be incorporated.

PARACENTRIC KEY. Key used with cylinder locks. Paracentric means directed to the center.

PIN TUMBLER. A small sliding pin preventing movement of the plug in a cylinder lock. See "Cylinder Lock."

PLATE. See Drop Key P., Strike P., Knob P., Key P., Escutcheon, etc.

PLUG. A small rotating cylinder within the cylinder case, containing the keyway, and rotated when set by the proper key, transmitting motion through the attached cam to the dead bolt.

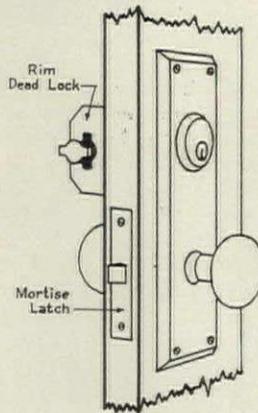
PROTECTED FRONT. See "Guarded Lock."

RABBETED FRONT LOCK. A mortise lock, the front of which conforms to the rabbet on the edge of the door.

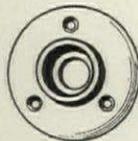
REVERSIBLE. Locks described as reversible are flat front locks designed for use on doors of either hand.

RIM LOCK OR LATCH. One applied to the surface of a door in contrast to one mortised into the edge.

ROOM KEY. See "Change Key."

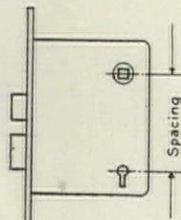


ROSE. A plate forming a knob socket, for attachment to the surface of the door. Compare "Escutcheon."



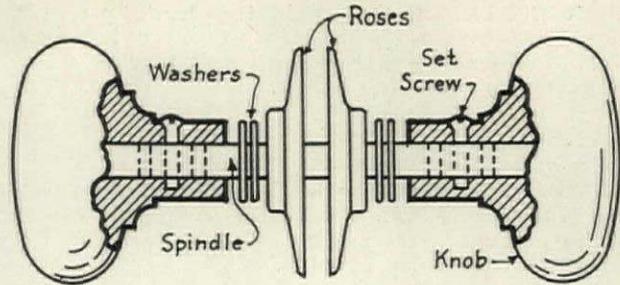
ROUNDED FRONT LOCKS. Dead locks are furnished with rounded fronts for use on double acting doors. Standard radius $2\frac{1}{4}$ ".

SPACING. The distance between the center of the knob hub to the center of the cylinder hole or key hole of a lock.



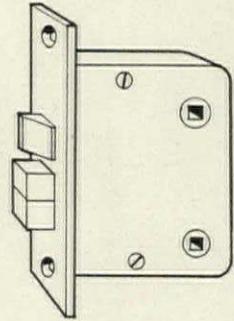
SPINDLE. The shaft, usually of square section, which carries the knobs of a latch and communicates their motion to the latch mechanism. Different latch mechanisms and different types of knobs require spindles of considerable variety.

The knobs are attached to the spindle by screws which pass through the knob shanks and are screwed into the spindle, the knobs being drawn tight against the spindle.



There are three holes in each end of the spindle, giving a range of adjustment of one inch. Washers introduced under the ends of the knob shanks eliminate end play. Can be used on all knobs, with exceptions noted on knob pages in catalogs.

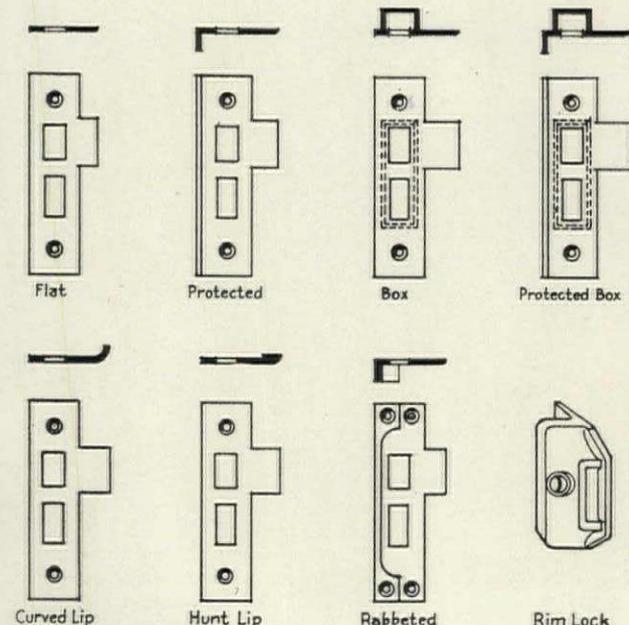
SPLIT DEAD BOLT. Really two dead bolts of the same or twin construction, both projecting from a common hole in the lock front, and engaging in a common opening in the strike. Frequently used in hotel room and communicating door locks.



STOP. That mechanism, button, or lever, which serves to fasten a bolt or knob or both in the locked or unlocked position. May or may not take control away from key. See illustration of "Night Latch."

STORE DOOR LOCK. Usually contains a latch bolt operated by thumb pieces and a dead bolt controlled by a key from both sides. Similar, if not the same, features as an Entrance Door Lock (which see).

STRIKE. Same as "keeper." The plate into which the bolts of a lock or latch are projected to secure the door. Applied both to the flat plate of various shapes used for mortise locks, and the projecting box-shaped piece used with rim locks.



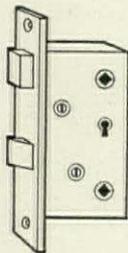
Various Kinds of Strikes

SWINGING LATCH. Also called "Hinge Latch." A type of latch which is hinged at the inner face of the lock front and swings into the lock case on contact with the strike, affording easy action with little friction.

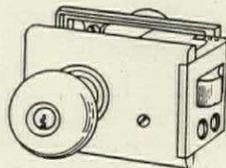
THUMB KNOB. See "Knob."

TUMBLER. The obstruction or obstacle in a lock preventing motion of the bolt. The tumblers are set by the key during the act of locking or unlocking the door. See "Pin Tumblers," and "Lever Tumblers."

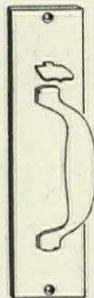
TURN KNOB. See "Knob."



Upright Lock



Unit Lock



Store Door Handle with Thumb Piece

UPRIGHT. Said of a lock whose case is higher than it is wide.

UNIT LOCK. A type of lock, originated by Corbin, comprising lock, knob, and escutcheon assembled together. Installation is accomplished by slipping the lock into a U cut in the door edge.

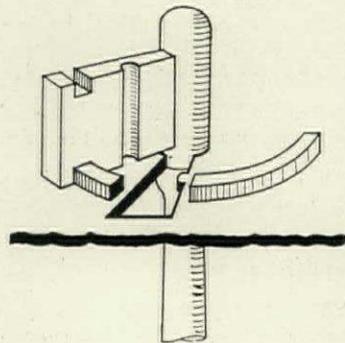
THUMB PIECE. The flattened or shaped end of a lever

which operates a latch, used with handles, and taking place of the knob on Store Door Locks, Entrance Door Locks, etc.

VESTIBULE DOOR LOCK. A mortise night latch, often controlled from outside by thumb pieces.

WARD. A projection from the case or key hole of a lock, obstructing the entrance or revolution of an unmatched key.

WARDED KEY. One having grooves or notches or both, usually in the wing or bit, which coincide with corresponding projections, or "wards," in the lock case or key hole.



Warded Key in Warded Keyhole

WARDED LOCK. A lock, having for an obstacle projections cast in the keyhole opening or on the inside of the case. This requires corresponding nicks or grooves in the key to permit it to enter and turn. The warded lock is cheap and offers very slight security. The number of variations in wards is few. Twelve is the usual limit. Frequently only four are employed, which means that every fourth lock of a given model can be opened by the same key, and four keys would enter every lock in the series. The warded lock is simple to pick. Due to the limited number of key changes and lack of security, warded locks are not used where master keying is required.

WING KEY. One having a wing or projection on a stem for operating the bolt or tumblers of a lock.

TO STIMULATE RENOVIZATION

*An Illustrated Lecture which
Has Been Used Effectively*

By BLOODGOOD TUTTLE, A. I. A.

HIRAM K. JONES is dead!

He was one of the solid, respected citizens of his town, and the house which he built back in the '90s on Main Street is still a show place.

At his death the old Jones place passed down to his son, Henry.

Henry Jones is following in his father's footsteps. After his graduation from the State University, he entered his father's business, which he has been successfully managing for some years. He is a member of the leading local service club and the Chamber of Commerce and while not particularly brilliant is the same sort of a sound, conservative personality as was his father.

He is married and has two children in their teens. His wife, Mary, is a feminine Henry. She plays a medium game of bridge and is a member

of several women's organizations. She, however, has a streak of the artistic. She belongs to the Garden Club and delights to poke around in antique shops and attend auction sales.

Some day, she says, she is going to have a real Colonial house, painted white, with a picket fence across the front. She had rather vaguely thought that perhaps some day they would tear down the old house and build a new house there, for after all it is the best site on Main Street and there *are* the fine old trees. They couldn't do it right now, however, for while Henry does not exactly belong to that new organization—the Financial Nudists—at the same time he does not feel that he should undertake the building of a new house.

Henry and she are both a little bit dazed at having the big old house placed on their shoulders. They do not want to live in it in spite of its beautiful surroundings and they certainly can't rent it for enough to pay its taxes!

Henry is worrying the matter over in his mind one day at lunch when he happens to run into an architect friend and tells him his troubles.

"Humm," said the architect when he had finished, "I'll go out and look over the house and you and Mary come down to my office next Tuesday afternoon and I'll talk the matter over with you both."

So Tuesday afternoon they go to the architect's office.

He greets them cordially and says, "Well, I have been over the old house and I am going to suggest that you renovize it into a modern Colonial home. I have had my draftsmen make a drawing of the

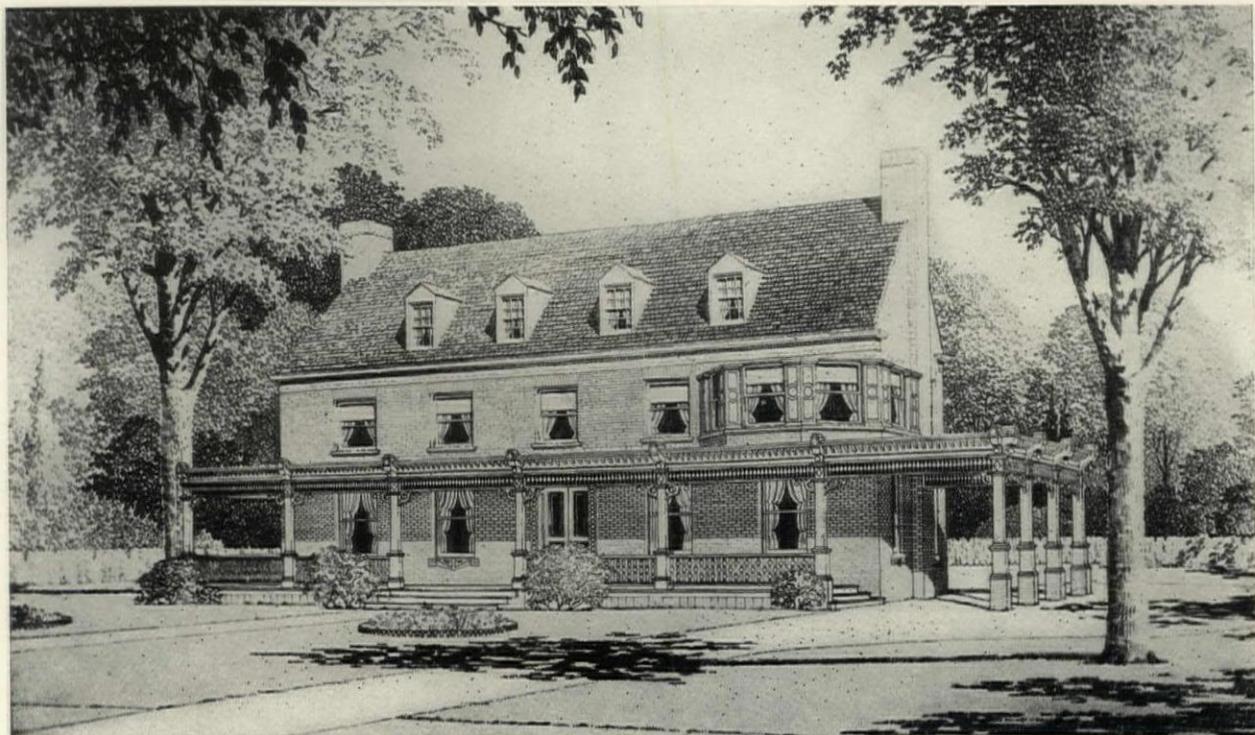


Figure 1—The house after two stages of the transformation have taken place

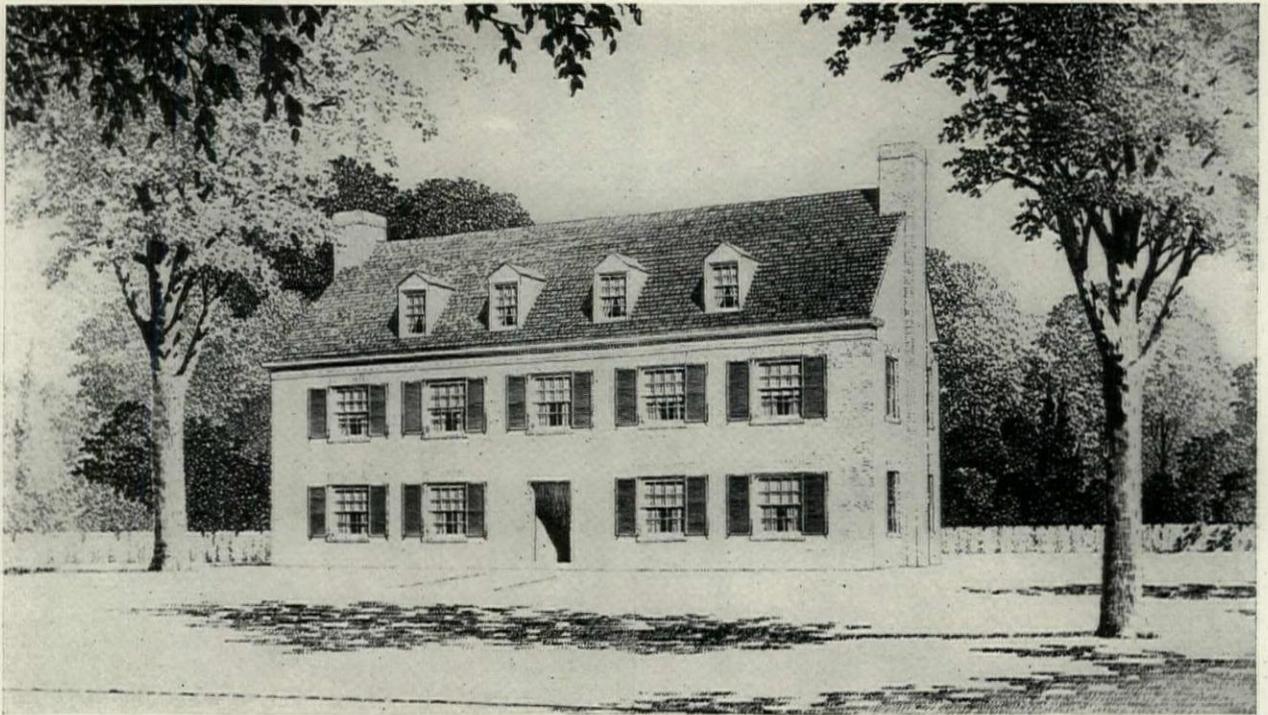


Figure 2—The fifth stage in effecting the modernization of a Victorian atrocity

place showing exactly how it looks today—and here it is.” (A drawing is, at this point, shown to the audience.)

“Your father, you know, built the house back in the early Nineties and it was built soundly and substantially, and today it is still sound and solid.

“So much for the construction. But as to equipment and design it is hopelessly antiquated. I

don’t believe that there was ever an architect for it. It looks as though it had been designed by a professor of Spencerian penmanship. Indeed it is a very Mae West of a house, it is so full of curves and wiggles—but it doesn’t say ‘Come up and see me’—just the opposite, it repels—seems musty and whispers of the straight-laced, uncomfortable conventions of a bygone day. On the right as you

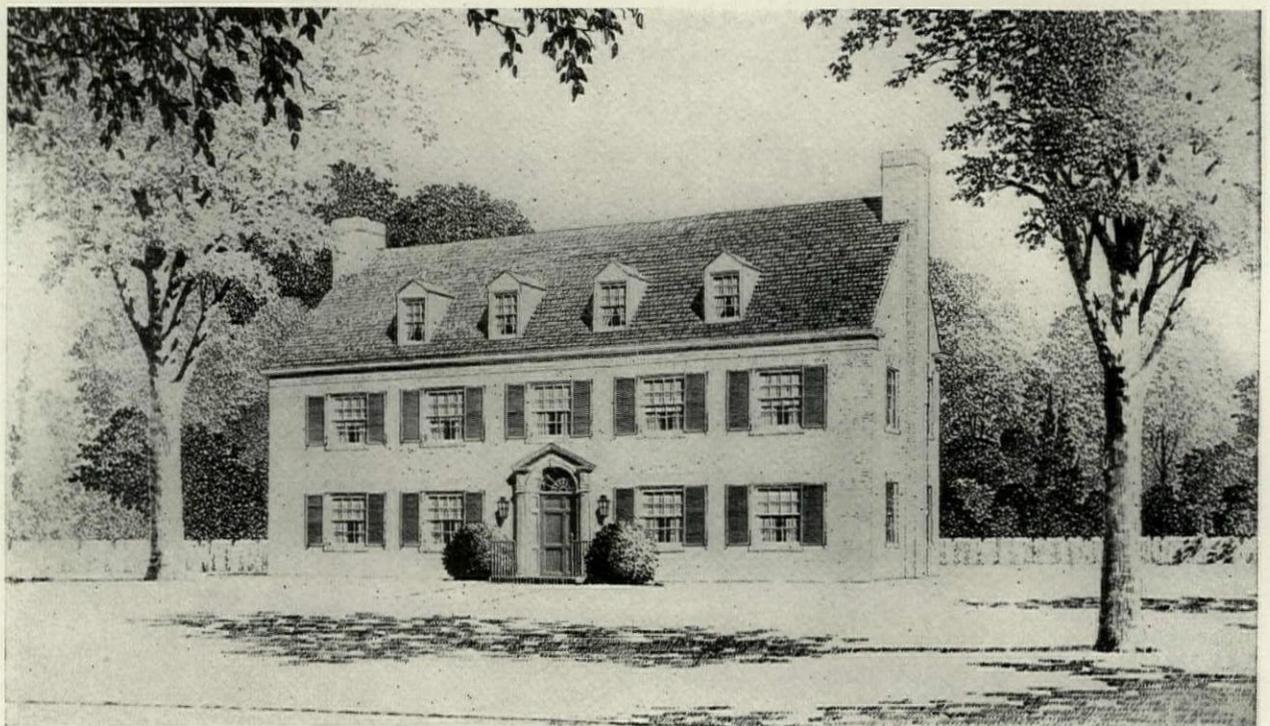


Figure 3—The entrance doorway has now been added and planting has begun

enter, for instance, are two dark, high-ceilinged parlors, instead of one bright, comfortable big living room. But it can be renovated and changed into a modern, charming *home*.

"For instance, take the hideous, high, old-fashioned pressed brick chimneys. The fancy upper parts should be removed and lowered and the brick work painted white—thusly." (Whereupon the appropriately modified drawing is shown.)

"Then there is the roof. I never did understand why the builders in the Nineties put cast iron fences on top of their roofs. But they did. And the over-emphasized dormers with their jig-saw ornamentation; and the pointed towers! But the crowning glory of the period was the cornice, with its wide overhanging roof—designed to keep the sunlight out of the bedrooms—and the elaborate brackets which pretend to hold it up!

"So, off comes the roof and in its place we put a simple roof with simple dormers and a simple Colonial cornice." (See Figure 1.)

"Now for the second floor. The windows are well placed so we won't disturb them, but we will put in new sash with small panes and will paint the brick white and we will take off the old octagonal tower on the corner." (Another transformation in the drawing is exhibited.)

"There! It is beginning to look better already!

"One of the inevitable features of the horse and buggy house was the front porch. Perhaps it was

all right back in those more leisurely days, but times have changed. These are automobile days and we want a porch or a terrace away from the noise and gasoline fumes and looking into the peace and quiet of the garden. And so vanishes the old porch, leaving the house calm and sedate, stripped of all its gaudy gingerbread." (See Figure 2.)

"Mary has for years shuddered every time she passed the house and saw the round flower beds carefully guarded with the interlaced croquet wickets, so they disappear, and the old drive winding through the lawn and back to the deserted old barn disappears as well, to be replaced with a motor drive on the other side of the house." (Here a fifth modification appears on the drawing.)

"Up to now we have been removing things and now we start to add—just a little. A simple Colonial entrance, flanked by clipped shrubs." (See Figure 3.)

"Mary is interested in gardens, so we will give her one—cut off from the street by a high hedge with a trellised entrance from the front lawn. And, of course, there will be some base planting at the house. This base planting is, of course, balanced by planting on the other side." (See Figure 4.)

"And last but not least is Mary's precious white picket fence across the front." (The final change is made.) "And so the House of the Gay Nineties goes 1935!"

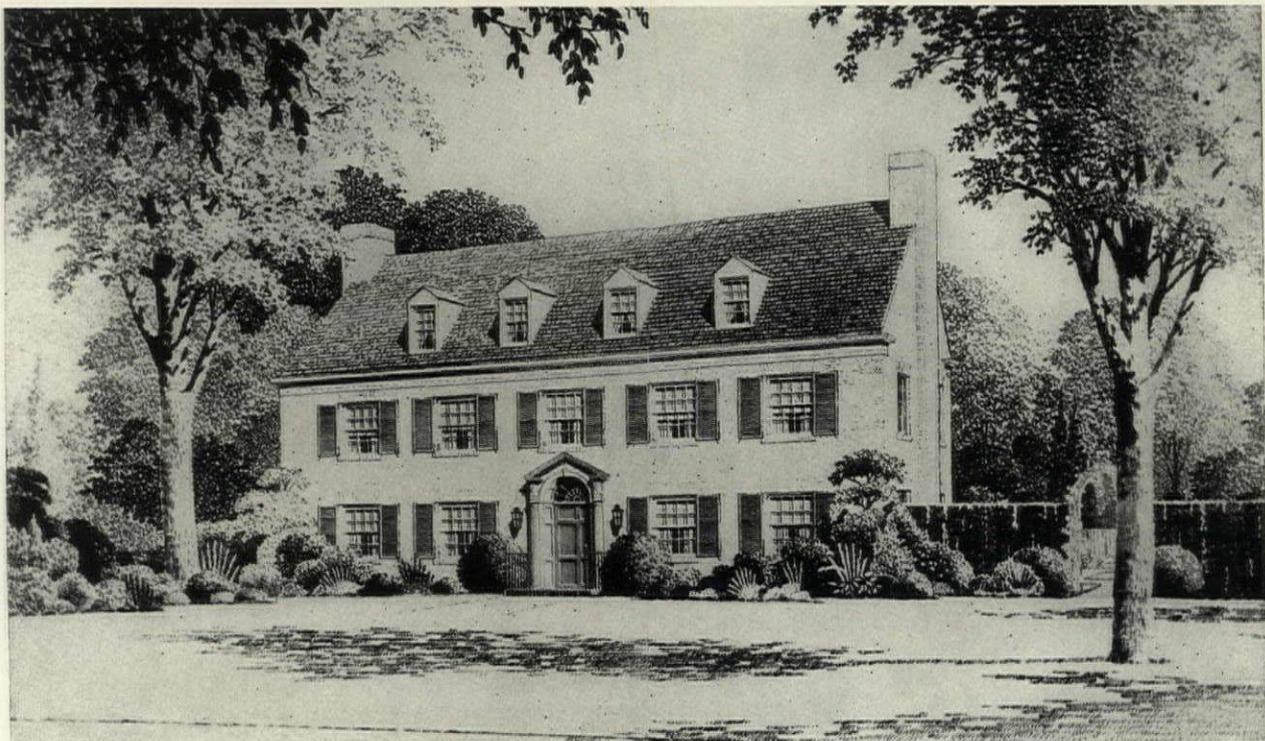
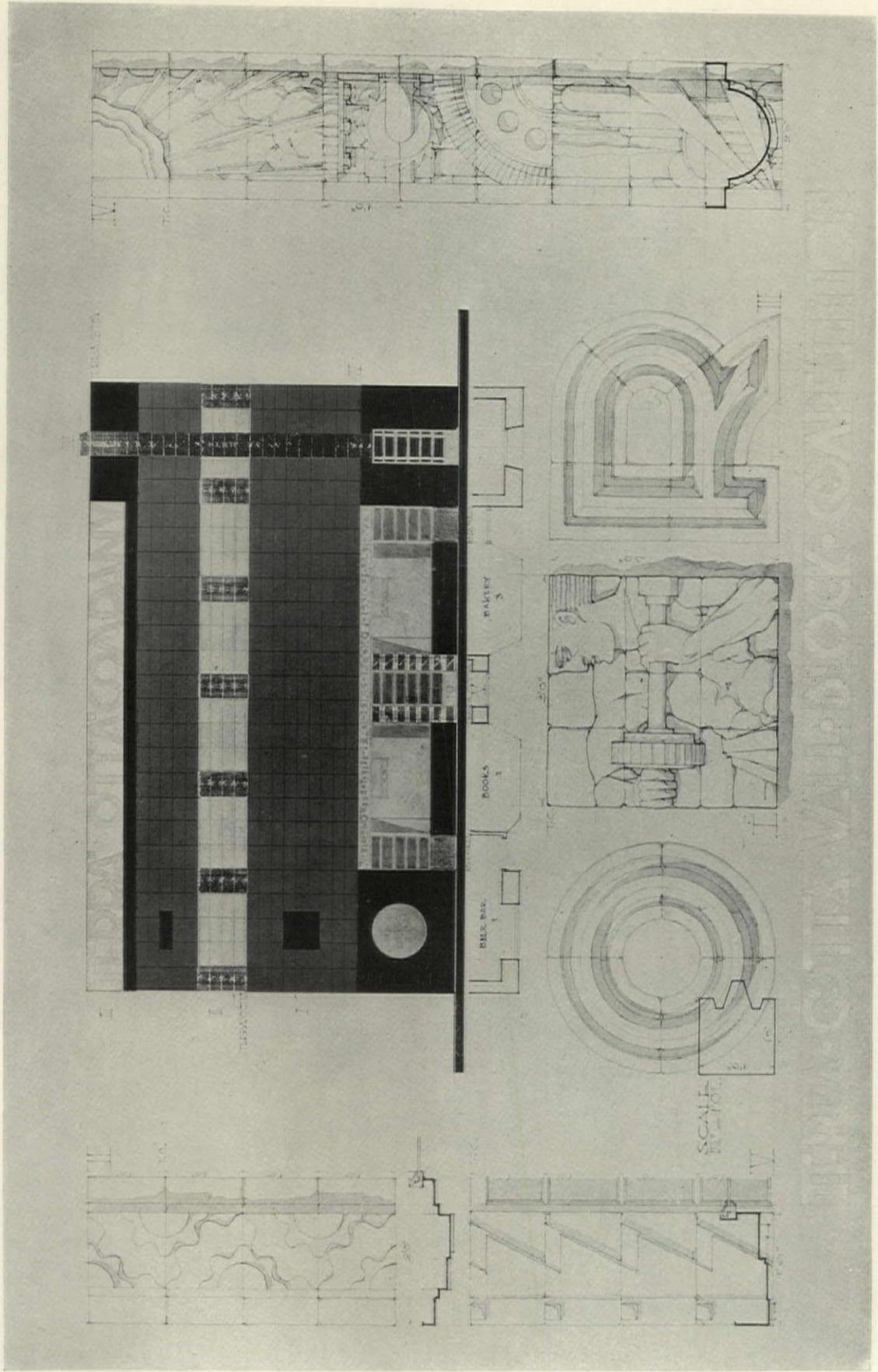


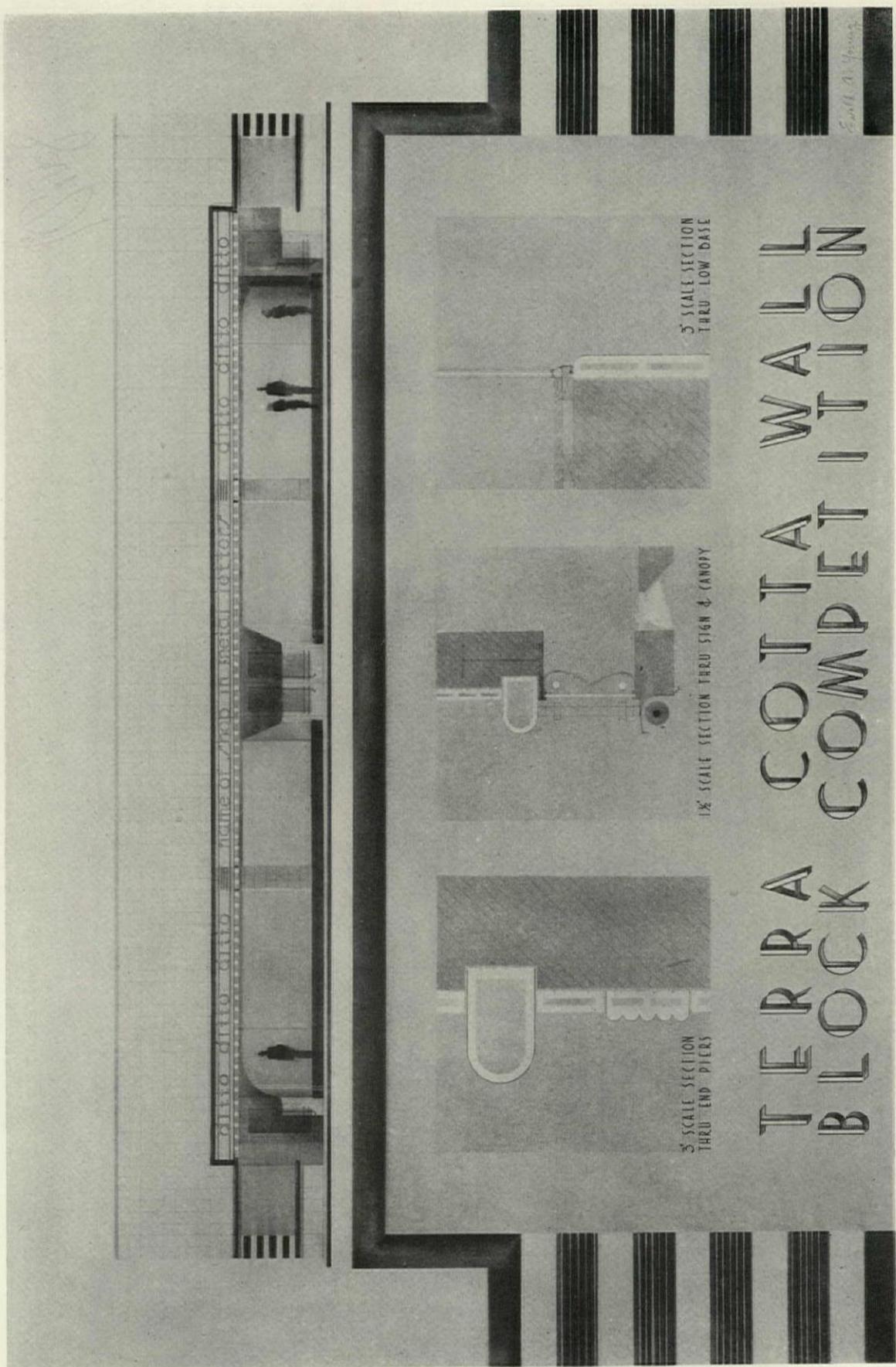
Figure 4—The last stage but one shows the effect of complete base planting



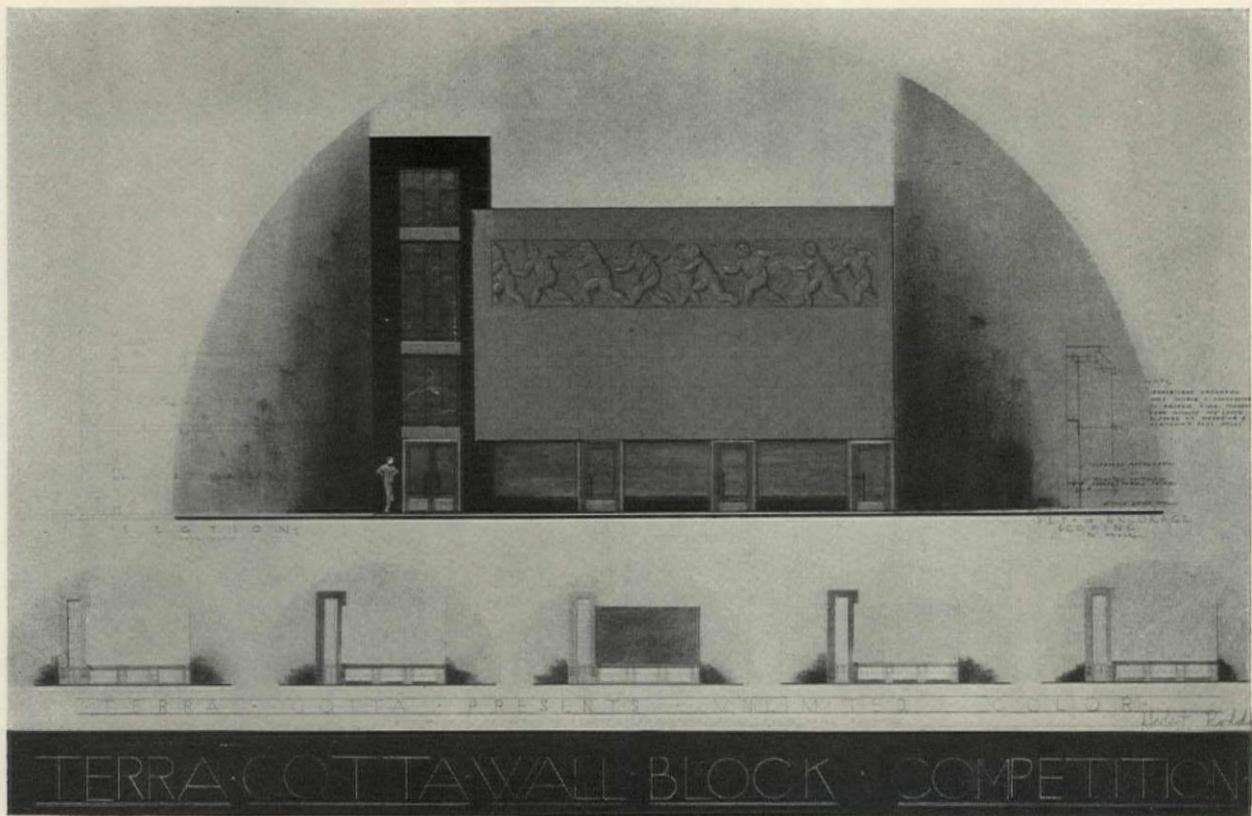
Pencil sketch from the travel notebook of Louis A. Lamoreux of Mansfield, Ohio



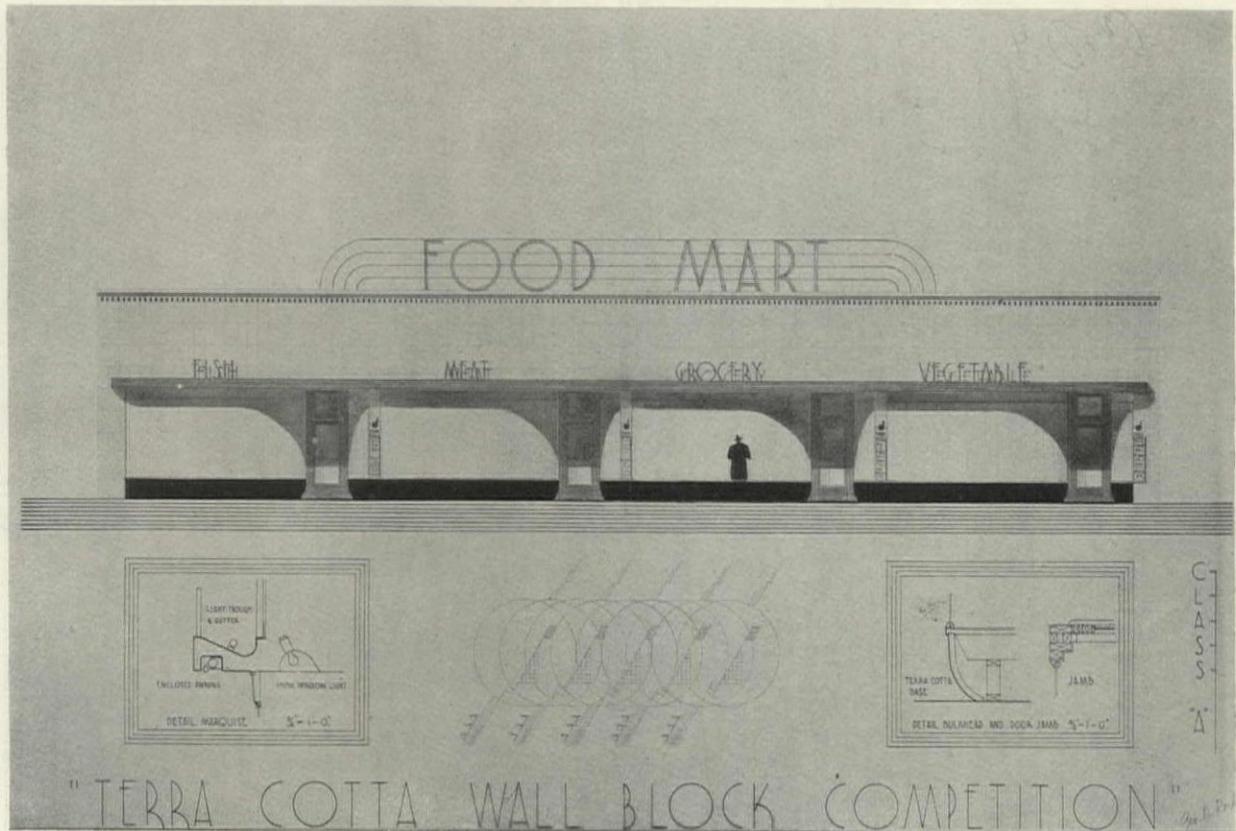
First Prize Design by A. A. Zakharoff for a Two-story Shop and Office Building in the Terra Cotta Wall Block Competition conducted by the Chicago Architectural Club and sponsored by the American Terra Cotta Company and the Northwestern Terra Cotta Corporation



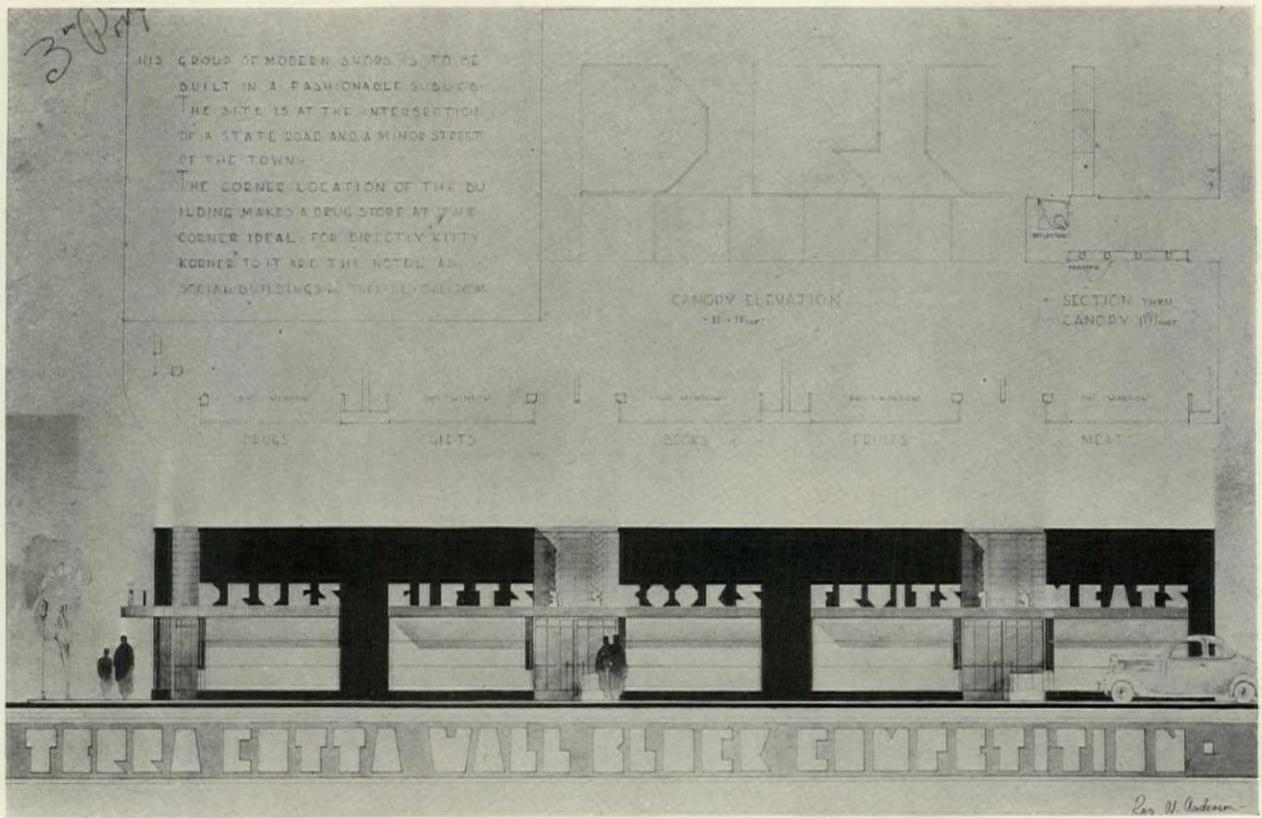
First Prize Design by Evald A. Young for a One-story Shop Building in the Terra Cotta Wall Block Competition conducted by the Chicago Architectural Club and sponsored by the American Terra Cotta Company and the Northwestern Terra Cotta Corporation



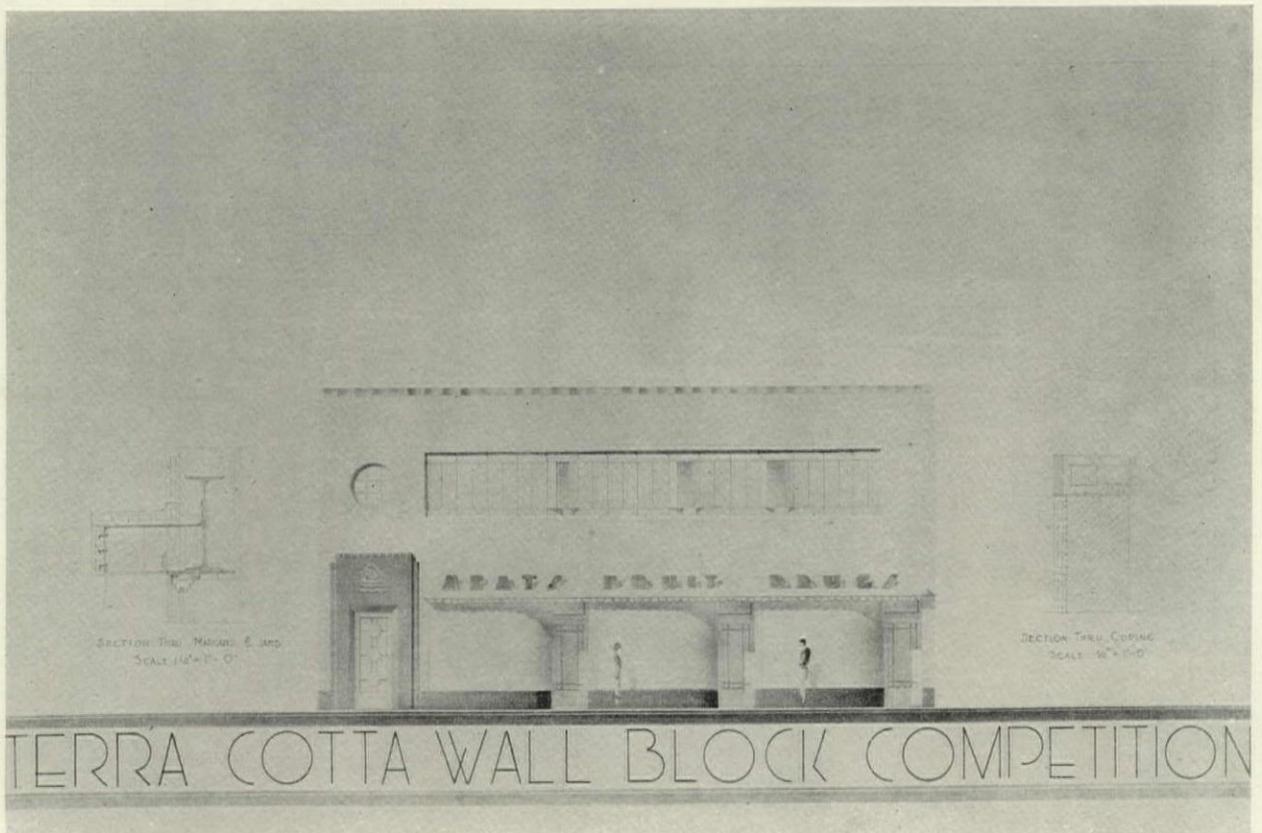
Second Prize Design by Herbert Rodde for a Two-story Shop and Office Building



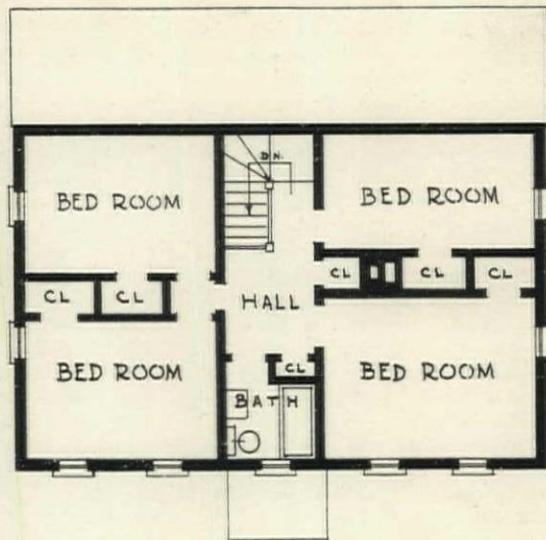
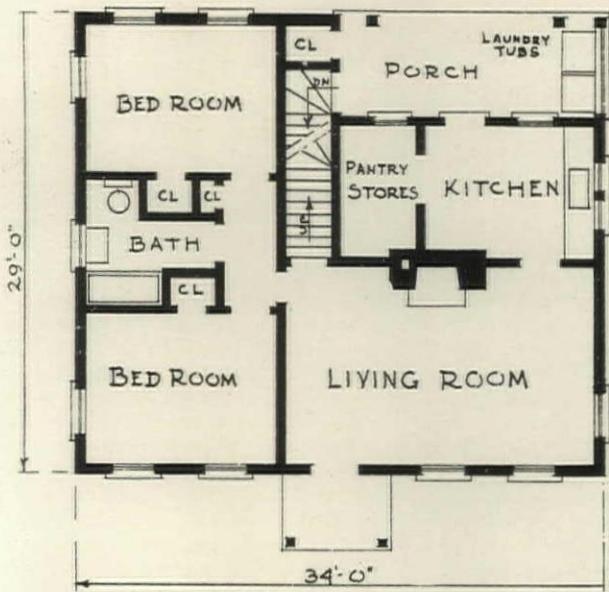
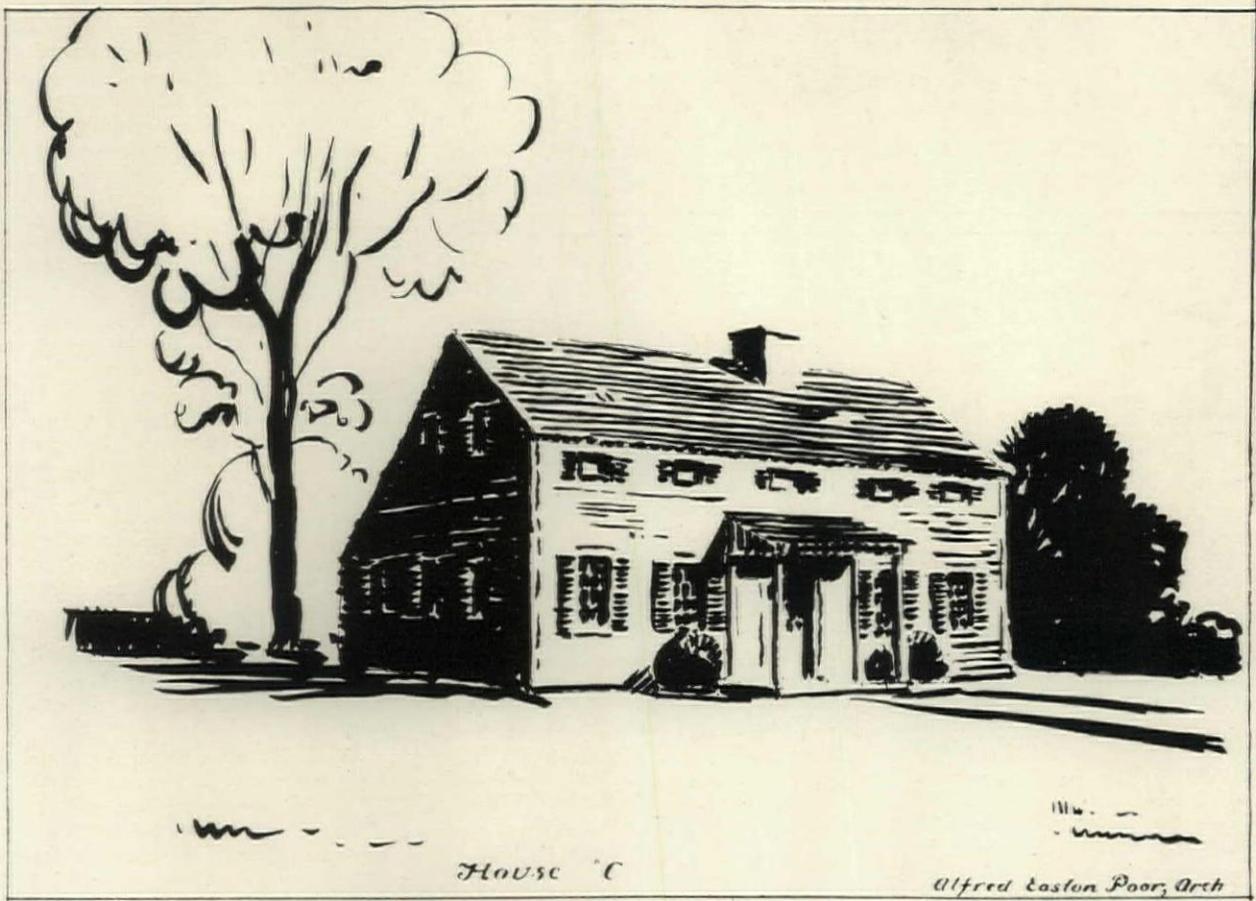
Second Prize Design by G. D. Reicher for a One-story Shop Building in the competition conducted by the Chicago Architectural Club and sponsored by the American Terra Cotta Company and the Northwestern Terra Cotta Corporation. Refer to news item on page 10, November Pencil Points



Third Prize Design by Roy Anderson for a One-story Shop Building



Third Prize Design by Charles Koncevic for a Two-story Shop and Office Building in the competition conducted by the Chicago Architectural Club and sponsored by the American Terra Cotta Company and the Northwestern Terra Cotta Corporation. Refer to news item on page 10, November Pencil Points



Plans and a perspective rendering of a house for a subsistence homestead in North Carolina. Alfred Easton Poor, Architect. Mr. Poor's rendering is of interest for its extreme economy of effort which has yet produced an adequate impression of the finished house. It was done rapidly with brush and ink

A. L. Gupstill's Corner

A LITTLE DEPARTMENT OF ARCHITECTURAL ESTHETICS, WITH
EMPHASIS ON SKETCHING AND RENDERING

HAPPY 1936!



BEST WISHES TO EVERYBODY!

Most sincerely do I wish every reader of Gupstill's Corner a Happy New Year! And it surely looks as though many of us have more hope for happiness than for some time past.

And thanks to you who have been so kind and thoughtful as to send cards or other greetings. If I don't get around to answering each one individually it doesn't mean any lack of appreciation. For I do truly appreciate every communication I receive. So far as the letters touching on matters vital to architecture are concerned, some day I hope to have space for an open forum where such things can be presented.

During recent weeks my unanswered letters have piled up faster than ever, for last-minute affairs connected with the publication of my Color book have kept me unusually busy. But I know you will forgive any tardiness in reply, especially the many of you who have already received your copies of this volume. It's terribly bad taste, of course, for me to brag about my own book, yet I can't resist a word. The book really isn't mine anyway, you know, for its value results largely from the numerous splendid contributions from other artists. To them the publishers and I (and you, too!) are indebted. But I have at least had the privilege of adding many practical suggestions which it took me over twenty-five years to collect, a bit from one source and a bit from another.

Aside from the question of the merit of the book, I want to tell you something which, believe it or not, is true. This is that at the price set (which is a lot as books run, I admit) this volume is positively cheap. If priced according to the publishers' normal adjustment of profit to production and distribution costs, it would sell for \$20 or more. This you will realize if you count the color pages in other similar books and compare them with ours in number, size, and quality. It is these color pages which cost the money, both because of the expensive engravings involved (four separate plates are made for each subject) and because they have to go through the presses four times.

Enough for that. I didn't intend to get running on in this way. But I have

tried mighty hard to make the book useful, and the publishers have done a splendid job, so naturally I am anxious to have its merits known. If you have any doubt as to whether or not it is what you need, you can take advantage of the free examination order form.

Apparently the November sheet on avoiding distortion in rendering layouts attracted more attention than I expected, for I have had a number of letters about it. Robert Fuller Jackson sent some interesting perspective charts and a well-rendered interior—wish I had room to publish them. Another reader asked the questions which prompted the preparation of the accompanying Sheet 4. These diagrams are mainly self-explanatory. At 1 we see that if we desire to show the floor design plainly, in the parallel perspective of an interior, we place the eye level high. If, contrarily, the ceiling is the important feature, as at 2, we make



A CREEPING BABY'S EYE VIEW

the eye level very low. One should never drop it so far, however, as to give a "creeping baby's eye view" effect. At 3 we are shown, diagrammatically, that if, of the two foreshortened (receding) walls, the right is to be given the most prominence, the vanishing point should be moved away from it, or towards the left. Preferably dominance should still be maintained in the unforeshortened wall directly before the eye. When we turn to angular perspective, as at 4, one of the two visible walls should usually dominate the composition (unless there are elements to unify them nicely), being shown larger or less foreshortened than the other. The two often fight for supremacy, this antagonism destroying the unity of the entire composition. This thought is made clearer, perhaps, by Sketch 6, which further indicates that if we take our line of sight directly into a room corner, as here, we get an unnaturally stiff appearance such as we seldom encounter in an actual room. In other words, it is unwise to have the vanishing points equi-distant from the room corner. Especially should we avoid the added symmetry which comes from locating the eye level half way from floor to ceiling, as in this diagram, for

this develops a number of lines of equal pitch; they seem decidedly artificial. It is only in highly decorative or conventional effects that such a placing is likely to prove other than disturbing.

Set arrangements of this sort are usually had in parallel perspective, too, as Diagram 5 demonstrates. Formal designs can occasionally be treated in this way, but as a rule one should not locate his vanishing point exactly in a room center.

In putting border lines around a perspective rendering, or in matting it (or in leaving wide margins), the unnatural appearances in the upper diagrams at 7 should also be avoided. In parallel perspective, for instance, the beginner often does the thing shown in the upper left-hand sketch, where some of the intersection lines of walls, ceilings, and floors come exactly to the picture corners. Note that line *a*, for example, runs to the picture corner *A*. This unpleasant and artificial impression has been corrected in the sketch below. It is often best to make your rendering a bit larger than needed, without thought of exact limitations, later matting it to the point where the best composition results, thus escaping this difficulty.

In angular perspective, we should particularly avoid set layouts such as that shown in the upper right-hand corner of Diagram 7, where line *b* runs to *B*, with the other corners constructed accordingly. In short, always in perspective layout we should work for naturalness.

Do you want more dope on perspective? If not, I'm turning back to interior rendering for a few plates; then on to some other subject.



I FIND AMONG RECENT LETTERS

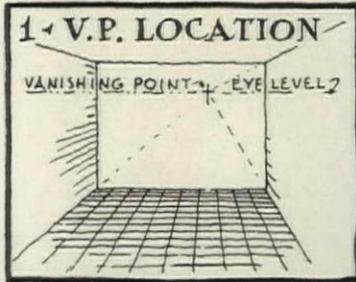
A number of letters have come in response to my request for suggestions for book titles. Schell Lewis, among others, points to the need of a book on trees, showing, in particular, how to render them in proper relation to architecture. Another fine letter from Rollin L. Rosser supports this same thought and offers additional constructive suggestions as to content. I am asked, also, to do a book on practical perspective, both instrumental and freehand, "showing the 'how' but free from too much of the 'why.'" Do these titles get any other support?

As to the voting on the recent pen competition drawings, unless I receive a more generous response I will have too few opinions to be worth publishing. I'll try it one more month. Let's hear from you!

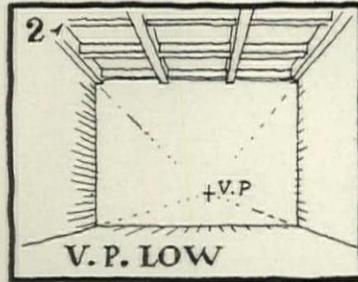
This month's letter from the most remote country is from L. S. Carrera of Guatemala.

RENDERING INTERIORS AND FURNITURE

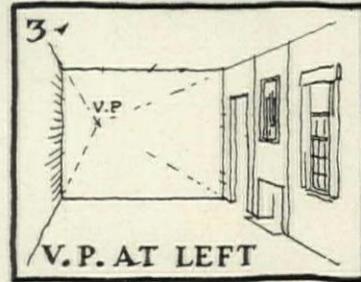
SHEET 4 • MORE ABOUT INTERIOR PERSPECTIVE LAYOUT



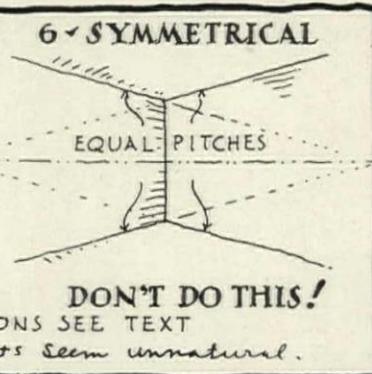
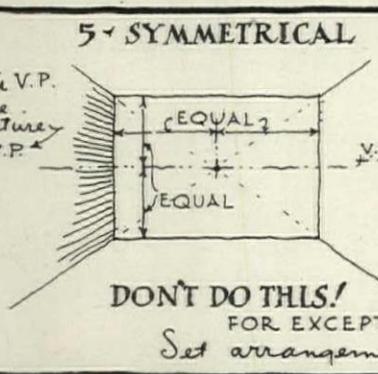
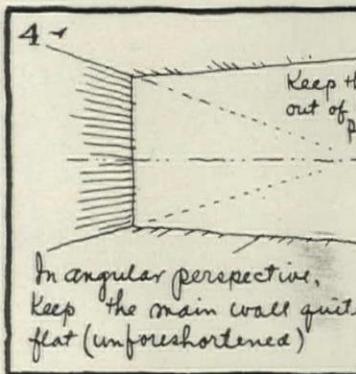
If you want to show your floor pattern to best advantage, place the eye level high.



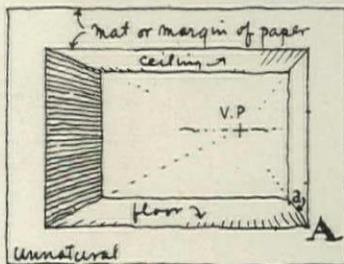
Conversely, if your desire is to picture the ceiling fully, choose a low eye level.



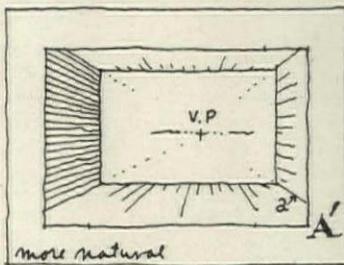
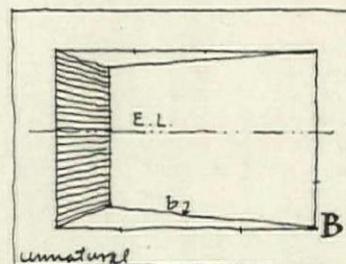
To show the right foreshortened wall distinctly, place the V.P. near left, and vice versa.



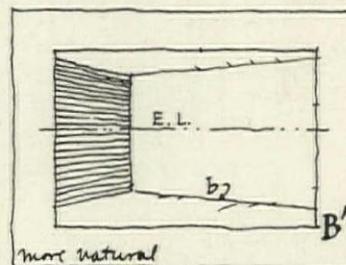
7 - MATTING OR FRAMING



Don't bring lines of intersection of walls and floor (and ceiling) exactly to mat or margin line corners, as here. It gives too stiff and unnatural an effect.

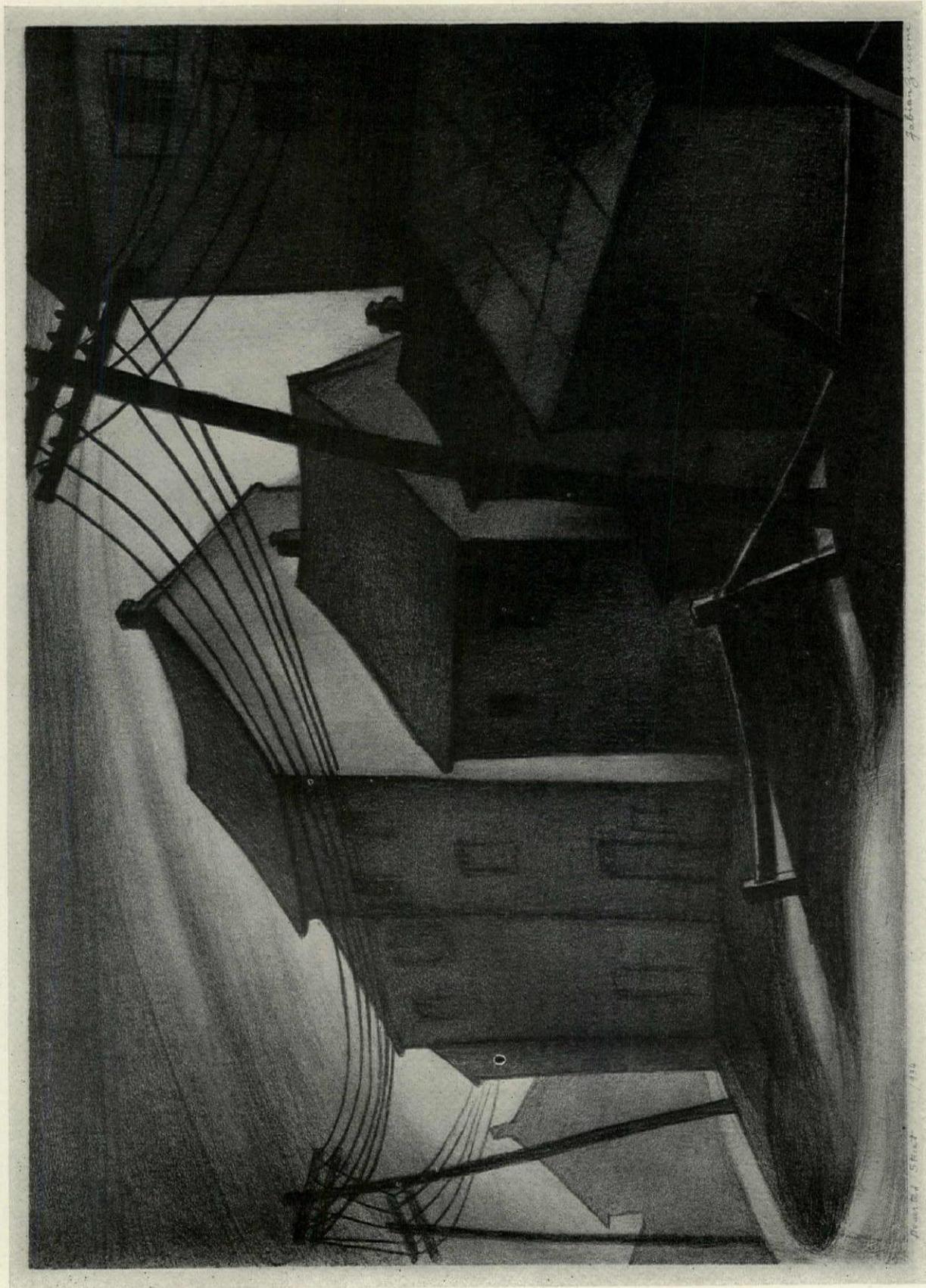


Arrangements more like these lower two are generally better. Frame or mat each example where most effective, just as you would a photograph.



See text.

GOOD RENDERING IS NEXT TO IMPOSSIBLE WITHOUT GOOD LAYOUT



"Deserted Street." From a lithograph by Fabian Zaccane. Without the presence of a single living thing in the composition a remarkable sense of movement has been expressed through flowing line and gradations of value. Size of original, 12½" x 9". Printed by George Miller

S E R V I C E D E P A R T M E N T S

THE MART. In this department we will print, free of charge, notices from readers (dealers excepted) having for sale or desiring to purchase books, drawing instruments, and other property pertaining directly to the profession or business in which most of us are engaged. Such notices will be inserted in one issue only, but there is no limit to the number of different notices pertaining to different things which any subscriber may insert.

PERSONAL NOTICES. Announcements concerning the opening of new offices for the practice of architecture, changes in architectural firms, changes of address and items of personal interest will be printed free of charge.

FREE EMPLOYMENT SERVICE. In this department we shall continue to print, free of charge, notices from architects or others requiring designers, draftsmen, specification writers, or superintendents, as well as from those seeking similar positions.

SPECIAL NOTICE TO ARCHITECTS LOCATED OUTSIDE OF THE UNITED STATES: Should you be interested in any building material or equipment manufactured in America, we will gladly procure and send, without charge, any information you may desire.

Notices submitted for publication in these Service Departments must reach us before the fifth of each month if they are to be inserted in the next issue. Address all communications to 330 West 42nd Street, New York, N. Y.

THE MART

P. E. Soneson, 706 North Main Street, West Lafayette, Indiana, has the following *White Pine Series* for sale: Vol. 7, Nos. 1, 2, 5; Vol. 8, No. 5; Vol. 10, Nos. 1 through 6.

Ervin Kampe, 100 Montrose Drive, South Charleston, West Va., would like to obtain a copy of the January, 1930, issue of *PENCIL POINTS*.

Henry John Larrecq, 110 West 51st Street, Los Angeles, Calif., has the following for sale: *PENCIL POINTS*, 1927 through 1935; *Architectural Forum*, 1924 through 1935; *American Architect*, 1924 through 1932; *Architectural Record*, 1932 through 1935.

T. C. Herrmann, Box 1082, Providence, R. I., has for sale first and second volumes of *Monograph on the Works of McKim, Meade & White*. Originally cost \$35; in excellent condition. Make offer.

Adrian F. Wemhoff, 416 Marshall Street, Decatur, Indiana, would like to obtain the following books: *History of Ornament, Ancient and Medieval*, vol. 1, *History of Ornament, Renaissance and Modern*, vol. 2, by A. D. F. Hamlin; *Grammar of Ornament*, Owen Jones; *Styles of Ornament*, Alexander Speltz; *Principles of Design*, G. Wooliscroft Rhead; *The Theory of Practice of Design*, Walter Crane; *Study of the Orders*, American Technical Society. Would prefer them in good condition.

Robert Ronowski, LaGrange, Ill., has a few architectural books, magazines and catalogs he would like to dispose of at a reasonable price.

Howard A. Griffith, Jr., Sheffield National Bank Bldg., Sheffield, Ala., would like to purchase the following: equipment for etching, plates, stylus, etc.; second-hand press.

S. W. Dodd, P. O. Box 1, Barberton, Ohio, has the following copies of *PENCIL POINTS* for sale: January, 1924, through December, 1931, except September and October, 1927, and May, 1931. Will sell the lot of 93 numbers for \$15.00, f.o.b.

PERSONALS

MARTIN C. PARKER, *Architect*, has moved his office from Long Beach, Calif., to Suite 528 Aztec Building, San Antonio, Texas.

UDA H. KOERNER, *Architect*, has moved his office to 1663 East 79th Street, Chicago, Ill.

S. L. BERG, *Architect*, has moved his office from 523 6th Avenue to 711 Monroe Avenue, Helena, Montana.

RANDOLPH F. WARE, *Architect*, has moved his office to the Hiland Theatre Building, Fort Thomas, Ky.

F. D. AMORY, JR., *Architect*, formerly of 551 Fifth Avenue, is now located at 15 East 40th Street, New York, for the practice of architecture and interior work. Phone LEXington 2-4058.

NORMAN W. MARBLE, *Architect*, has opened an office for the practice of architecture, at 7 Thomas Street, Providence, R. I.

MANUFACTURERS' DATA WANTED

JAMES ROBERT DURLING, *Architect*, P. O. Box 56, Ancon, C. Z.

NORMAN W. MARBLE, *Architect*, 7 Thomas Street, Providence, R. I.

HARTY & INGALL, *Architects*, 22400 Morley, Dearborn, Mich.

ADRIAN FRANCE WEMHOFF, *Architect*, 416 Marshall Street, Decatur, Ind. (data and prices on mausoleum equipment, bronze tablets, chapel equipment, stained glass, altars, etc.).

UDA H. KOERNER, *Architect*, 1663 E. 79th Street, Chicago, Ill.

J. SANFORD SHANLEY, *Architect*, 33 Washington Street, Newark, N. J.

MARTIN C. PARKER, *Architect*, 528 Aztec Bldg., San Antonio, Texas.

FRANCIS O. MERCHANT, *Architect*, 21 Elm Street, Camden, Maine.

RUDOLPH F. WARE, *Architect*, Hiland Theatre Bldg., Ft. Thomas, Ky. (data on residences and small shops).

BENJAMIN F. PHILLIPS, *Architect*, Three Lakes, Wisconsin.

HENRY W. JOHANSON, *Architect*, Lincoln Bldg., Roslyn, L. I., New York (data on residential work for A.I.A. file).

C. H. GREGG, *Architect*, 3701 16th Street, N. W., Washington, D. C.

RHENISCH, WILSON & WATERMAN, *Architects*, 612 North Grove Avenue, Oak Park, Ill. (data pertaining to architectural, engineering and construction industries).

ERTZ & MACPIKE, *Architects*, 323 North Beverly Drive Cr. 8009, Beverly Hills, Calif.

DON TORMEY, *Engineer*, 4th District, Iowa WPA, 6th floor, Royal Union Life Bldg., Des Moines, Iowa (for A.I.A. file).

JOHN H. BOOTHE, *Engineer*, 4th District, Iowa WPA, 6th floor, Royal Union Life Bldg., Des Moines, Iowa (for A.I.A. file).

C. E. BRASHEAR, *Engineer*, 210 Fratt Bldg., Billings, Montana (data on building construction products).

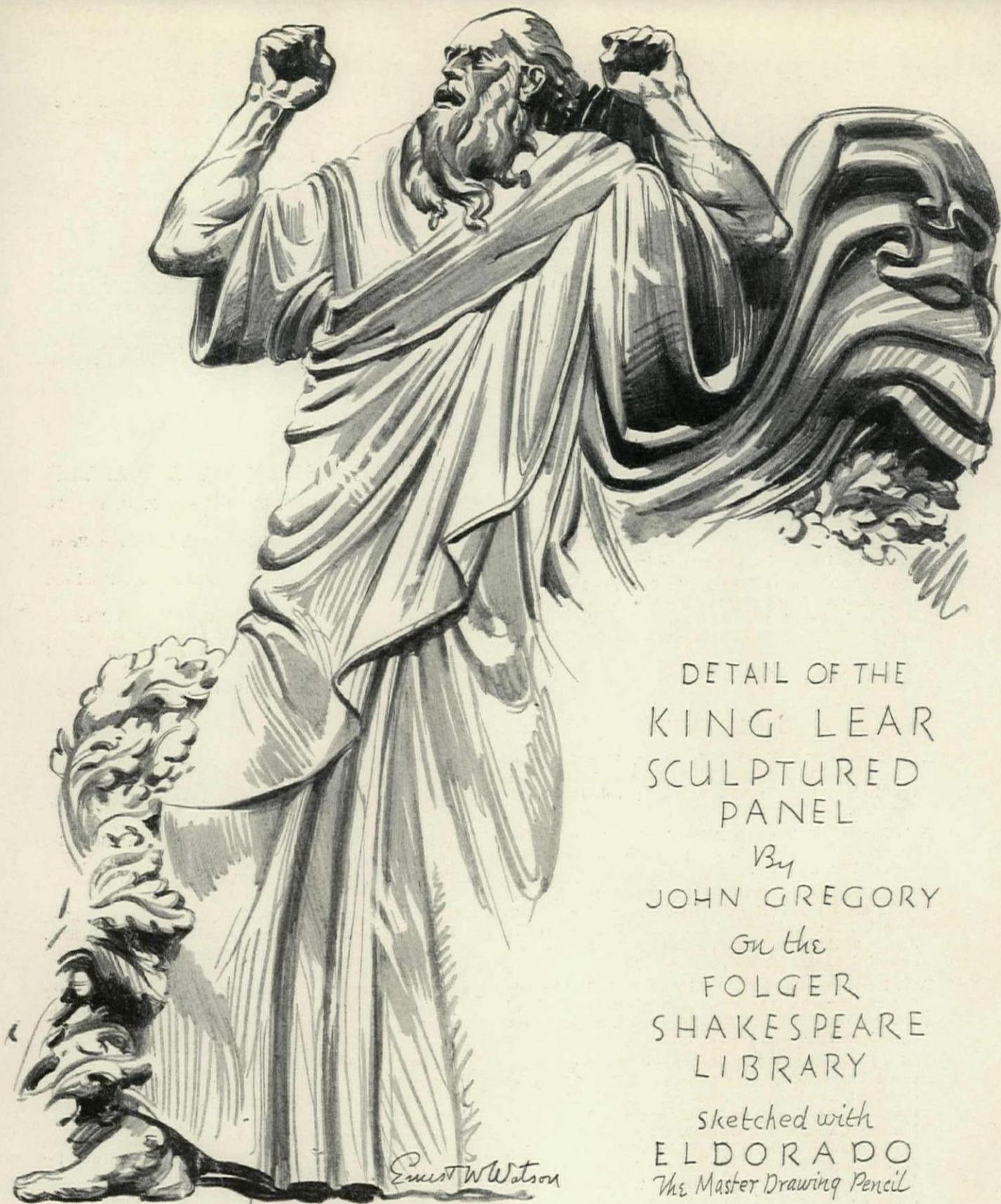
KEITH HINCHCLIFF, *Student*, Resettlement Adm., Kaiser, Mo. (data on products used in resort cabin construction).

M. F. STERN, *Student*, Dryfe House, S.A.C. School, Cape Town, S.A.

CHARLES BEYER, JR., *Student*, 612 Rex Avenue, N. E., Canton, Ohio (data on small residence and building construction).

DEPARTMENT OF ARCHITECTURE, Syracuse University, College of Fine Arts, Syracuse, New York.

HARPER HIGH SCHOOL, Architectural Club, 6520 So. Wood Street, Chicago, Ill. (for A.I.A. file and data on residential construction).



DETAIL OF THE
KING LEAR
SCULPTURED
PANEL

By
JOHN GREGORY

On the
FOLGER
SHAKESPEARE
LIBRARY

sketched with
ELDORADO
The Master Drawing Pencil

ELDORADO CONTEMPORARIES

In sketching sculpture the architect seldom wishes to produce a photographic likeness of the chiseled marble. Instead his pencil picks out the essential planes and renders them in a bold indicative manner. This the pencil will do with directness and charm, giving a crisp, lively impression.

Watson says he made this drawing on cameo paper using principally 4B and 5B Eldorados for the darkest tones and HB or B for the light gray tints. He says, "There is a peculiarly delightful *feel* and response to Eldorado leads." Pencil Sales Dept. 167-J, JOSEPH DIXON CRUCIBLE COMPANY, Jersey City, N. J.