

PENCIL POINTS

An Illustrated Monthly JOURNAL for the
DRAFTING ROOM Edited by RUSSELL F. WHITEHEAD

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IN MEMORY OF BIRCH LONG

TWO YEARS AGO, on March first, the architectural profession lost one of its outstanding figures who was, as well, one of its most lovable characters—we refer to Birch Burdette Long. His place will never really be filled, for in addition to being one of the most skillful architectural renderers of recent times he was everybody's friend, looked up to and esteemed by all who came in contact with him, from the architects he served so well to the youngest draftsman or student who received from him help and advice. And so we have thought it well to remind a quickly forgetting world of the anniversary of the passing of this unassuming, friendly man, so that those who knew him only slightly may freshen their memories of him and, so doing, perhaps pay him a silent tribute. Those who knew him well, of course, need no reminder to keep his memory fresh and green.

In the architectural community, both in New York and in other cities, Birch Long played an important part. The Architectural League of New York owes him a great debt for the active and enthusiastic part he took in its affairs. For many years his efforts were largely responsible for the success of its exhibitions and even on the verge of the serious illness which resulted in his death he held his annual duty of "hang-

ing the show" to be more important than his personal welfare.

In his renderings he acted, in a way, as an interpretative artist for the leading architects of his day, for with his pencil and brush he made their buildings live on paper ere they were built. It is safe to say that through these drawings of his many of the best pieces of American architecture first became known to the public.

During his lifetime we approached Mr. Long on several occasions to suggest running a comprehensive article about him and his work.

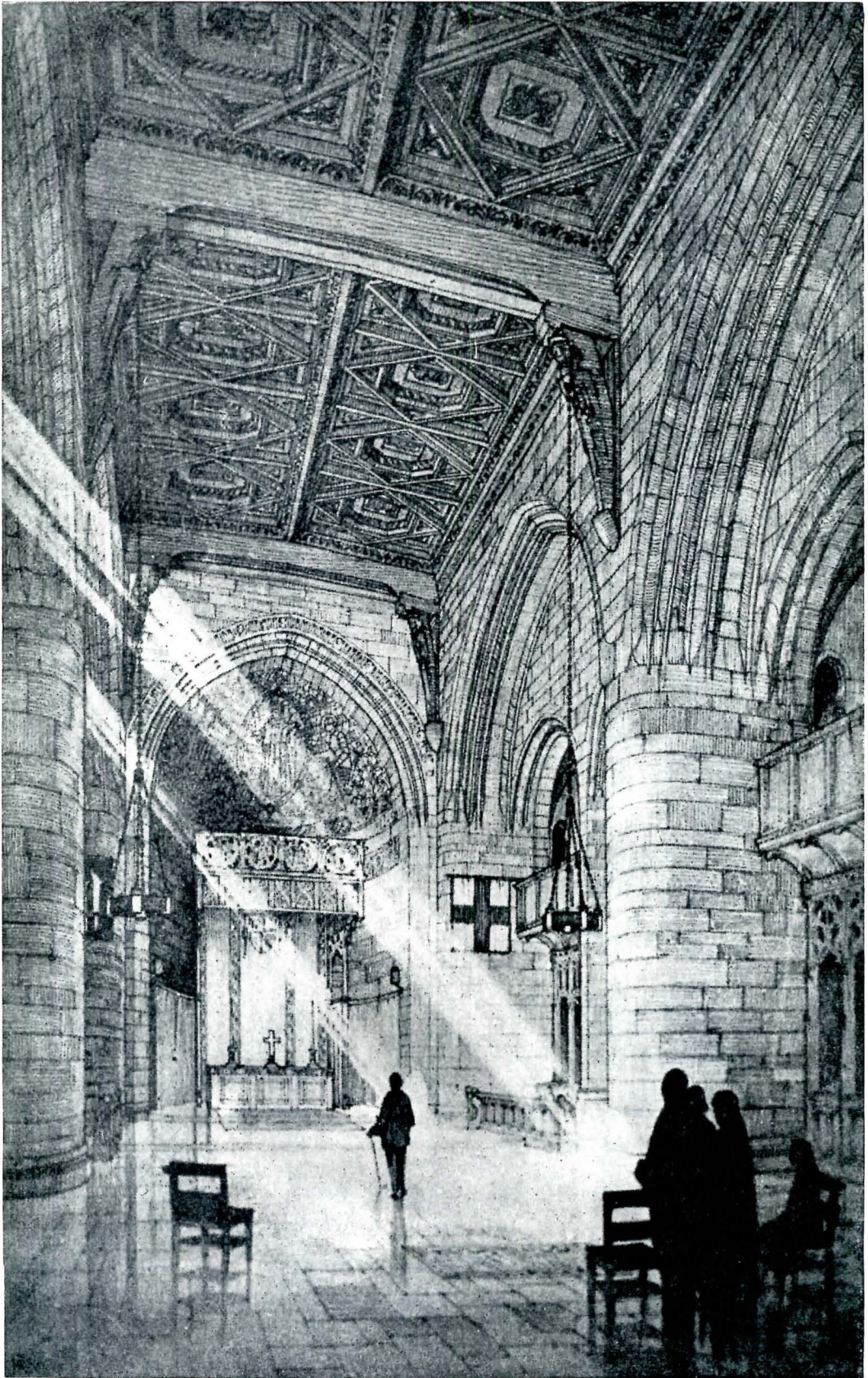
With characteristic modesty he invariably replied that it really wasn't worth it but that if we thought it was it would be better to wait until he was gone. Now, at last, in this issue, we had hoped to run an article on his career, but owing to some difficulty in securing a representative large color rendering from his hand for reproduction in color, it has become necessary to postpone this project. The article is, however, in course of preparation and will be presented to our readers at a little later date.

Meanwhile, we do not wish this anniversary to pass without recalling to our readers the debt of gratitude the profession owes to this man who did so much to raise the standard of architectural draftsmanship.

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PENCIL DRAWING BY ELLIOTT L. CHISLING

CHAPEL OF ST. GEORGE AND ST. BARTHOLOMEW, BALTIMORE CATHEDRAL, BERTRAM G. GOODHUE, ARCHITECT

PENCIL POINTS

Volume X

March, 1929

Number 3

SILHOUETTES OF AMERICAN DESIGNERS AND DRAFTSMEN—V

ELLIOTT L. CHISLING

By James Perry Wilson

IN THE SUMMER of 1909, a young man, whose love of design and drawing had led him to fix upon architecture as his life work, got a job in a New York office. Save for a previous employment of one week, it was his first experience in that profession. The work of this particular office appealed to him and, as he happened to know a member of the staff, he secured a position there. The young man was Elliott L. Chisling; and he could certainly have made no better choice of an office in which to learn his chosen work. Indeed, one cannot help wondering whether he himself fully realized at the time what an opportunity was opening before him. For it was to the New York office of Cram, Goodhue, and Ferguson that he went; and here, during the next fourteen years, he was to come under the influence of that most brilliant and inspiring genius of American architecture, Bertram Grosvenor Goodhue.

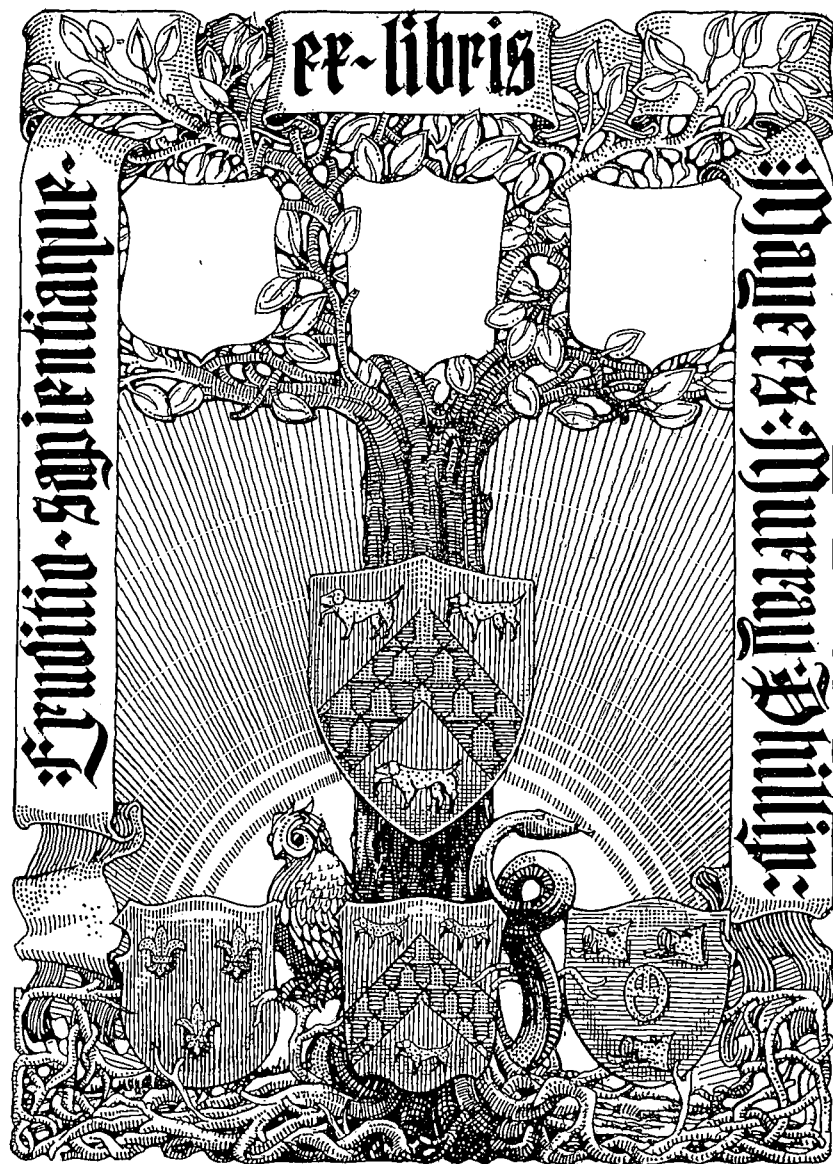
Anyone who has had the good fortune to work under Mr. Goodhue (and of this number the present writer is one) will tell you what a fruitful and stimulating experience it was. There was probably no other office in which a young draftsman could get such close and sympathetic attention from his employer. While the academic or French method of architectural training had become popular in this country, under the influence of architects who had studied at the Beaux Arts in Paris, Mr. Goodhue remained a firm believer in the English apprentice system. Accordingly he took a keen interest in getting promising young men into

his office, and there guiding and encouraging their progress. Thus young Chisling came under his eye. It was perhaps a time of unusual opportunities for the young draftsman. The office, which Mr. Goodhue had come down from Boston to establish a few

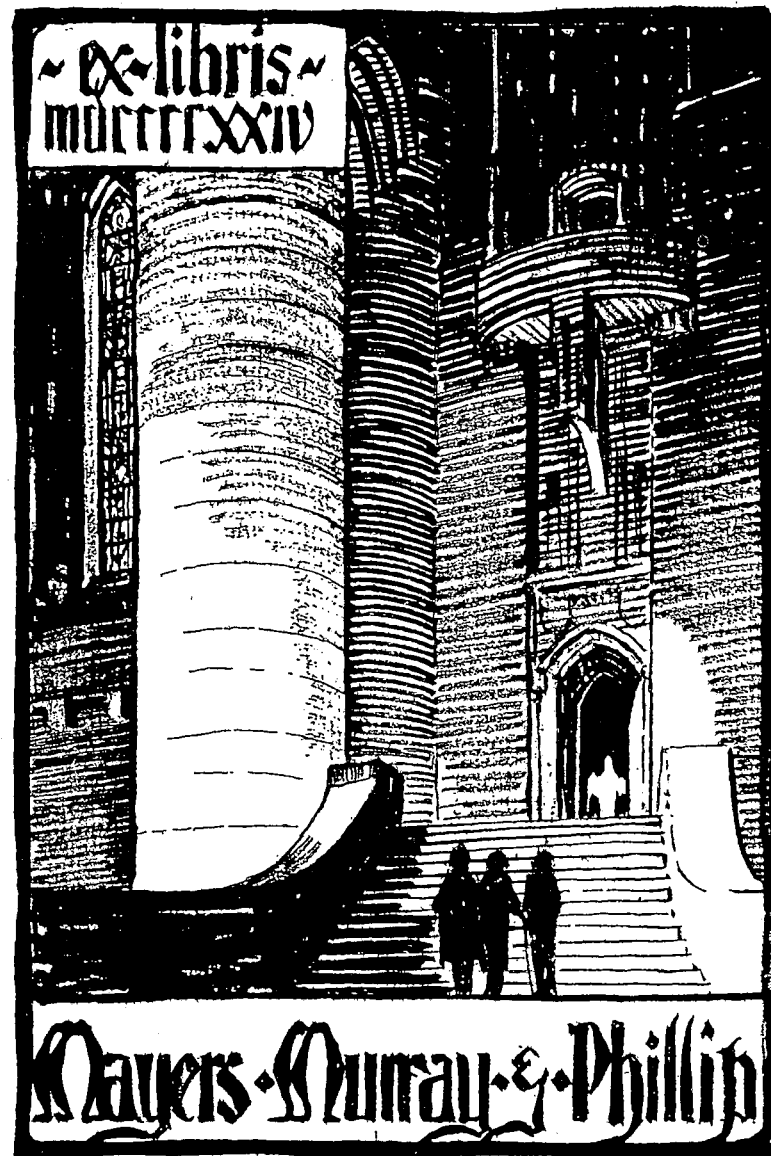
years before, was still comparatively small. There was a drafting force of about ten men, each of whom came in for a greater share of his employer's attention than would have been possible in a larger office. Mr. Goodhue was always a determined opponent of overspecialization, and looked with strong disapproval upon that type of "efficiency" in an office which keeps one man working for months or years on end doing nothing but lettering, while another puts in all his time on plumbing sections. It was his aim to give every man a chance to try his hand at every kind of work, and thus to broaden his experience and bring to light any talent he might possess. As his first job, a junior draftsman was usually set to work



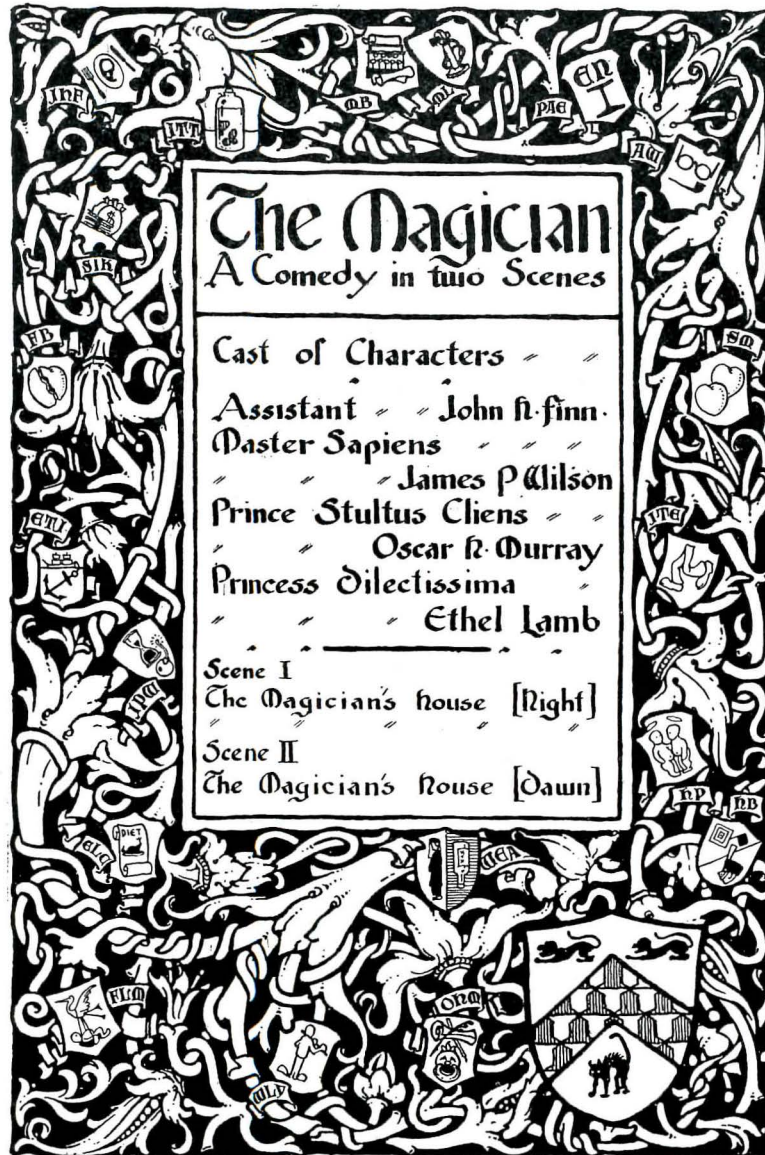
tracing full-size details. Blue-printing machinery in those days had not reached the stage of development that it has since attained, and the full-sizes were traced instead of being printed. The original, made on detail paper, was given to the contractor, after two tracings had been made, one for the superintendent on the job, and one for the office files. The tracer was always instructed to use his intelligence as well as his pencil, and not to trace lines blindly, but to understand what he was doing and why. If these instructions were followed, it was an excellent



BOOKPLATE DESIGN BY ELLIOTT L. CHISLING
DRAWN ON SCRATCHBOARD WITH PEN AND INK



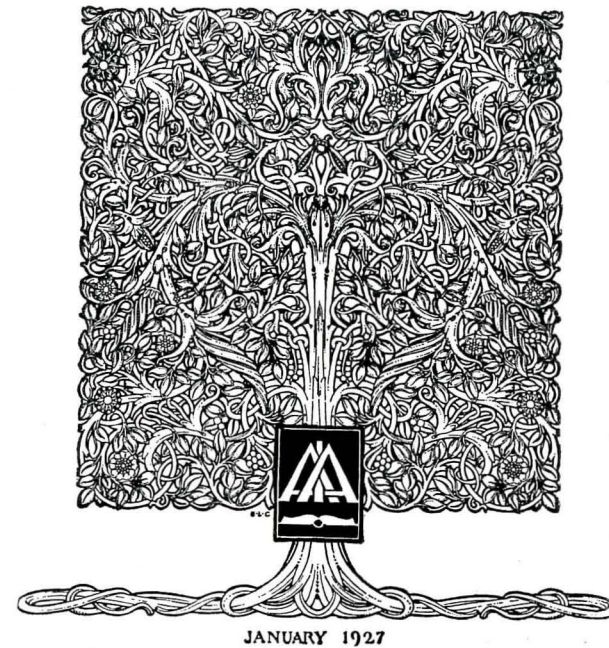
STUDY FOR BOOKPLATE BY ELLIOTT L. CHISLING
BRUSH DRAWING ON ROUGH PAPER



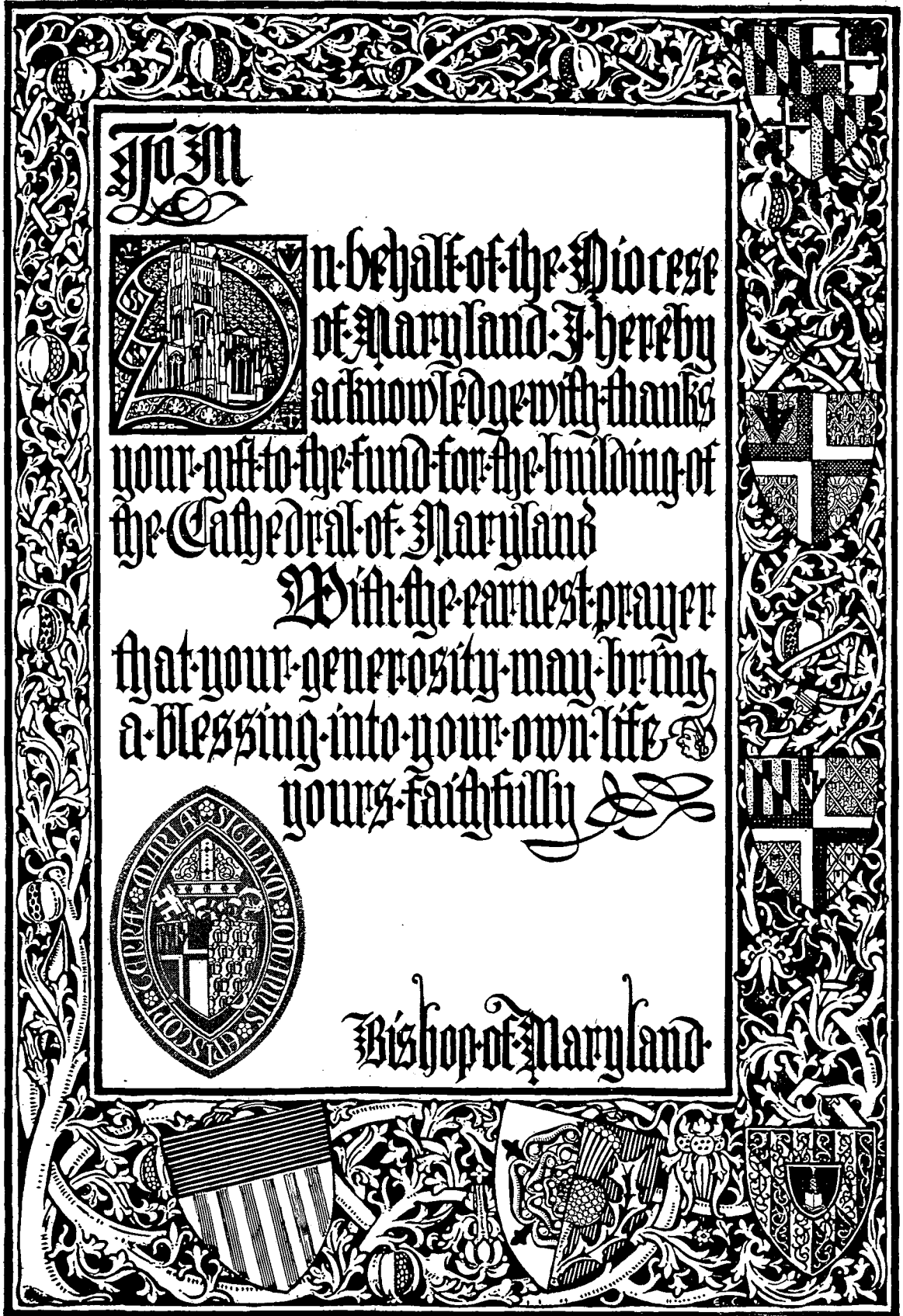
PROGRAM COVER BY ELLIOTT L. CHISLING FOR OFFICE PLAY
TWELFTH NIGHT CELEBRATION IN BERTRAM GOODHUE'S OFFICE

JOURNAL

OF THE
AMERICAN INSTITUTE OF ARCHITECTS



DESIGN BY ELLIOTT L. CHISLING FOR A COVER
JOURNAL OF THE AMERICAN INSTITUTE OF ARCHITECTS



DESIGN IN PEN AND INK BY ELLIOTT L. CHISLING

CERTIFICATE FOR DONORS TO THE BUILDING FUND FOR THE CATHEDRAL OF MARYLAND

method of learning detail. Chisling's first job in the office was tracing full-sizes on St. Thomas' Church. Thus he was plunged into the complexities of Gothic detail; and to what extent he profited by the training thus begun may be appreciated by one who had the opportunity of watching him work in later years, and noted the speed and fluency with which rich and complicated detail flowed from his pencil.

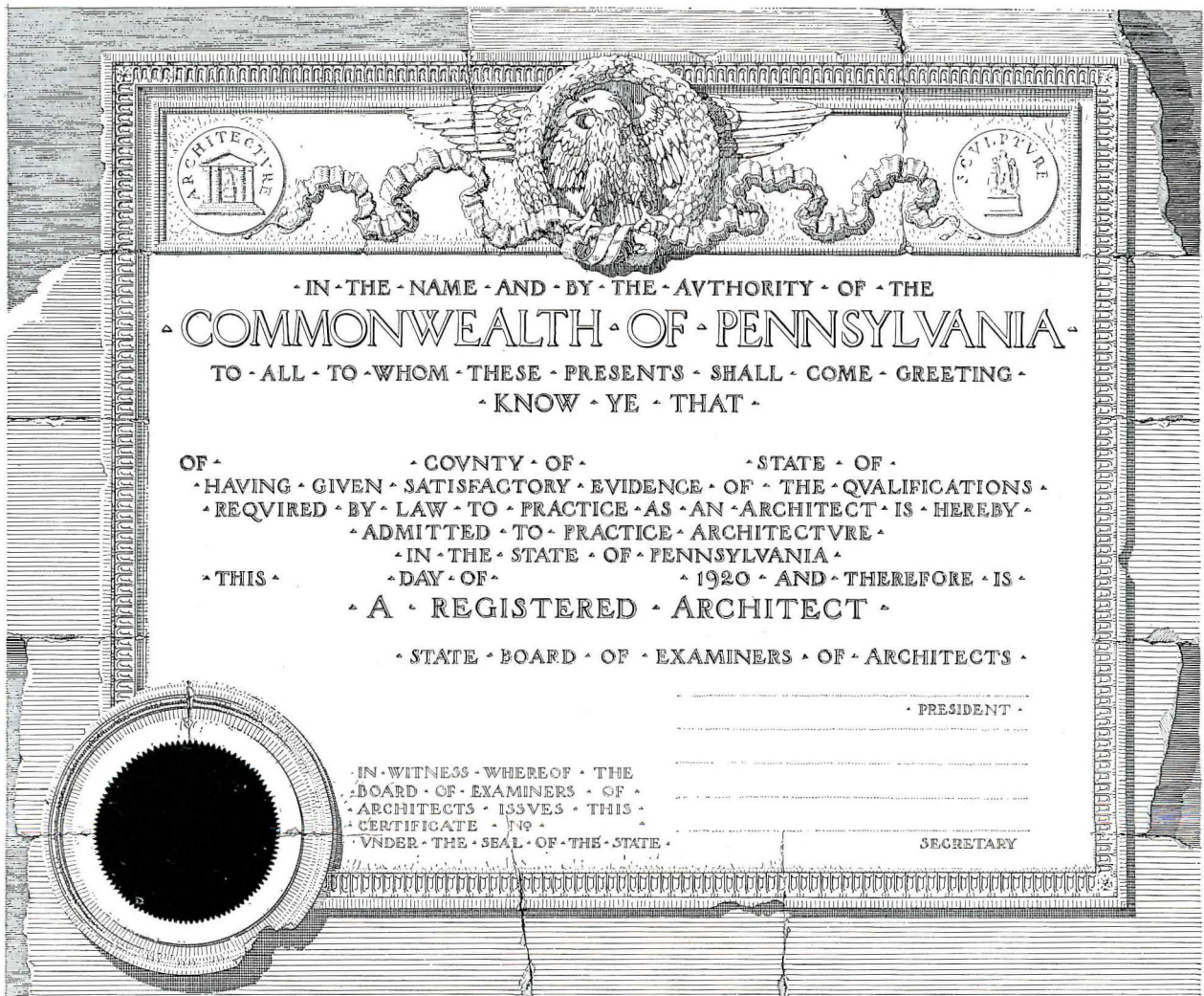
During the years that he spent under Mr. Goodhue, Chisling had a chance to try his hand at every kind of drafting, and he worked in various capacities on



BOOKPLATE BY ELLIOTT L. CHISLING

many of the most important projects on which the office was engaged. From St. Thomas' he went on to other churches,—the Chapel of the Intercession, St. Bartholomew's, St. Vincent Ferrer, the Chapel for the University of Chicago, Trinity Lutheran Church at Fort Wayne. He was in charge of this job at the time of Mr. Goodhue's death in 1924,

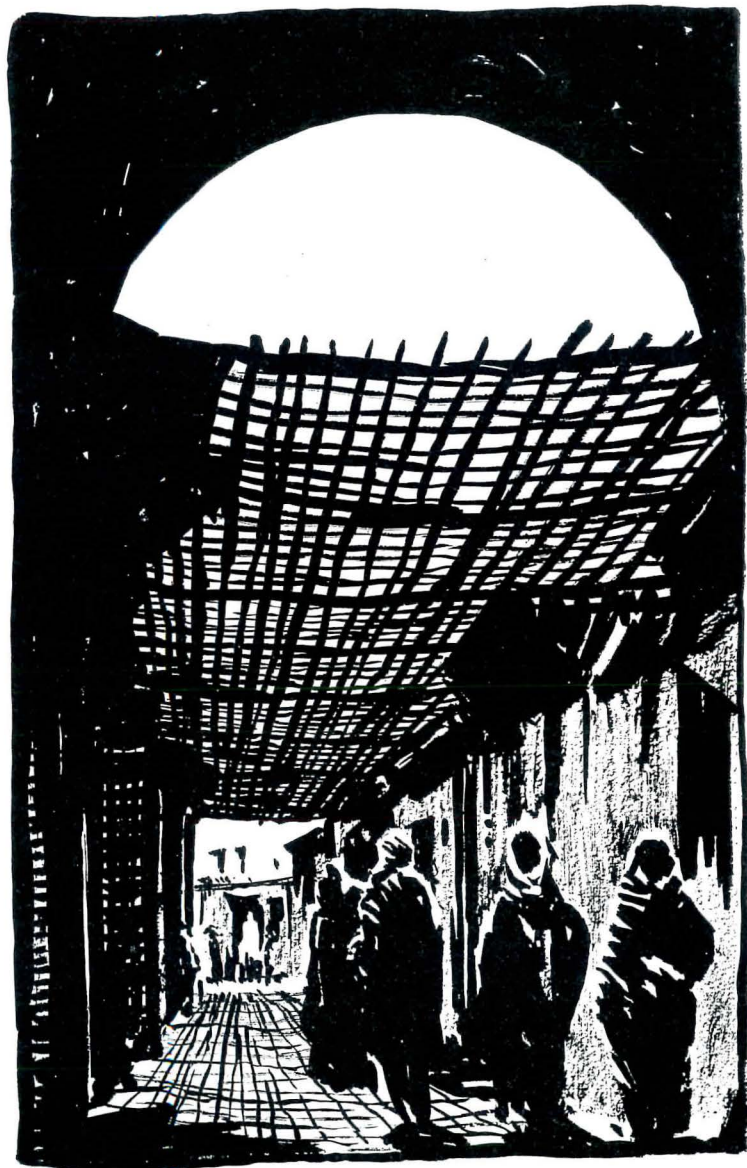
and carried it on under the new firm of the Bertram G. Goodhue Associates. In addition to these and other churches, he worked on such projects as the buildings of the San Diego Exposition, the residence



PEN AND INK DRAWING BY ELLIOTT L. CHISLING

DESIGN SUBMITTED IN COMPETITION FOR ARCHITECTURAL CERTIFICATE FOR THE STATE OF PENNSYLVANIA

Size of Original 163¼" x 14"



BRUSH DRAWING BY ELLIOTT L. CHISLING
"A STREET IN OLD FEZ"



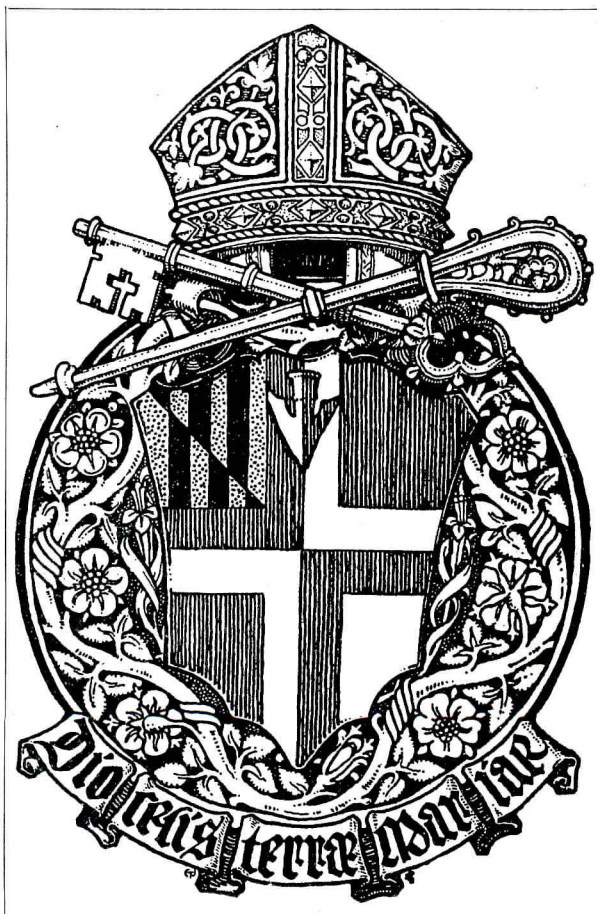
BRUSH DRAWING BY ELLIOTT L. CHISLING
DESIGN FOR A CHRISTMAS CARD

of Henry Dater at Santa Barbara, the National Academy of Sciences in Washington, the Nebraska State Capitol (both the competition and the working drawings), the Los Angeles Public Library and the competition drawings for the Kansas City War Memorial. These last, which comprised one of the most elaborate sets of competition drawings ever turned out by an office, gave full scope to his talents both in drafting and in rendering. An incident in this connection remains vividly fixed in my memory. On the large-scale detail it was desired to obtain a strong settle in the wash on the lower part of the masonry, to contrast with the smooth India-ink tone on the sky. Peach black was tried, but even this did not give the settle wanted. So Chisling took a hard eraser, rubbed it to fine crumbs, scattered these over the area to be covered, and then ran the wash! Just at this moment Mr. Goodhue entered the room, and was almost staggered at the extraordinary sight which met his gaze. But when the wash was dry, and the rubber crumbs were brushed off, each particle had acted as a nucleus around which the color had collected, and the resultant effect was precisely what was wanted.

In the Goodhue office Chisling came in contact with many interesting men, some of whom have since attained prominence in their own practice, and all of whom contributed something to his ever-growing store of knowledge and experience. Among these were the members of the present firm of Bertram G. Goodhue Associates, — F. L.



DESIGN FOR A BOOKPLATE

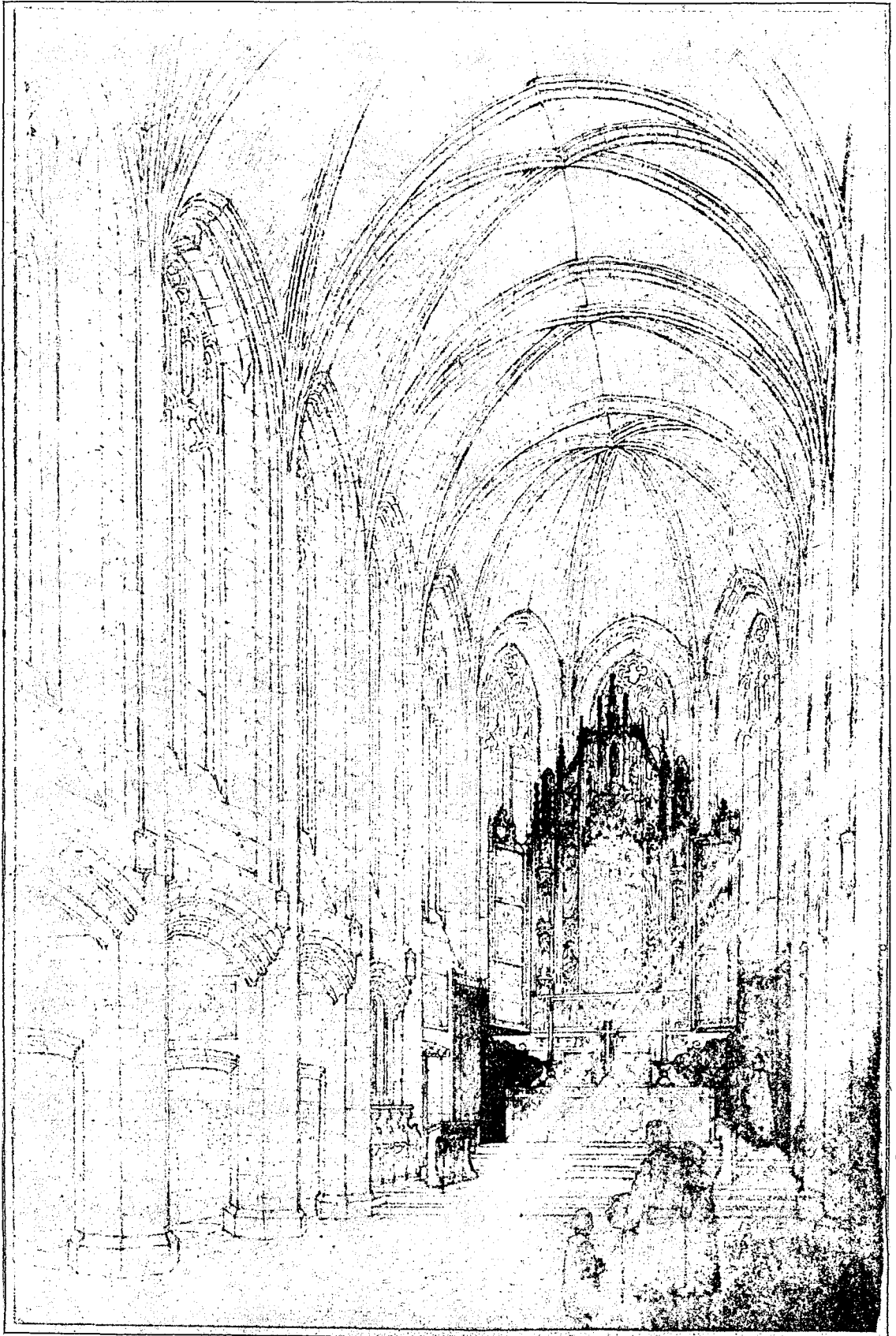


COVER DESIGN FOR A PROSPECTUS FOR BALTIMORE CATHEDRAL

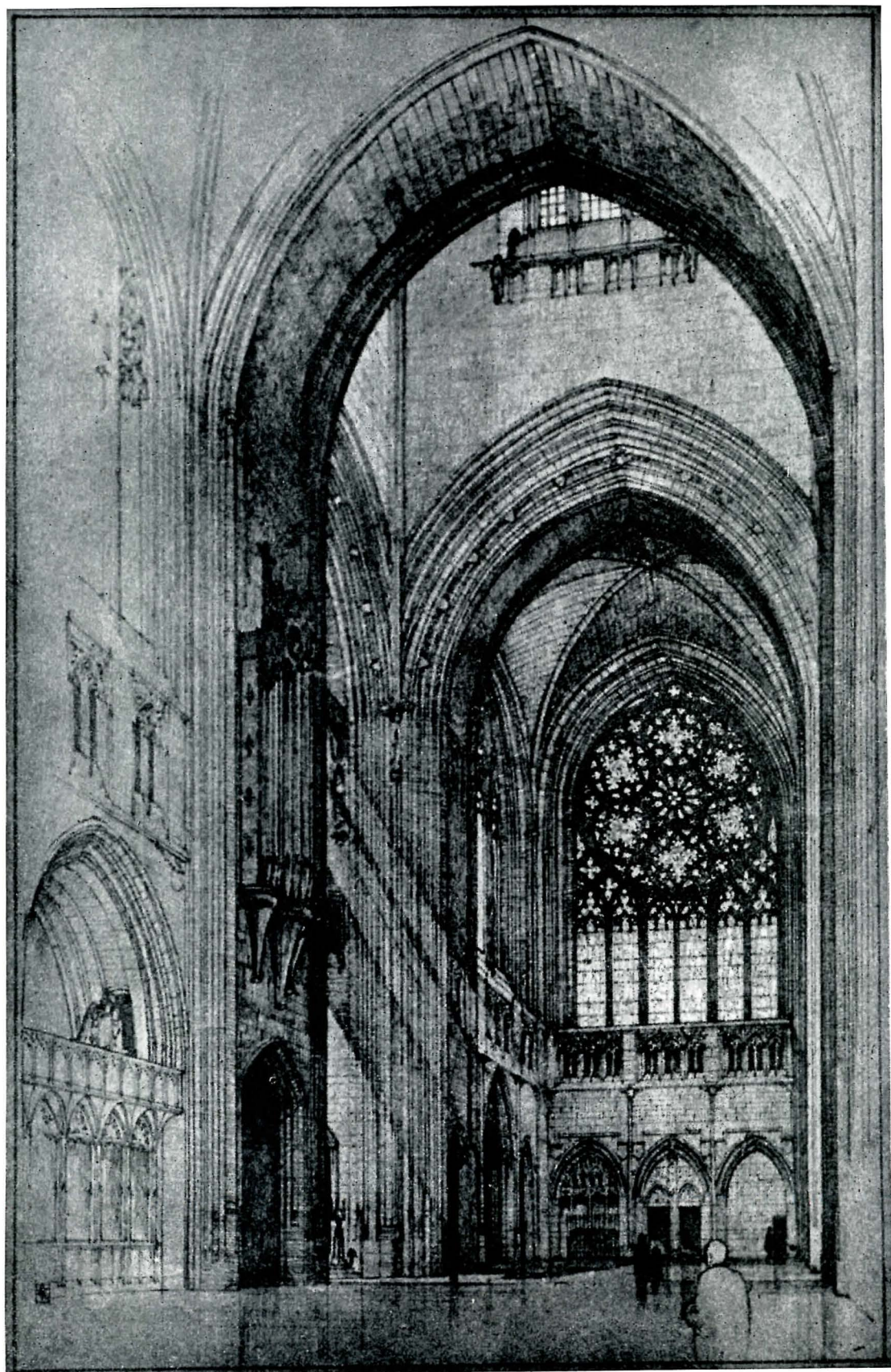
Mayers, O. H. Murray, and Hardie Phillip, all of whom had long training in the Goodhue tradition. Besides these, there were E. Donald Robb, now practicing in Boston; Carleton M. Winslow, now of Los Angeles; James M. Baker, author of that invaluable book, *American Churches*; Clarence Stein, now in practice in New York; W. E. Anthony, also practicing in New York, and a noted authority on ecclesiology; George W. Horsfield, and James T. Thomson (the latter now in practice in Glasgow), both outstanding Gothicists; John D. Moore of Sydney, Australia, a brilliant water-colorist; Henry Boak, equally at home in making a working drawing or an illuminated manuscript; and Ernest J. Jago of London, whose death, a year after that of Mr. Goodhue, was a serious loss to the profession of architecture, depriving it of a man whose profound knowledge and fluent handling of Gothic form and detail were unequaled.

Chisling's career in the office continued uninterrupted for eight years,—though he says it was in danger of coming to an abrupt termination one day early in its course, when he threw a ball of crumpled paper at a fellow-draftsman. His intended victim dodged, and quickly opened a door leading out to the entrance lobby. The missile sailed neatly through the opening and hit a client who was conversing with Mr. Goodhue. But this storm was safely weathered, and Chisling remained in the office until June, 1917, when he left to enter the United States Navy. After the war he returned, in

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PENCIL DRAWING BY ELLIOTT L. CHISLING
SYNOD HALL, BALTIMORE CATHEDRAL—BERTRAM G. GOODHUE, ARCHITECT

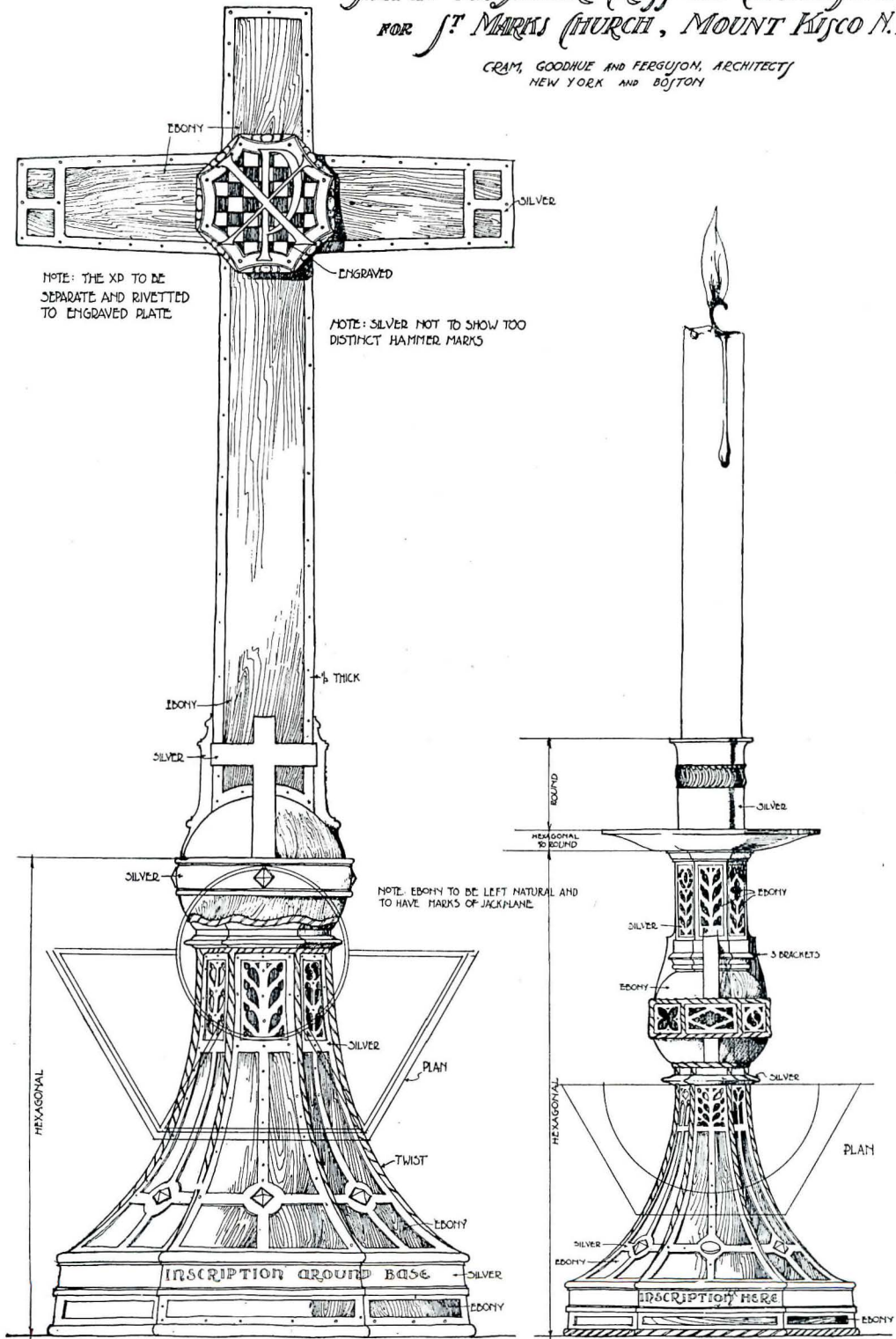


TRANSEPTS OF BALTIMORE CATHEDRAL—BERTRAM G. GOODHUE, ARCHITECT
FROM A PENCIL DRAWING BY ELLIOTT L. CHISLING

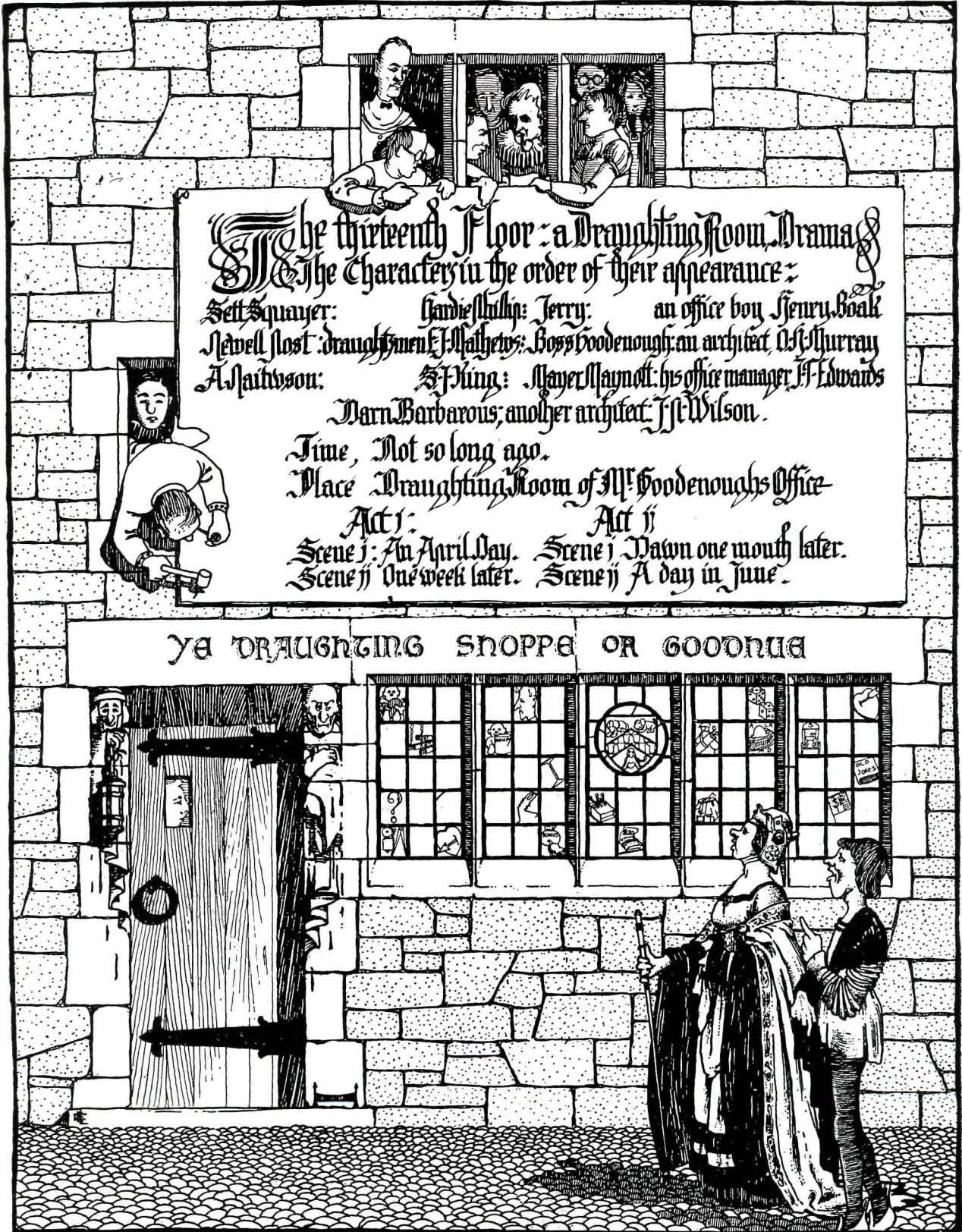
PENCIL POINTS

SKETCH FOR ALTAR CROSS AND CANDLESTICKS FOR ST. MARKS CHURCH, MOUNT KISCO N.Y.

CRAM, GOODHUE AND FERGUSON, ARCHITECTS
NEW YORK AND BOSTON



REPRODUCED FROM THE SKETCHES BY ELLIOTT L. CHISLING



PEN AND INK COVER DESIGN FOR 12TH NIGHT PROGRAM OF GOODHUE PLAY

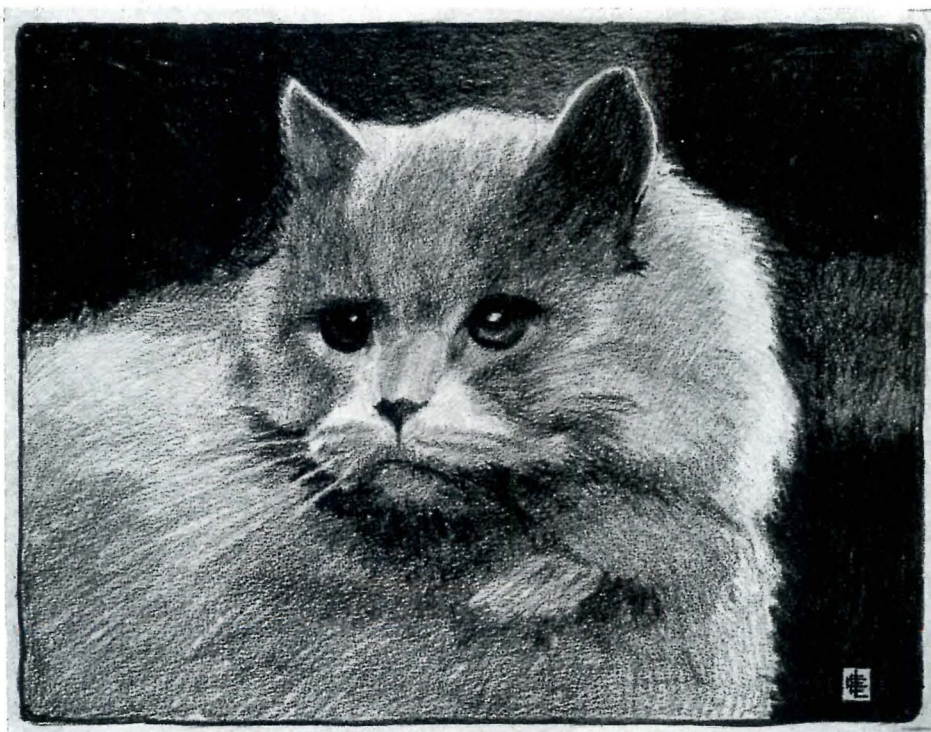
DRAWN BY ELLIOTT L. CHISLING

January, 1919. He was a member of the office staff at the time of Mr. Goodhue's death in 1924, and continued for three years thereafter in the new office of the Goodhue Associates. Among the important jobs on which he worked for the new firm was the Church of the Heavenly Rest in New York, of which he was in charge at the time he left the office. The next six months he spent in the Adirondacks, reveling in the luxury of complete leisure for the first time in a very busy career, and forgetting that such a thing as architecture existed. Towards the close of 1927 he returned to New York and entered the office of Hiss and Weekes. Here he is at present situated, in practice under his own name.

So far we have said more about the various influences that have played a part in developing and guiding Chisling's work than we have about the work itself. But, after all, perhaps his work is its own best commentary. The drawings which are here reproduced are quite capable of speaking for themselves. They will attest his familiarity, not only with strictly architectural drawing, but with decorative design as well. They will give evidence that he is at home in various media, and in widely varied manners of working. It is interesting to contrast the two designs reproduced on page 148 which he submitted in an office competition for a book-plate for the firm of Mayers, Murray, and Phillip, noting the careful study

and the finished pen-and-ink technique which are found in the one, and the loose, rapid handling of the dry brush which marks the other. A word of comment may not be amiss in regard to the program shown on page 149 for *The Magician*, one of the Goodhue office shows. In these annual events Chisling always refused to act, on a plea of ungovernable stage-fright, but he was invariably the chief scene-painter, and the designer of the program. This latter, in earlier years, was more or less of a medley of cartoon sketches. The example here shown belongs to a later and more sophisticated period, but the element of humor has not entirely disappeared. You may note the very irreverent treatment of the animals in the Goodhue coat of arms (seen in their proper form in one of the book-plates), while in the luxuriant foliage of the border lurk sly comments on the various members of the office staff.

In regard to the other work here shown, — the renderings, and the various designs, — space is lacking for extended comment. Here are further examples of Chisling's work in lead pencil, in carbon pencil, in pen-and-ink, and in brush-and-ink. We may note, however, that these do not exhaust the field of his endeavors. In addition to the various types of work here represented, he has also tried his hand, with commendable results, at etching and at landscape painting in oil.



CARBON PENCIL DRAWING OF "MISS PEARSALL'S CAT"

MAKING FULL-SIZE DETAILS, PART III

A DISCUSSION OF THE METHODS USED IN THE OFFICE OF DWIGHT JAMES BAUM

By Evans Chrysler

SMALLER BUILDINGS require full-size detail drawings that are usually greater in number and more completely informative than those required for larger buildings. These drawings have a bigger part to play in the former case, for they do much of the work that is done by models and scale drawings of ornament and by shop drawings of construction in the case of the larger buildings. They serve to give exact information as to the cutting shape of mouldings, the design of cornices, pediments, and other features. They often show ornament fully drawn out, though models of ornament are usually made for the more elaborate features. They frequently show exactly the construction of cornices, woodwork about the doors and windows, etc., for when this is done shop drawings can be dispensed with and the construction that the architect desires can be secured in the most direct and satisfactory way. In smaller buildings the construction details are usually not of so complex a nature as to call for the making of shop drawings, though such drawings are frequently needed for larger buildings where the construction cannot be left safely to the contractor without quite definite presentation of the architect's requirements.

In connection with this article a number of full-size details from the office of Dwight James Baum are reproduced. Details of smaller buildings have been selected for their appropriateness in illustrating this text. Though this architectural office does not confine its work to residences, it is one of the best known offices in that particular field, a fact that makes its drafting room practice of special interest in this connection.

In the office of Dwight James Baum, residences and other buildings of moderate size are first drawn at $\frac{1}{4}$ inch scale. Then the elevations are drawn at either $\frac{3}{4}$ inch scale or 1 inch scale according to whether the character of the subject is simple or elaborate. These large scale drawings are rendered in pencil to show the shades and shadows, indicating the effects of lighting on all the motives. In the case of the interiors, the large scale elevations are often rendered to some extent with colored pencils. The drawing of the complete elevations at large scale in this way permits the study of every part in relation to the whole. For instance, interior window trim that may have been drawn $4\frac{1}{2}$ inches wide may be seen to be too wide in view of the character of wall treatment the architect has in mind for this particular room and its width may be reduced to 3 inches with

great advantage to the general effect. The scale of every detail is carefully considered in connection with that of every other detail and with the general composition of the room, as shown by the assembled large scale elevations.

When the large scale drawings have been corrected to the architect's satisfaction, full-size drawings of the more important features are made in charcoal or Conté crayon, drawn freely and somewhat roughly. These charcoal details are then hung up on the walls of the drafting room, where they can be viewed at the height and from the distance at which the executed details will be seen.

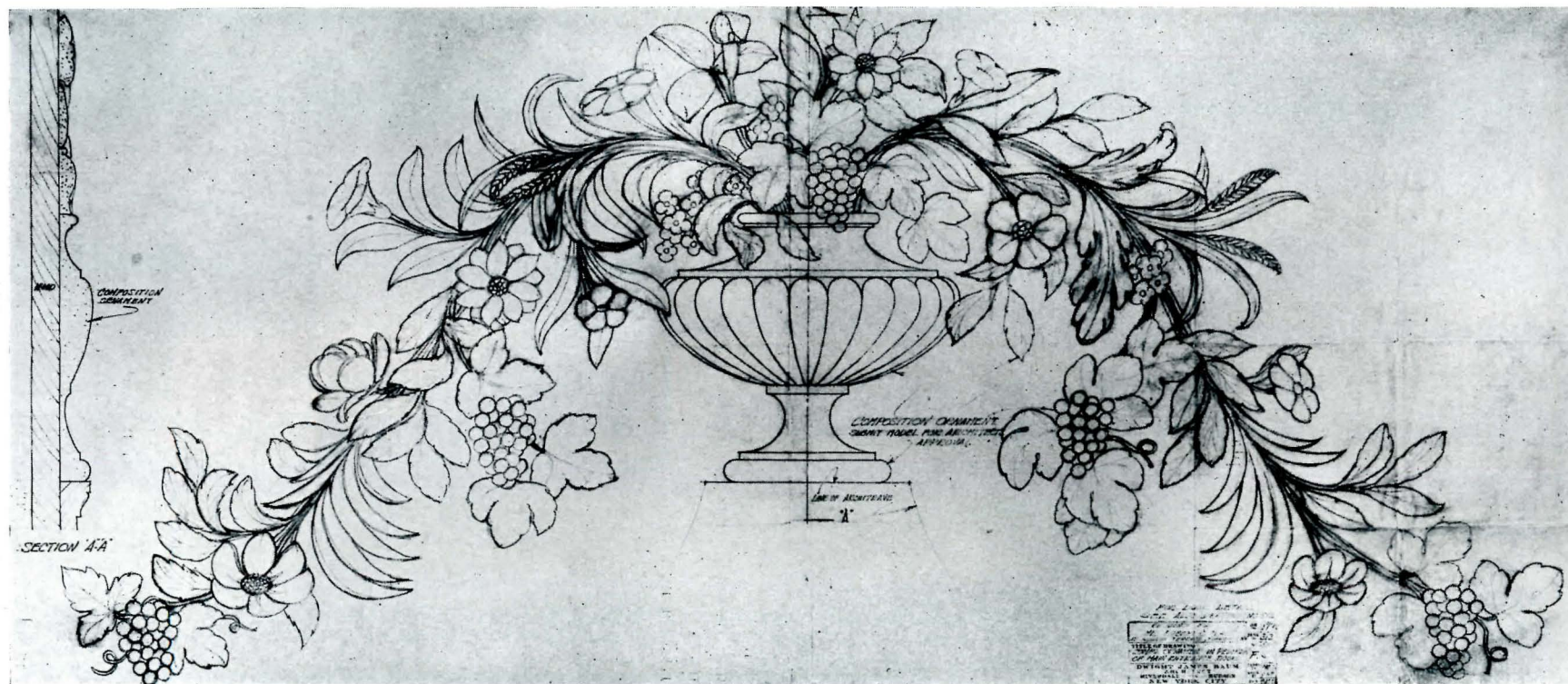
It is interesting to note that the walls of Mr. Baum's drafting room, like those of some other offices, are scaled with black figures painted upon them for both height and length, so that it is easy for a draftsman to glance up from his drawing and see just what the dimensions he is using mean, just how big ten feet is, for instance. It is a great help in keeping the dimensions of everything right, this convenient means of judging actual sizes.

After the roughly drawn full-sizes in charcoal have been thoroughly studied and corrected, the related details are assembled on sheets by making tracings of them with soft pencil.

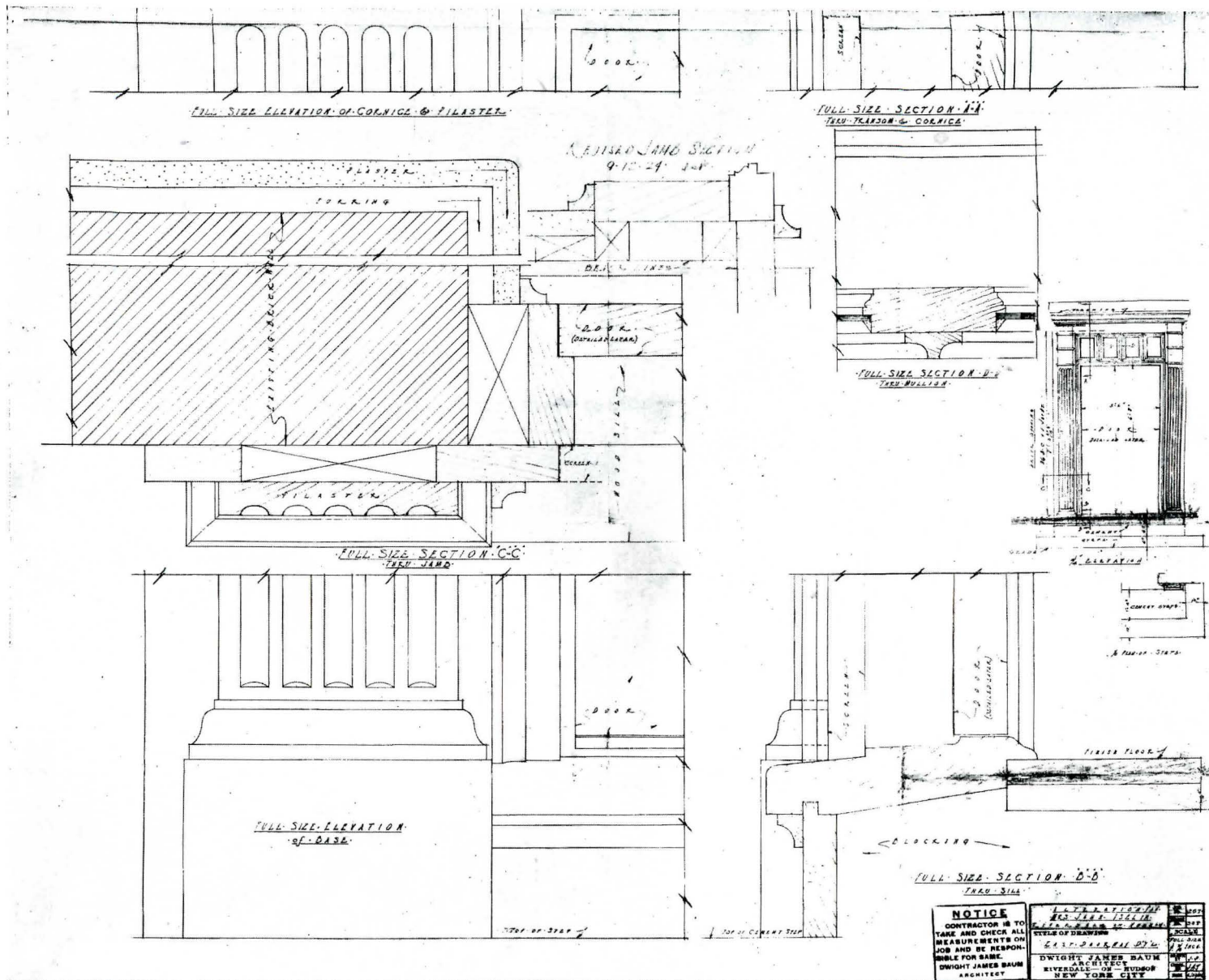
The charcoal full-sizes that show modelling or carving are sent to the modeller to be used by him as the basis for his models. The information these drawings contain is supplemented by a further expression of the architect's intention in the discussion and criticism of the models.

The sheets of tracings from the charcoal full-sizes are assembled and studied together for their relation to one another and to the general composition of the room or of the façade, as the case may be. These drawings are corrected in the light of the information gained through this study, and when they are felt to be right, they are used as the basis for the final set of full-size drawings, such as those shown as illustrations for this article.

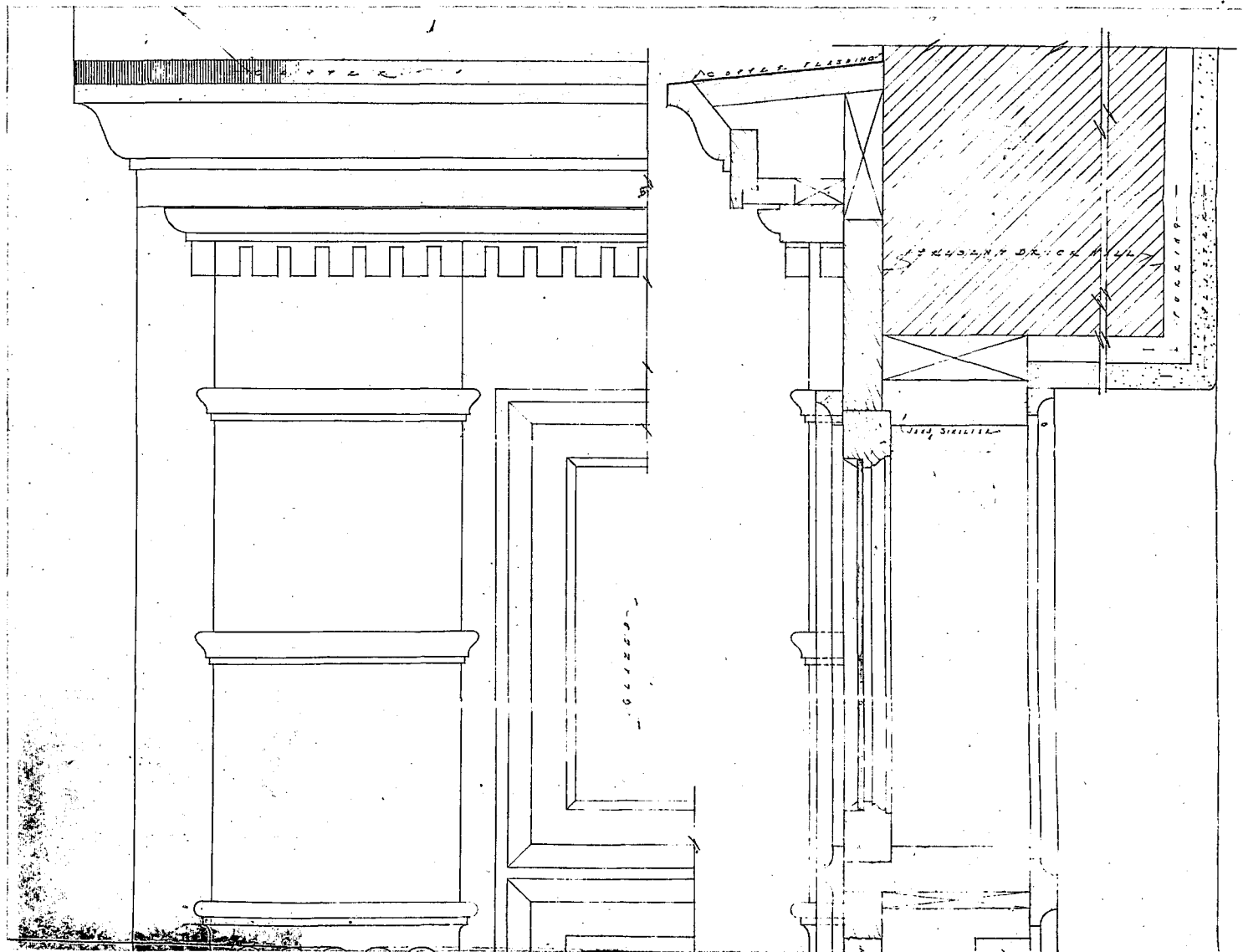
Mr. Baum's office always supplies three blue prints of each full-size detail drawing to the contractor; one to be kept in the contractor's office, one to be kept in the office on the job, and one to be supplied to the mill man. By making sure that there is always a blue print of every detail on the job, it is possible to settle properly any question that may arise or to get the definite information that may be required on any occasion. This is something that cannot be done when the con-



FROM A FULL-SIZE DETAIL BY THE OFFICE OF DWIGHT JAMES BAUM, ARCHITECT
COMPOSITION ORNAMENT OVER MAIN ENTRANCE DOOR, RESIDENCE OF ROBERT C. FLACK, ESQ., YONKERS, NEW YORK



LOWER PORTION OF SHEET OF FULL-SIZE DETAILS—SEE REVERSE SIDE FOR UPPER HALF
 DOORWAY FOR ALTERATION TO RESIDENCE OF MRS. JOHN ISELIN, RIVERDALE, NEW YORK—DWIGHT JAMES BAUM, ARCHITECT



UPPER PORTION OF SHEET OF FULL-SIZE DETAILS—SEE REVERSE FOR LOWER HALF
 DOORWAY FOR ALTERATION TO RESIDENCE OF MRS. JOHN ISELIN, RIVERDALE, NEW YORK—DWIGHT JAMES BAUM, ARCHITECT

FULL SIZE SECTION F.F.
 MARBLE
 FLINTH
 PLASTER PANEL
 DOTTED LINES INDICATE BOARD AT CENTER
 PROFILE OF BRACKET
 G. F. WALTERS COMPOS. 2215
 G. F. WALTERS COMPOS. 2215
 A.S.D. CORNER OF MANTLE
 SECTION
 MARBLE FACE
 (PLASTER FINISH)
 4'-10"
 ELEVATION

LITERATURE FOR RIVERDALE HUDSON N.Y. TITLE OF DRAWING FIREPLACE MANTLE DWIGHT JAMES BAUM ARCHITECT RIVERDALE - ON HUDSON NEW YORK CITY	20 32 SCALE 1" = 3'-0" 1/4" = 3'-0" 1/8" = 3'-0" 1/16" = 3'-0" 1/32" = 3'-0" 1/64" = 3'-0" 1/128" = 3'-0" 1/256" = 3'-0" 1/512" = 3'-0" 1/1024" = 3'-0" 1/2048" = 3'-0" 1/4096" = 3'-0" 1/8192" = 3'-0" 1/16384" = 3'-0" 1/32768" = 3'-0" 1/65536" = 3'-0" 1/131072" = 3'-0" 1/262144" = 3'-0" 1/524288" = 3'-0" 1/1048576" = 3'-0" 1/2097152" = 3'-0" 1/4194304" = 3'-0" 1/8388608" = 3'-0" 1/16777216" = 3'-0" 1/33554432" = 3'-0" 1/67108864" = 3'-0" 1/134217728" = 3'-0" 1/268435456" = 3'-0" 1/536870912" = 3'-0" 1/1073741824" = 3'-0" 1/2147483648" = 3'-0" 1/4294967296" = 3'-0" 1/8589934592" = 3'-0" 1/17179869184" = 3'-0" 1/34359738368" = 3'-0" 1/68719476736" = 3'-0" 1/137438953472" = 3'-0" 1/274877906944" = 3'-0" 1/549755813888" = 3'-0" 1/1099511627776" = 3'-0" 1/2199023255552" = 3'-0" 1/4398046511104" = 3'-0" 1/8796093022208" = 3'-0" 1/17592186044416" = 3'-0" 1/35184372088832" = 3'-0" 1/70368744177664" = 3'-0" 1/140737488355328" = 3'-0" 1/281474976710656" = 3'-0" 1/562949953421312" = 3'-0" 1/1125899906842624" = 3'-0" 1/2251799813685248" = 3'-0" 1/4503599627370496" = 3'-0" 1/9007199254740992" = 3'-0" 1/18014398509481984" = 3'-0" 1/36028797018963968" = 3'-0" 1/72057594037927936" = 3'-0" 1/144115188075855872" = 3'-0" 1/288230376151711744" = 3'-0" 1/576460752303423488" = 3'-0" 1/1152921504606846976" = 3'-0" 1/2305843009213693952" = 3'-0" 1/4611686018427387904" = 3'-0" 1/9223372036854775808" = 3'-0" 1/18446744073709551616" = 3'-0" 1/36893488147419103232" = 3'-0" 1/73786976294838206464" = 3'-0" 1/147573952589676412928" = 3'-0" 1/295147905179352825856" = 3'-0" 1/590295810358705651712" = 3'-0" 1/1180591620717411303424" = 3'-0" 1/2361183241434822606848" = 3'-0" 1/4722366482869645213696" = 3'-0" 1/9444732965739290427392" = 3'-0" 1/18889465931478580854784" = 3'-0" 1/37778931862957161709568" = 3'-0" 1/75557863725914323419136" = 3'-0" 1/151115727451828646838272" = 3'-0" 1/302231454903657293676544" = 3'-0" 1/604462909807314587353088" = 3'-0" 1/1208925819614629174706176" = 3'-0" 1/2417851639229258349412352" = 3'-0" 1/4835703278458516698824704" = 3'-0" 1/9671406556917033397649408" = 3'-0" 1/19342813113834066795298816" = 3'-0" 1/38685626227668133590597632" = 3'-0" 1/77371252455336267181195264" = 3'-0" 1/154742504910672534362390528" = 3'-0" 1/309485009821345068724781056" = 3'-0" 1/618970019642690137449562112" = 3'-0" 1/1237940039285380274899124224" = 3'-0" 1/2475880078570760549798248448" = 3'-0" 1/4951760157141521099596496896" = 3'-0" 1/9903520314283042199192993792" = 3'-0" 1/19807040628566084398385987584" = 3'-0" 1/39614081257132168796771975168" = 3'-0" 1/79228162514264337593543950336" = 3'-0" 1/158456325028528675187087900672" = 3'-0" 1/316912650057057350374175801344" = 3'-0" 1/633825300114114700748351602688" = 3'-0" 1/1267650600228229401496703205376" = 3'-0" 1/2535301200456458802993406410752" = 3'-0" 1/5070602400912917605986812821504" = 3'-0" 1/10141204801825835211973625643008" = 3'-0" 1/20282409603651670423947251286016" = 3'-0" 1/40564819207303340847894502572032" = 3'-0" 1/81129638414606681695789005144064" = 3'-0" 1/162259276829213363391578010288128" = 3'-0" 1/324518553658426726783156020576256" = 3'-0" 1/649037107316853453566312041152512" = 3'-0" 1/1298074214633706907132624082305024" = 3'-0" 1/2596148429267413814265248164610048" = 3'-0" 1/5192296858534827628530496329220096" = 3'-0" 1/10384593717069655257060992658440192" = 3'-0" 1/20769187434139310514121985316880384" = 3'-0" 1/41538374868278621028243970633760768" = 3'-0" 1/83076749736557242056487941267521536" = 3'-0" 1/166153499473114484112975882535043
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Dwight James Baum, Architect

Architectural drawings of a fireplace mantel and surround. The drawings include:

- Full-Size Elevation of Pilaster Cap:** Shows the front view of the mantel. It features a central rectangular opening with a depth of 36 inches. The opening is flanked by pilasters with a width of 16 inches each. The total width of the mantel is 56 inches. The mantel is topped with a decorative cornice. The drawing is labeled "FULL-SIZE ELEVATION OF PILASTER CAP" and "FINISH CASTING".
- Full-Size Section A-A:** A vertical section through the corner of the pilaster. It shows the internal structure, including the plaster and the support for the mantel. The section is labeled "FULL-SIZE SECTION A-A THRU CORNER PILASTER C-C".
- Full-Size Section B-B:** A horizontal section through the bottom of the pilaster. It shows the internal structure, including the plaster and the support for the mantel. The section is labeled "FULL-SIZE SECTION B-B THRU BOTTOM OF PILASTER B-B".
- Full-Size Section C-C:** A horizontal section through the interior corner of the mantel. It shows the internal structure, including the plaster and the support for the mantel. The section is labeled "FULL-SIZE SECTION C-C THRU INTERIOR CORNER D-D".

The drawings are detailed with dimensions and labels, including "PLASTER LINE", "FINISH CASTING", "CARPET STRIP", "FIN FLOOR", and "MARBLE".

Dwight James Baum, Architect

tractor's only blue print of the drawing in question may be at his office, as frequently happens. When a drawing is not at hand, things are likely to be permitted that would not otherwise pass. Even the most competent and careful superintendent may fail to notice, for instance, that the profile of a moulding on the job is not exactly as the architect detailed it, unless there is a blue print of that detail at hand to check by.

The importance of seeing that the mill man has a blue print of each detail lies, of course, in the fact that if he does not have a print he will probably make a drawing of his own from the contractor's print, and in doing so he will almost invariably change the character of the details, usually losing the refinement of profiles of mouldings and other forms.

It will be noted that on the drawings reproduced in connection with this article, construction is shown fully. Often full-size details of such features show only the profiles, etc., the construction being left to the contractor to work out. But here the architect shows the thickness and arrangement of the parts. Where, for instance, five-ply veneer is wanted, it is shown on the full-size and three-ply veneer is not likely to be substituted as it might be if dependence were placed upon mentioning it in the specifications and it were not shown on the drawings. Thoroughness such as this in matters of construction indicates to the contractor that the architect knows what he wants and the contractor is quite likely to be more careful in carrying out the architect's wishes than when the architect shows what may be taken for signs of uncertainty in the vagueness of his drawings.

Mr. Baum's office makes full-size details of everything, even the baseboards of the room. In case of a Tudor house the half-timber work is shown completely; drawing out a "typical" portion is not considered sufficient. Where a diaper pattern is wanted in the brick work, a three-quarter inch scale elevation is made showing every brick, the relative tones being indicated by hatching in pencil, in order that the parts of the pattern may be so graded that it will fade into the background in some places, as such patterns often do in the old work. Sometimes a verge-board is executed at full size in pine by machine carving and put in position in order that the design of the ornament may be given a final and conclusive test before it is executed in the oak. Mr. Baum makes use of old timber and of portions of old buildings to a considerable extent. In the construction of a large residence the drawings for which are now being made, the material for the half-timber work will be supplied by the frames of three old barns that have been purchased for the purpose. Carved beams from an old palace in Spain are being incorporated in the dining room ceiling of another house. If a house is in the Italian manner, large samples of the stucco are executed and allowed to weather in order that the actual

results may be seen. Often the roof tiles are designed in collaboration with the tile manufacturer to secure the shape, color, and even the surface texture that give the charm to the old Spanish tiles. For a Tudor house, special chimney pots are worked out with the manufacturer to secure the old character. The extent to which this effort to secure consistency is carried is shown by the fact that the drawings for a Spanish house now on the boards include a design for a screen door with turned spindles in the manner of the old Spanish wooden grilles. All of this calls for innumerable full-size drawings as well as for many large-scale drawings and for a great deal of close personal contact with the work on the part of the architect, in order that the refinements he has in mind may be put into the executed work.

A sheet of full-size details that is an extremely good example is the drawing for the east doorway of the alteration for Mrs. John Iselin at Riverdale-on-Hudson, reproduced on page 161. The elevation at three-quarter inch scale which is drawn in one corner, acts as a key to the full-size details on this sheet, which shows both the design character and the construction of every part of this doorway.

The drawing for the living room mantel in this house shows the application of the same method of presentation to an interior feature. Keying the full-sizes by means of a scale drawing on the same sheet, where it may be referred to readily, makes for convenience and for the avoidance of confusion. It also permits of showing only fragments at full size so that no space is taken up in showing the relation of the parts at full size. This makes it possible to keep the sheet much smaller than it would be otherwise, a great advantage for full-size details have a tendency to become so large that they are difficult to handle. Also, since large blue prints cost more than smaller ones, there is a saving on this item that is worth considering, for it adds up during a year.

Not only an elevation at three-quarter inch scale but a section and plan as well are shown on the sheet of full-size details for the dining room cupboard in the residence of Mr. Robert C. Flack at Hudson Terrace, Yonkers, New York. This drawing tells the whole story, so far as this particular cupboard is concerned, and tells it concisely and pleasingly.

The sheet showing the dining room paneling in the residence of Mrs. Walter S. Barret at South Tampa, Florida, gives the needed information clearly. The precision, sensitiveness and spirit with which the profiles are drawn on this sheet, and on the other ones reproduced in connection with this article, are worth noting. The swing of the line at the end of the sweep of each curve, the kick that gives it the crispness is there, so that the mill man can put it into the details, with the result that the executed work may sparkle instead of being dull and lifeless in expres-

CAST IRON

CENTER MOTIF

END MOTIF

F.S. SECTION SHOWING NEWEL POST

FULL SIZE DETAIL OF WROUGHT IRON RAILING

ADDITION TO RESIDENCE OF MR. & MRS. ROWLAND AT AYE NEW YORK

DWIGHT JAMES BAUM ARCHITECT

NOTE
SUBMIT SHOP DRAWINGS FOR ARCHITECT'S APPROVAL

SEE SHEET NO. 2

TOP LINE OF CORNICE

[166]

LINE OF LOWER SHELF "

F. S. SECT. E-E

FLM

COMPO. OF NANNENT - SUBMIT MODEL

CUT WOOD EAGER 1 TO
CONFORM WITH PROFILE
OF COMPO. ORNAMENT

F. ELEA AT F

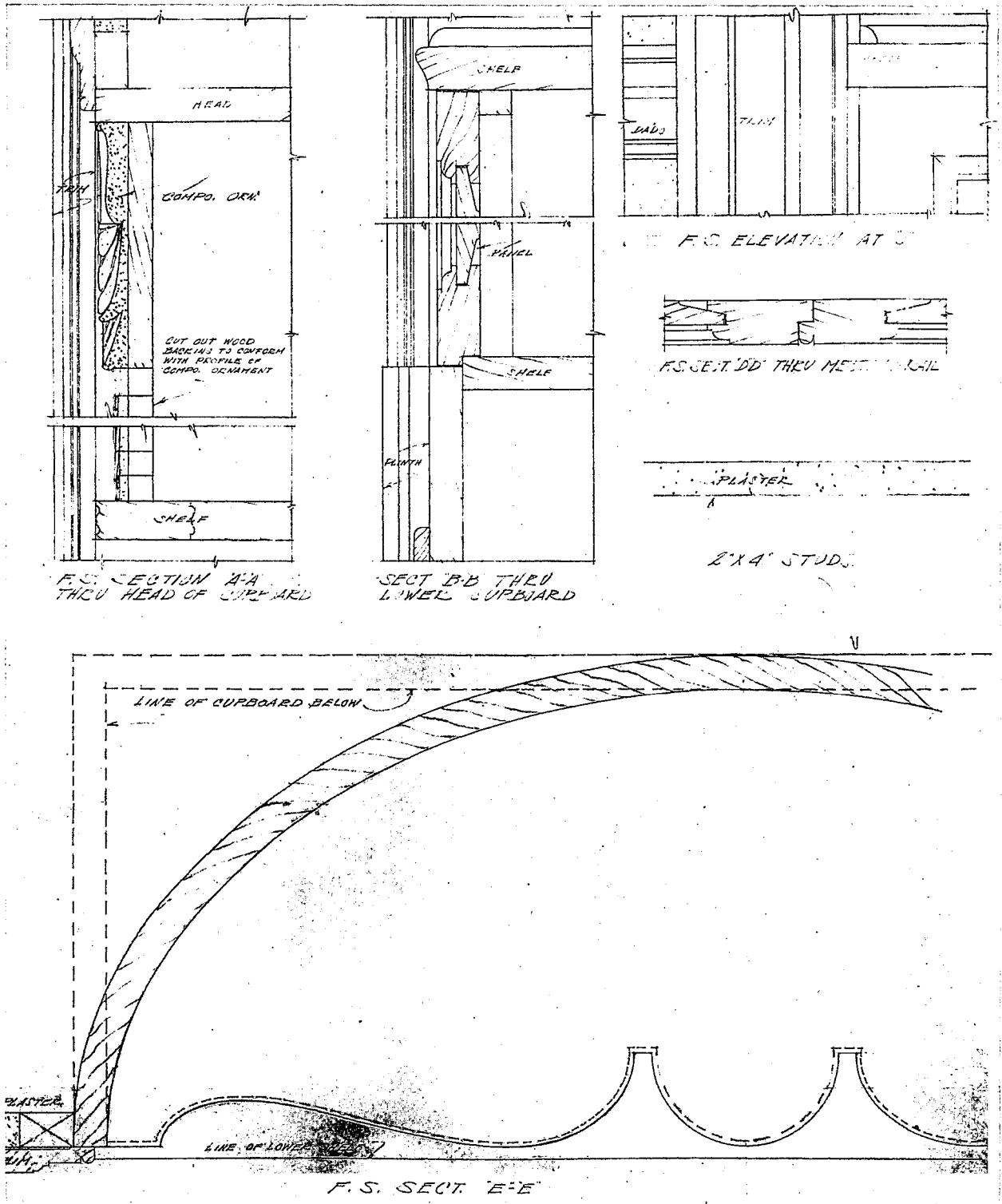
NOTICE

CONTRACTOR IS TO
TAKE AND CHECK ALL
MEASUREMENTS ON
JOB AND BE RESPON-
SIBLE FOR SAME.
DWIGHT JAMES BAUM
ARCHITECT

225 E. 14th St. New York 10003 AT THE NEW YORK PUBLIC LIBRARY ASTOR LENOX TILDEN FOUNDATION 455 5th Ave. New York 10017 TITLE OF DRAWING DWG. 114 SANITARY	JOB NO. 177 DRAWING NO. 321 SCALE F.
DWIGHT JAMES BAUM ARCHITECT RIVERDALE - ON - HUDSON NEW YORK CITY	CREATION DATE 1/1/68 CHECKED BY DATE

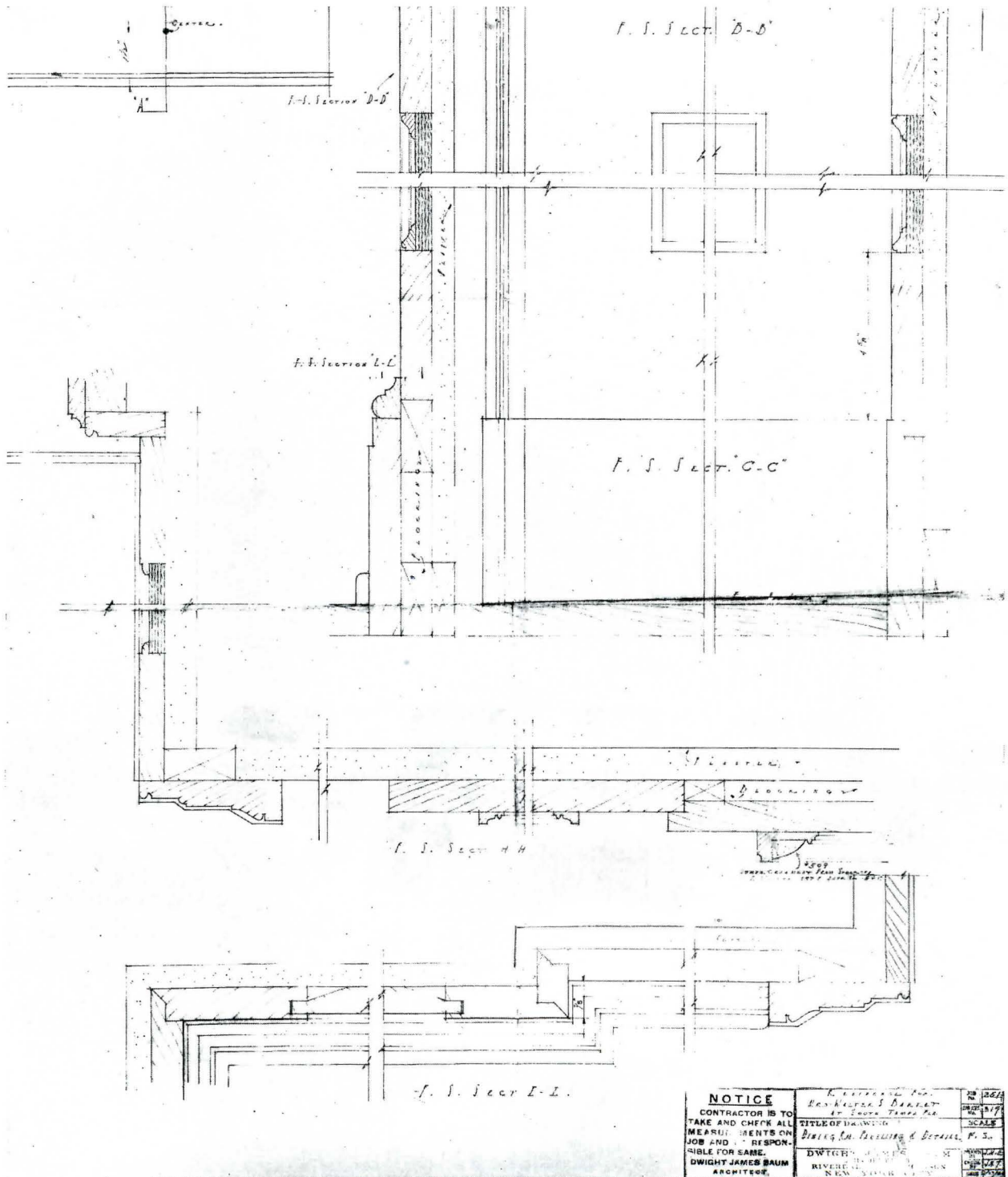
Dwight James Baum, Architect

PENCIL POINTS



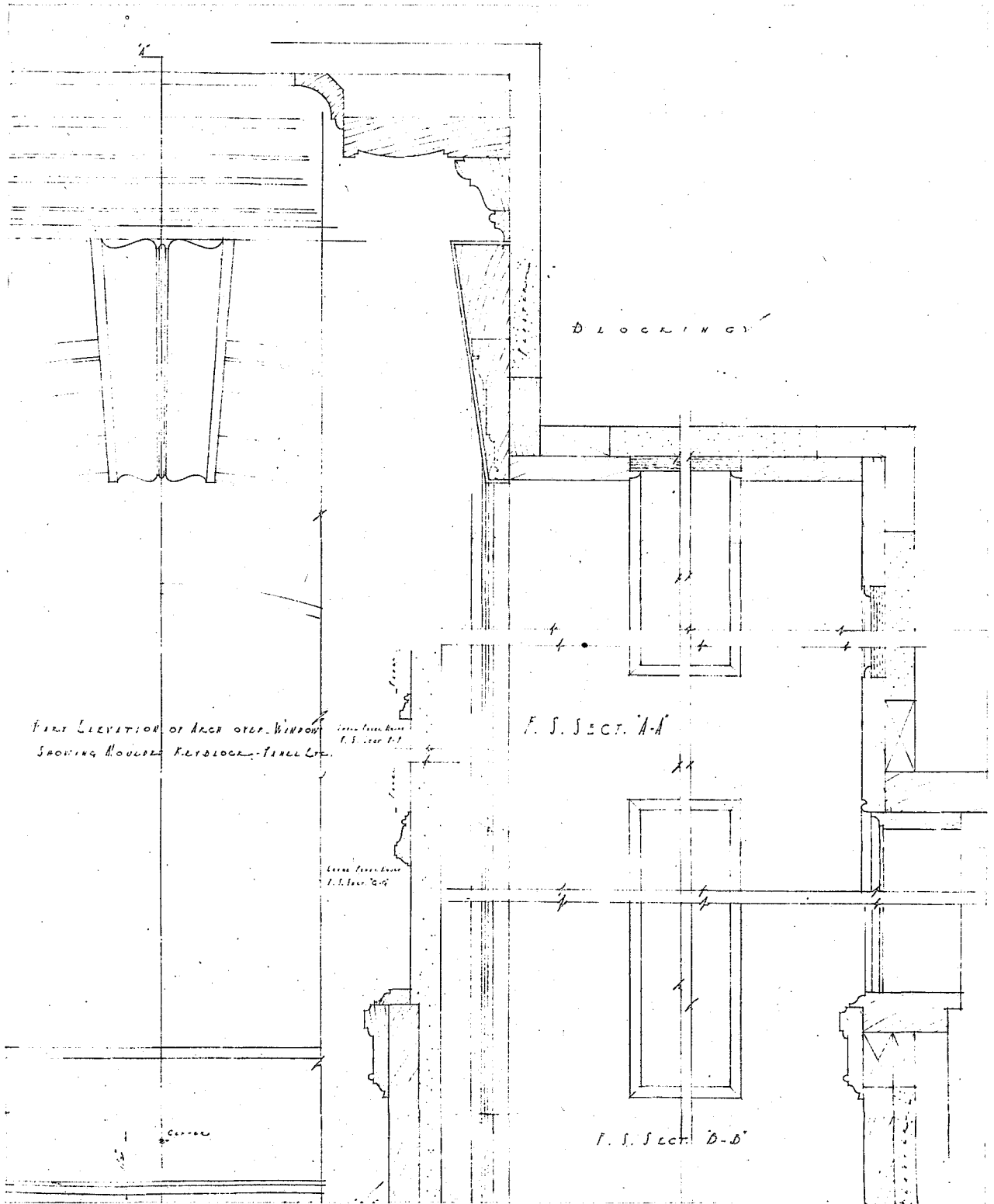
PORTION OF SHEET OF FULL-SIZE DETAILS—SEE REVERSE FOR LOWER HALF
 DINING ROOM CUPBOARD—RESIDENCE OF ROBERT C. FLACK, ESQ., YONKERS, NEW YORK
 Dwight James Baum, Architect

MAKING FULL-SIZE DETAILS—PART III



PORTION OF SHEET OF FULL-SIZE DETAILS—SEE REVERSE FOR UPPER HALF
DINING ROOM PANELING—RESIDENCE OF MRS. WALTER S. BARRET, SOUTH TAMPA, FLORIDA
Dwight James Baum, Architect

PENCIL POINTS



PORTION OF SHEET OF FULL-SIZE DETAILS—SEE REVERSE FOR LOWER HALF
DINING ROOM PANELING—RESIDENCE OF MRS. WALTER S. BARRET, SOUTH TAMPA, FLORIDA

Dwight James Baum, Architect

sion; it is just these little things that make the difference.

A full-size detail of ornament that is fully drawn out, spirited and vigorous, is the drawing for the composition ornament over the main entrance door of the residence for Mr. Robert C. Flack, Hudson Terrace, Yonkers, New York. This is a good example of the presentation of ornament of moderate scale.

A wrought iron railing of domestic scale that is pleasantly light and graceful in its line is well shown in the full-size detail drawing on page 166 for a railing for the house of Mr. R. Rowland at Rye, New York. Incidentally it may be pointed out that lightness is more in keeping with the character of wrought iron than is the clumsiness that so often marks designs for wrought iron. Since iron is a strong, rigid material, it does not need to be used in thick bars usually. Fortunately architects are more often nowadays showing an appreciation of this fact, probably because of their acquaintance with the many fine examples of old work that are delightfully slender.

Of the technique of making full-size drawings little remains to be said excepting that accuracy, good, clean expressive drawings and good arrangement of the details on the sheet are essential. For the convenience of everyone concerned it is desirable to avoid showing unrelated details on the same sheet, and where the work is complicated it is well to keep the details for each trade together, showing only so

much of the other work as may be necessary to indicate the connections.

In general lead pencil on tracing paper is used, the lines being clean and of very moderate width for the sake of definiteness. If the sheets are not exceptionally large, they may well be folded across the middle and across once more, then by folding across the center always in the direction of the smaller dimension, it is possible to reduce the drawing to a compact form of convenient size for filing. It is, of course, desirable to have the stamp in the lower right-hand corner giving the name of the job, drawing number, etc., on the outside when the drawing is folded. When a drawing is, of necessity, made very large, the method of folding used by the office of Carrere & Hastings, and possibly by some others, has distinct advantages. It consists in folding the drawing in the same way as a bellows folds. This permits of access to any part of the drawing by simply opening the folds at the desired corner, without unfolding the whole sheet.

The making of full-size details is one of the most interesting parts of drafting room work if one feels that the lines on the paper represent building materials that are to be shaped and fitted together exactly in accordance with the instructions conveyed by the drawings. It is the part of drafting room procedure that comes into the most direct and intimate contact with the actual work of building.

The first two parts of this series of articles on full-size details appeared in the July and September 1928 issues of PENCIL POINTS. They were illustrated by examples of full-size details from the offices of McKim, Mead, and White and John Russell Pope, respectively.

FIG. 16.

PLOTTING ARCHES
DIRECTLY IN
PERSPECTIVE
BY THE
"MAGIC
DIAGONAL"

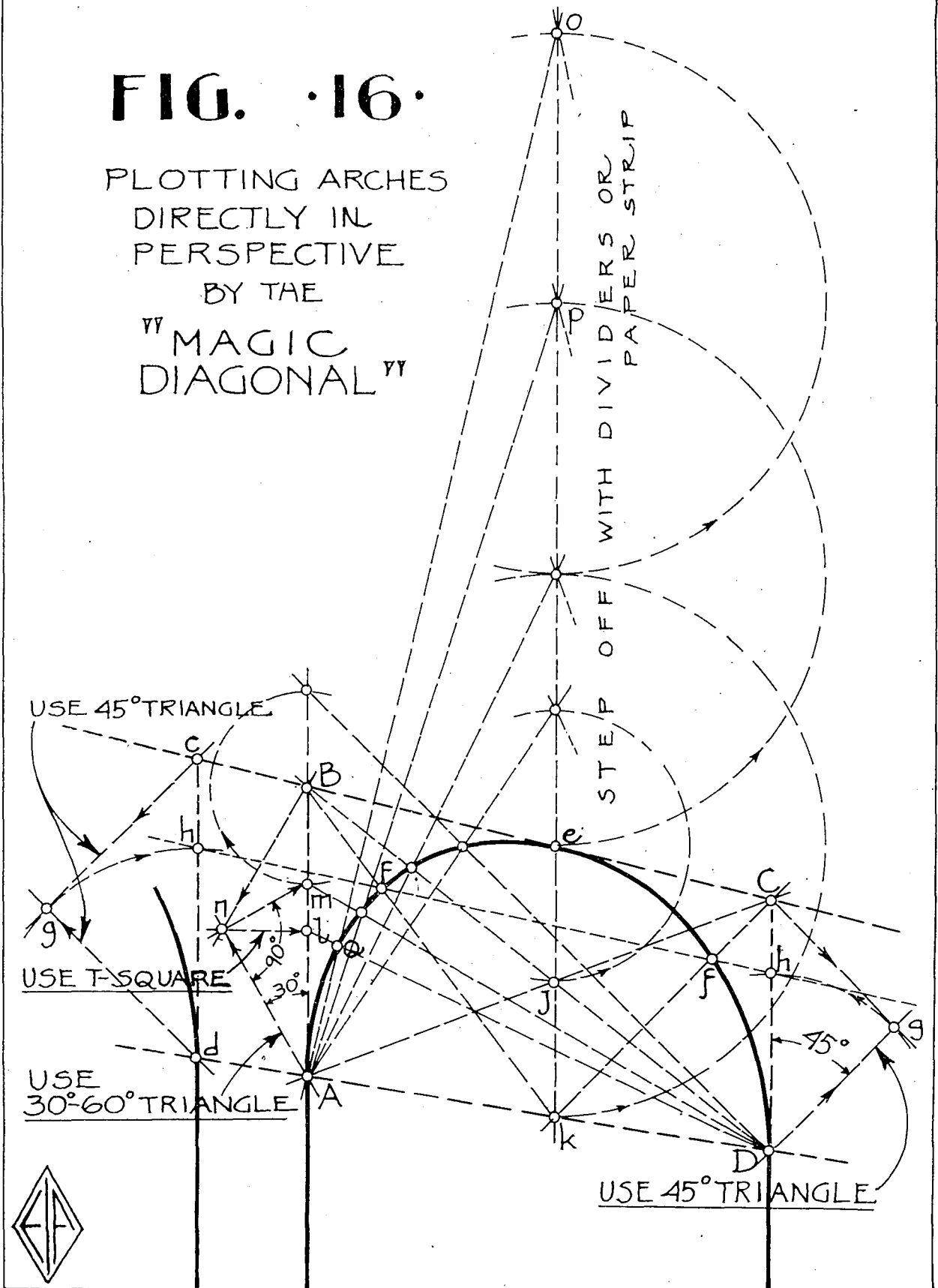


FIGURE 16—PERSPECTIVE PROJECTION—SEE TEXT OPPOSITE

PERSPECTIVE PROJECTION

A SIMPLE AND EXACT METHOD OF MAKING PERSPECTIVE DRAWINGS

By Ernest Irving Freese

PART III—EXPEDIENTS

EDITOR'S NOTE:—This article continues the series of which installments have already appeared in the January and February issues of this year. Mr. Freese here explains several ways of shortening labor on perspective drawings which should interest every draftsman. The illustrations, which were drawn by the author, together with the text have been copyrighted in his name and are fully protected.

A KNOWLEDGE OF the straight "projective" system of perspective drafting, which has been fully set forth in Parts I and II, coupled with an understanding of the expeditious properties of "picture-plane lines," the "Magic Diagonal," and the "Eternal Triangle" as herein exemplified, puts the draftsman in command of the easiest, quickest and most accurate method of perspective delineation ever evolved. The ease and speed with which perspective drawings can be made, and the universal application of the "projective" methods to any object whatsoever under any conditions whatsoever, is nothing short of astonishing. As the student works out one problem after another he will become enthusiastic at the way in which the projected "pictures" evolve so readily under his hand on a blank sheet of paper, without any "construction lines" cluttering the area within which the perspective is being drawn, and with all necessary data at his elbow within the moderate space available on an ordinary-size drafting board.

All of the expedients here shown are operative directly upon the perspective itself, hence eliminating the need of "projecting" the points and lines so found.

After the draftsman has thoroughly familiarized himself with the elliptical curves, that define the usual visual appearance of circles, by actually and repeatedly "constructing" them by the processes given in Part II, only then can he safely proceed to the faster and more direct method of locating but a comparatively few points through which the curves may be sketched freehand.

In Figure 16 are given two methods of directly locating points in the perspective curves of semi-circular arches, the only given data being the circumscribed perspective rectangle $ABCD$ obtained by projection. On small-size perspectives, where a multiplicity of points might possibly be more confusing than defining, and after the draftsman has become "ellipse-conscious," the three points A , e , and D which limit the diameters may possibly be sufficient. The point e is found by crossing the main diagonals of the enclosing rectangle and raising a vertical through the crossing to intersect BC in e . Another

point f , in each half, is found as follows: Mark g by crossing lines at 45 degrees from C and D . If there is but one arch, mark g at both sides. If there is a row of them, mark g at the ends of the row only. From center D revolve g to h . The crossing of hh and the diagonal Ck , marks f , which is a point on the curve corresponding to the tangent point of a circumscribed octagon. On the other half of the arch the diagonal Bk also marks f on hh , as shown. Five points are now fixed: A , f , e , f and D . Eight more, four on each side, can be found by the method shown on the left-hand half of the arch. With the 30-60-degree triangle, long leg vertical, cross lines from A and B marking n . Project n to m with same triangle, short leg vertical. With T-square, project n to l . Step off ek three times to o . The crossing of oA and lD marks Q , which is another point on the curve. Three more can be found in the manner indicated in the Figure. The circular arcs diagrammed in the drawing are not "construction lines" but are put there to serve as a graphic guide to the location of the various points used in finding the points on the arch. The whole thing is readily done with T-square, triangles and dividers in much quicker time than it takes to "explain" it!

In passing, it may be well to note, that the above operations of direct proportionate measurement and division have been performed solely upon *vertical* lines, for these lines are the only ones in this particular perspective that are *parallel with the picture plane*, hence, in perspective, are non-convergent, and retain the property of being dividable, either directly by measurement or geometrically by graphics, into equal or proportionate parts. This valuable and expeditious property is held in common with any other line, be it *vertical*, *horizontal*, or *inclined*, that *parallels the picture plane* or, which is the same thing said in another manner, with any other line whose *perspective parallels the line itself*. For these lines are always in "parallel perspective" as has been shown very clearly in Part I in the discussion of "Straight-line Figures." Further applications will be shown in the examples to follow. Wherever used, they will henceforth, for brevity, be termed *picture-plane lines*.

FIG. 17.

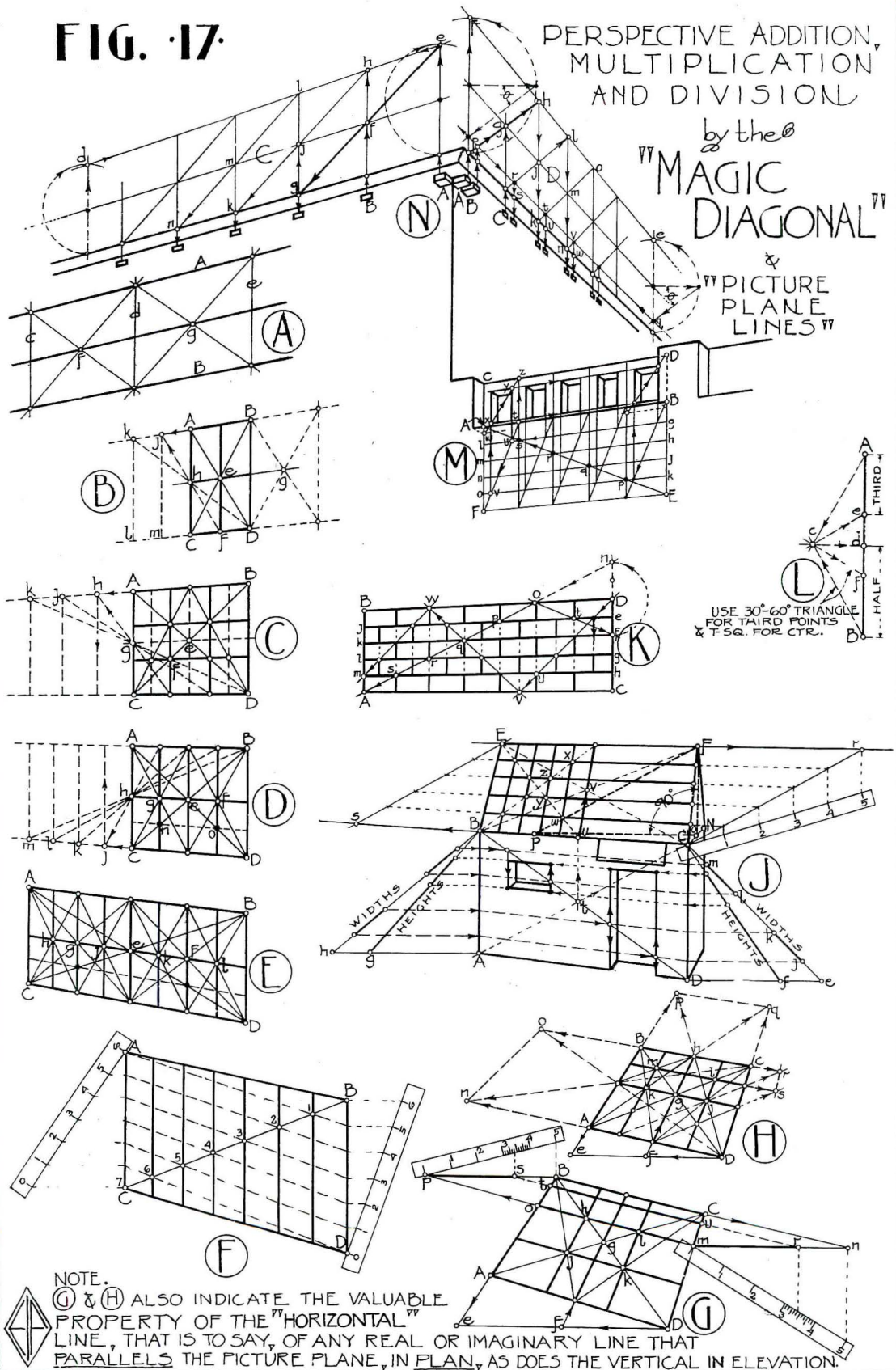


FIGURE 17—PERSPECTIVE PROJECTION

And now I shall show you some of the properties of what I have termed the "Magic Diagonal." For, by means of the diagonal line, operating directly upon the perspective itself, the addition, multiplication, division, and subdivision of vertical, horizontal, and inclined lines and planes can be accomplished in most cases quicker than by the process of projection. For it is plain folly, and a waste of time, to carry such detail work through the process of projection if the same result can be gained with the same exactitude in less time. Moreover, a thorough knowledge of the expedients illustrated herein reduces the preliminary work preparatory to "projecting" the perspective, to virtually a mere "blocking in" of the significant lines, enclosing rectangles, heights etc., on the plan and elevation. Practice alone will acquaint the draftsman with all the labor-saving and speed-productive devices at his command, and he will discover for himself new ways of employing "picture-plane lines," the "Magic Diagonal," and the "Eternal Triangle," and thereby have the joy of discovery.

In Figure 17, all lines or planes that have been projected into perspective, that is, all "given" lines of each example, are indicated by capital letters only, and, where possible, the order of operations has been suggested by using the lower-case letters of each example in the order of the alphabet, thus making the various diagrams almost, but possibly not quite, self-explanatory.

At "A," Figure 17, the two given lines *A* and *B* are perspective parallel horizontal lines in a vertical plane. It is required to draw a perspective line midway between them. First cross them with any three verticals. If verticals already exist, such as the corners of the building, door or window jambs, etc., use them. Then cross the diagonals of the ensuing two rectangles, and the line through the crossings, *gf*, will be the line sought. The same result can be attained by directly dividing any two verticals, limited by *A* and *B*, into halves, either by measurement or geometry, or by T-square and triangle as indicated at "L" in the Figure. Hence, it is obvious that the space between *A* and *B* may be divided into any number of equal or proportionate spaces by directly dividing any two contained verticals in the required manner and drawing the required line, or lines, between the corresponding points of division.

Moreover, since a straight line cannot change direction, any perspective line can be prolonged indefinitely in either direction and yet remain in perspective. This fact can often be made good use of by extending the lines outside the area upon which the perspective is being projected, and, after performing the required operations upon them there, carrying the ensuing required lines back into the picture where they belong; thus keeping the "working area" clean and free of confusion. Or, again, any operation of perspective "geometry," such as this, can be done

on tracing paper placed over the drawing and only the *result* transferred to its place beneath. Any straight line is fixed by two points, and said points may be transferred merely by pressure with the pencil point or dividers.

Diagrams "B" to "F," inclusive, in Figure 17, clearly indicate methods of dividing and subdividing vertical rectangles, as well as the manner in which the "Magic Diagonal" is used to repeat, or continue, any desired unit. The method of third-point-division at "C" is especially noteworthy. The other subdivisions at "B," "D," and "E" are based on the well-known fact that the center of a rectangle lies at the crossing-point of its diagonals.

At "F," Figure 17, let it be necessary to divide the given perspective rectangle into seven equal bays. First divide the two verticals into ONE LESS, which is six, equal parts, as depicted. Then, after drawing the shorter diagonal, cross it with a straight-edge connecting, consecutively, the opposite division-points 6 and 5, 5 and 4, 4 and 3, etc. Verticals through the diagonal divisions thus marked will divide the rectangle into the required seven bays. This method is of universal application, and its one advantage over the common, but equally usable, method of making the vertical division equal in parts to the required horizontal division, lies in the fact that here, as shown, the division lines cross the transferring diagonal at a less acute angle than they otherwise would, thereby assuring of greater accuracy in the fixation of the required points . . . more especially in cases where the perspective is more abrupt than that indicated by the example used.

In the division of horizontal perspective planes, the geometrically horizontal line, being analogous to the vertical line in the vertical plane, that is, being a "picture-plane-line," its property of being directly dividable is made use of in the same way, as illustrated at "G" in the same Figure, in two instances. In the first instance it is required to divide the horizontal rectangular plane *ABCD*, in half with a line perspective parallel with *AB* and *CD*. Prolong *AB* and draw a horizontal, with the T-square at *D*, to meet the prolonged side at *e*. Bisect *eD* at *f* and then the line *fg* through the crossing of the diagonals, will be the required line. By extending *BC* to meet a horizontal from *D* in the opposing direction from *e*, the same process will yield a center line perspective at right-angles to the first. It must be evident to the thinking student, that all of the operations performed upon diagrams "A" to "F," inclusive, by the use of the vertical line, are equally applicable to diagrams "G" and "H" by the use of the geometrically horizontal line, insofar as proportionate division is concerned. Now consider diagram "G" once more. Assume that the given rectangle is 15 feet square. Then it is incontrovertible that the line *eD* represents, to some scale, the actual distances *AD*

FIG. 18. The "ETERNAL TRIANGLE"

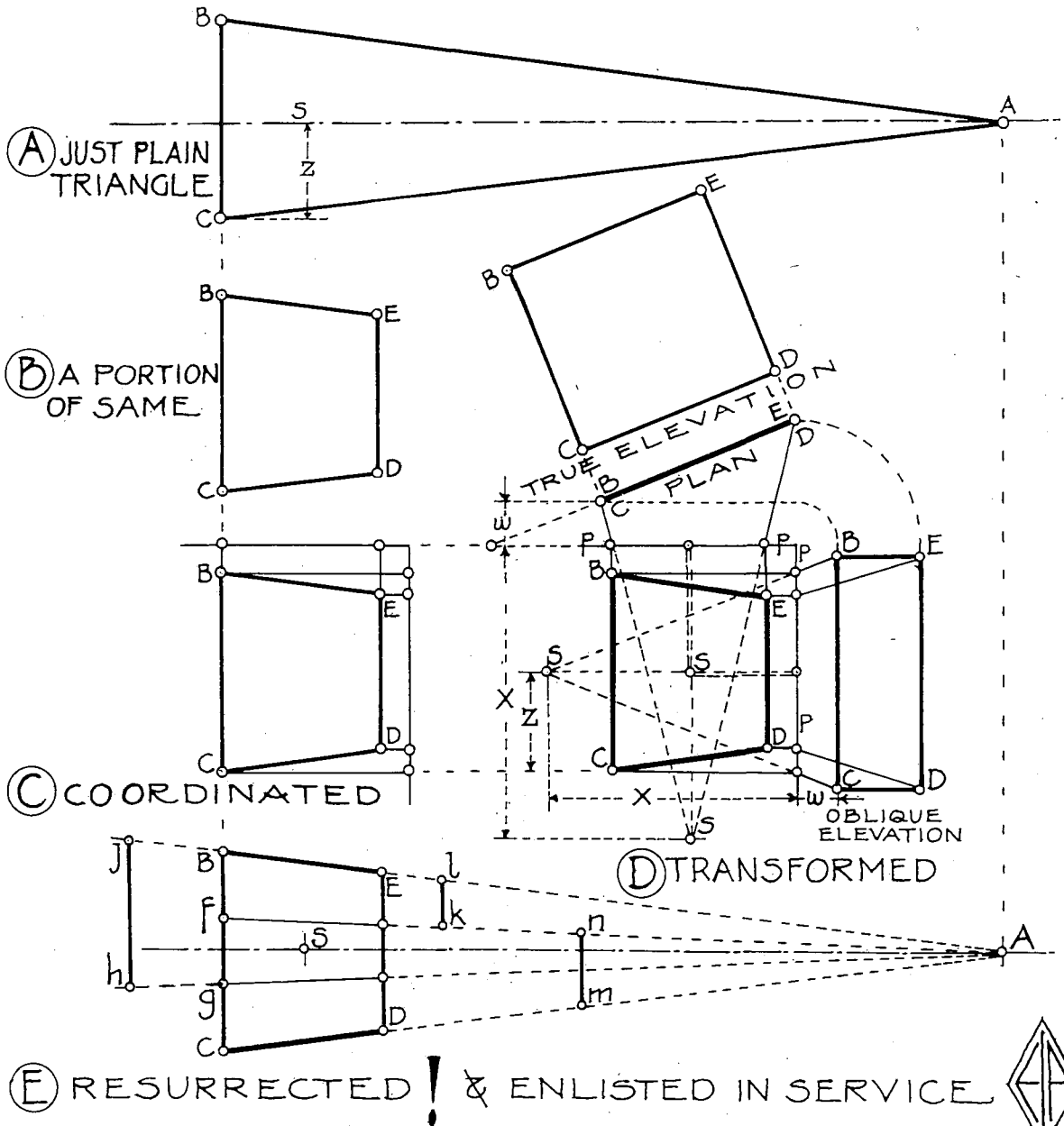


FIGURE 18—PERSPECTIVE PROJECTION

and BC of 15 feet, and it is this scale, established by the line eD itself, that must be used in applying measurements to said line, regardless of the scale of the drawings from which the perspective was projected. Also, if another line, geometrically parallel with eD be laid across the rectangle anywhere whatsoever between the confines of AB and CD , or between any extensions thereof, then this other "picture-plane-line" would also represent, to some *other* scale, the same actual distance that the line eD does, and this *other* scale must be used for the second line. Wherefore a system of *relative measurement* is clearly established whereby any dimension whatsoever can be transferred to its proper place in perspective. To prove this, let the student draw a horizontal "picture-plane-line" across the rectangle from C to meet AB . He will then find that it becomes *geometrically bisected* by the *perspective center line* fg . Now, one more instance of this expedient and I shall "move along." By the system of diagonals cutting across this rectangle, it is perspectively divided into nine equal squares. Hence, each square is 5 feet square. Hence, the "picture-plane-lines" mn and Bp , confined within the boundaries, or extensions thereof, of the farther third, are each 5 feet long for the purpose of transferring measurement to this portion of the rectangle. Assume the necessity of locating a perspective line exactly 3'-5" back from the line om . Lay any convenient scale in the two positions shown, so that it reads 5'-0" between the verticals $n5$ and $B5$. Project the distance 3'-5" vertically from the scale, in each instance, to the points r and s , respectively. Then the line rs will cross the rectangle at the points u and t , perspectively 3'-5" back from the line om .

At "H" is shown how the diagonal may be applied to the duplication, or repetition, of units in a horizontal rectangular perspective plane. And at "J" a wee house illustrates some more uses of the "Magic Diagonal" as applied to the direct placement of door and window, which is plain enough, as well as the employment of an inclined "picture-plane-line" in dividing the rake line, which is not so clear. So, I shall assume that the given rake line CF , of the gable, needs to be divided into five equal spaces. Now, a little reflection will show that *any* inclined plane whatsoever, that is drawn in perspective, such as the front slope of this roof, contains real or imaginary inclined lines that are parallel to the picture plane, and that the invariable and true geometric inclination of these lines can be established by discovering the line of intersection of the roof surface (or any extension of it) with a vertical plane paralleling the picture plane. This is easy, and is done as follows: Drop a vertical from F to intersect the base line CN of the gable at point o . Extend a horizontal from o to intersect the eaves line CB at p . Connect pF , which is the line sought; for the triangle Fop is an imaginary *cross section* of the front half of the roof

made by a vertical cutting plane passed through same parallel with the picture plane. Here, then, is an instance of the use of all three "picture-plane-lines"; the vertical Fo , the horizontal op , and the inclined pF , which latter line (or any other inclined line that is geometrically parallel with it) is available for directly dividing the inclined plane of the roof into any number of equal or proportionate parts. To avoid confusion of lines, draw the two lines Cr and Es geometrically parallel with pF limiting them, as shown, within the perspectively prolonged boundaries of the roof. Divide each into five equal parts in any convenient manner, one method of division being shown. Then, connect the corresponding points of division with a straight edge and the rake lines will be divided, perspectively, into five equal parts. Moreover, the connecting lines will be true perspective lines dividing the front slope of the roof into five equal courses or bands. Finally, by crossing the diagonals of roof and front wall, and projecting the center t to the eaves line at u , the perspective center line uv can be drawn, and the subdivision and resubdivision of the roof surface carried on as far as you like. The student will be well repaid to give this "wee hoose" much study.

A ready means of delineating ashlar or brick courses and bond-jointing in perspective is illustrated by still another use of the "Magic Diagonal" at "K" in Figure 17. And at "M" is a suggestion applicable to countless cases occurring in architectural work. Which same holds true of the spacing device diagrammed at "N." In the latter case, the initial spacing of the brackets A and B on the left, or A , B , and C on the right, is projected into perspective from the plan, and the succeeding repetition accomplished directly in the manner shown, which the draftsman should have little difficulty in following by taking note of the alphabetical order of the reference letters given. The center construction lines C and D should be "projected" at considerable distance either above or below the cornice lines so that the lines of the repeating diagonals will intersect the cornice lines at as great an angle as practicable or convenient. This, of course, holds true in all cases where points are located by intersecting lines. The nearer they approach a right angle, one with the other, the greater will be the accuracy of the points so located. Finally, the entire spacing can be done on tracing paper laid over the perspective, and only the *results* transferred to same.

Now turn your attention to the plain geometric triangle ABC displayed at "A" in Figure 18. Cut it in two anywhere, retaining the portion depicted at "B." Immediately the "perspective illusion" becomes felt. The erstwhile geometric triangle or, rather, the detached portion of same, now takes on the familiar appearance of a *rectangle in perspective*. We shall see. Reverse the process of perspective

projection by first "coordinating" the points $BCDE$ as at "C." We now have a fully equipped "perspective projection" of something or other to experiment with, the horizontal and vertical projection planes representing the horizontal and vertical projections of the "picture plane," as fully set forth in Part I. Next, as at "D," assume and fix the two relative positions of the eye, S , in plan-position and elevation-position, at any distance x from both "picture planes," and at a height z , in elevation, corresponding to the same height z , of the horizontal line passing through the apex of the original triangle. Also assume the distance w which is destined to become the right-angular distance of the near corner of the "something or other" back from the picture plane. Now go ahead and "project" the "working drawings" from the assumed perspective. Whence, the developed line $BC-ED$, thus projected into plan position, as shown, becomes the true geometric *plan* of the said "something or other," and, since this line is seen to lie at an angle to the picture plane, it just naturally follows that the elevation developed back of the vertical picture plane is an *oblique elevation* of the same something. Hence, since this elevation establishes the true *height* of it, and the plan establishes the true *width* of it, then the true *geometric elevation* of it can, as has been done in the diagram, be projected into actuality at 90 degrees to its plan. Wherefor, by "working the system backwards," the "working drawings" of the object represented by the assumed perspective have been produced! And, behold, the "object" instead of being part of a triangle, is found to be a true geometric rectangle which was originally contained in the true geometric triangle! In other words, it has been conclusively proven in a simple and utterly unexpected manner that *the perspective of any rectangular plane, that does not parallel the picture plane, is part of a geometric triangle*, and that the apex A can be speedily located merely by completing the triangle, that is, by prolonging the convergent lines of same until they meet. So, at "E" in the same Figure 18, we have a true perspective image of the true rectangle $BCDE$ which, by the simple process of continuing the established convergent lines of same to the apex A , will re-establish the original triangle by the same identical lines AB, BC, CA . Wherefore, the triangle has become "eternal," and, forthwith, becomes enlisted in service as a co-partner of the "Magic Diagonal." So, now, let me, before leaving the subject of expedients, suggest how the properties of the "Eternal Triangle" may be made use of, not only alone but combined with the "Magic Diagonal."

Consider again the process of projection diagrammed at "D," Figure 18. Project, by rectangular coordinates, the plan and elevation position of S , the station point, (which is the eye-position of the observer, as shown in Part I) onto the lines PP , representing the respective positions of the picture plane.

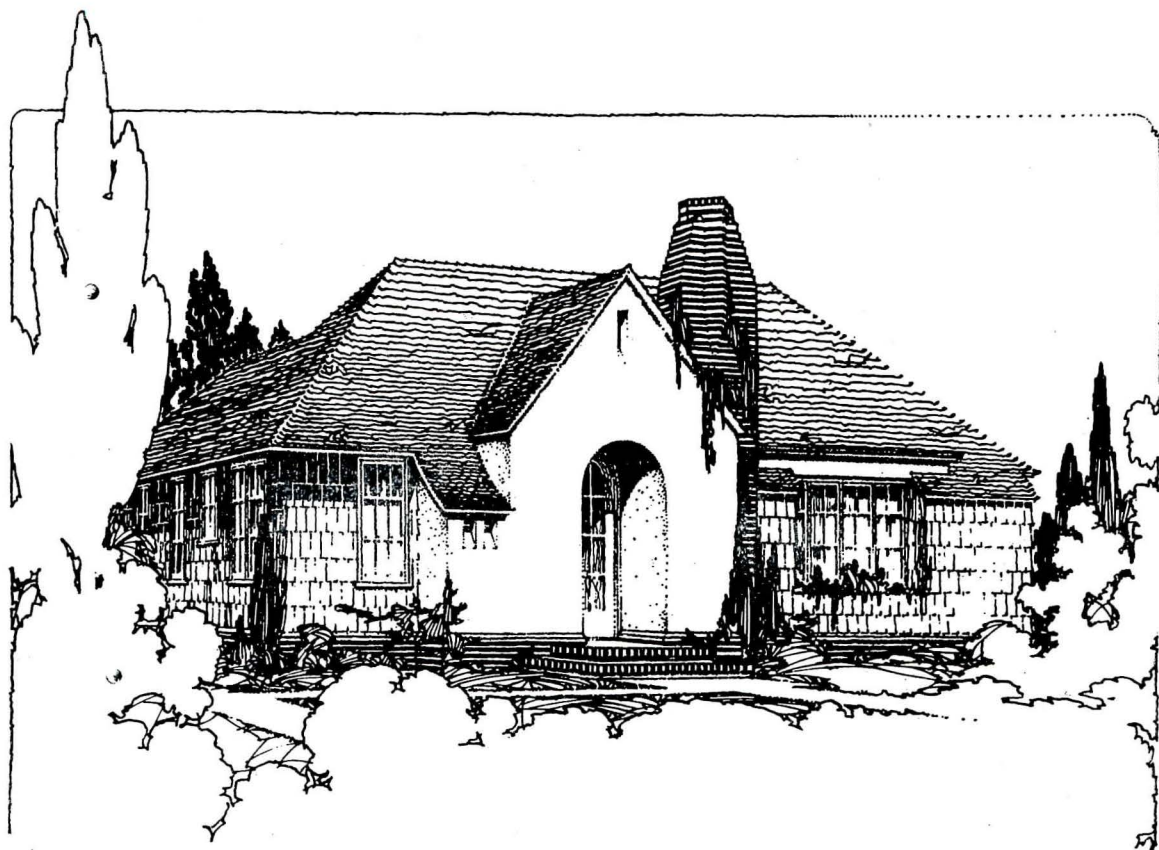
Then, from the said lines, project the eye-position into the perspective. The two sets of projection lines, or coordinates, will be found to coincide beyond the point where the first set crosses, as indicated by the doubled dotted lines. Hence, the true perspective position of the eye is bound to lie at the initial intersection of the first two coordinates. Wherefor, the *eye-level* is clearly defined as the one geometrically horizontal line that can be drawn through the vertical position of S . This line appears as SA at diagram "E," and you now see that it must pass through the point A , which point is the apex of the triangle; for the eye-level SA in the perspective projection, being located at a distance z above C , is in the precise location of the same line SA of the original triangle at diagram "A." Hence, by a very little extension of the analogy, it can be proven that the apex A , or the point of intersection of *any* system of converging perspective lines, is a point common to all of them, and must lie at the meeting-point of any *two* of them or, since the eye-level is one, at the point where any of the others meets the horizontal through S . Hence, if the convergence of the lines is so great as to bring the said point A within convenient reach of the triangle or T-square, on the drafting board, it can be used to advantage. For instance: let BC at "E" in Figure 18, be the vertical corner of a building, BE the top of the wall, CD the ground line, and fg the position and height on BC of a row of windows occurring in the plane of the wall. These lines, having been projected into perspective by the method with which the draftsman should now be familiar (having been fully covered in Parts I and II), let it be required to locate and place the windows without further recourse to the process of height projection from the elevation. Prolong BE and CD to apex A . Then the lines fA and gA , not only establish the height of *all* windows in this wall, but they also coincide with and, in effect, are *actual perspective lines* defining the heads and sills of said windows. Lines now projected from the plan-position of the picture plane will give the location and heights of the window jambs as well as the far corner of the building the height of which is plainly limited by the lines BE and CD already established. All of which is accomplished by taking advantage of the one outstanding property of the "eternal triangle," which is the property of *proportionate measurement*. The line jh is perspective equal to the line Bg , as will be any other vertical line occurring anywhere between the confines of the same two convergent lines JA and HA . Similarly, the line lk is the correctly foreshortened height of the line Bf . And nm equals fC , that is, if fC were moved to the position nm , it would move within the lines running from its extremities to the common point A . The student or draftsman will readily see that these properties of the "Eternal Triangle" are applicable to lines occurring in a horizontal plane as well as in a verti-

PERSPECTIVE PROJECTION—PART III

cal one, for any line in a horizontal plane may be conceived as being the line of intersection therewith of a paralleling vertical plane or, again, any line in a vertical plane may be imagined as coinciding with, and covering, another line in a paralleling horizontal plane. Hence, the point *A* becomes a point in common for *all* perspective horizontal lines, in any plane whatsoever, that lie parallel and that run in the same established direction, be it to the left or right. If the perspective line *AB* in Figure 17, diagram "G," were prolonged to meet an imaginary level line at the height of the eye, then all other perspective parallel lines running in the same direction would meet at the same point which, as has been shown, is the "apex of the triangle." If this point were fixed,

then a line toward same from *f* would coincide with the line *fg* already found by another method. Which method is the *more* expedient, conditions alone will suggest. In actual practice, it is not often that the "apex of the triangle" is within reach on an ordinary drafting board except, perhaps, where one side of an object is greatly foreshortened in relation to the other, and more prominent, side. But when it is available, it affords a valuable expedient as has been illustrated.

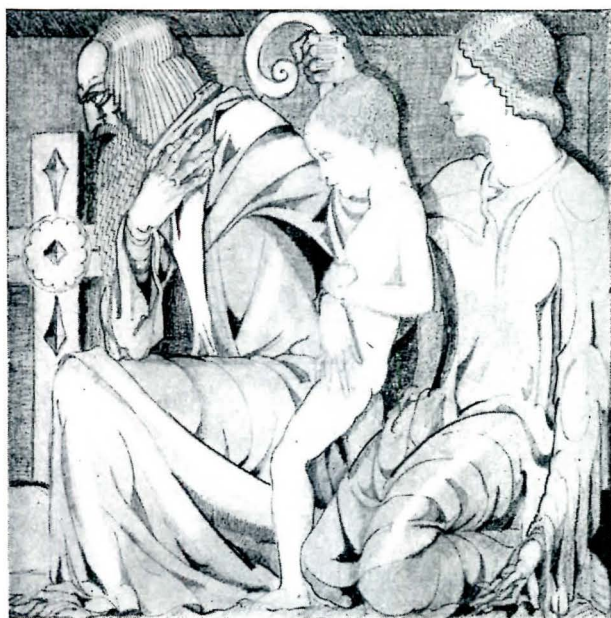
In Part IV, an easy method of enlarging or reducing a perspective projection from the same plan will be given. Also a fast procedure for getting domes into perspective by projection. And pertinent points relative to foregrounds and interior perspective will be illustrated.



RENDERING BY THE AUTHOR, LAID OUT BY PERSPECTIVE PROJECTION METHOD

HOUSE BY ERNEST I. FREESE, ARCHITECT

PENCIL POINTS

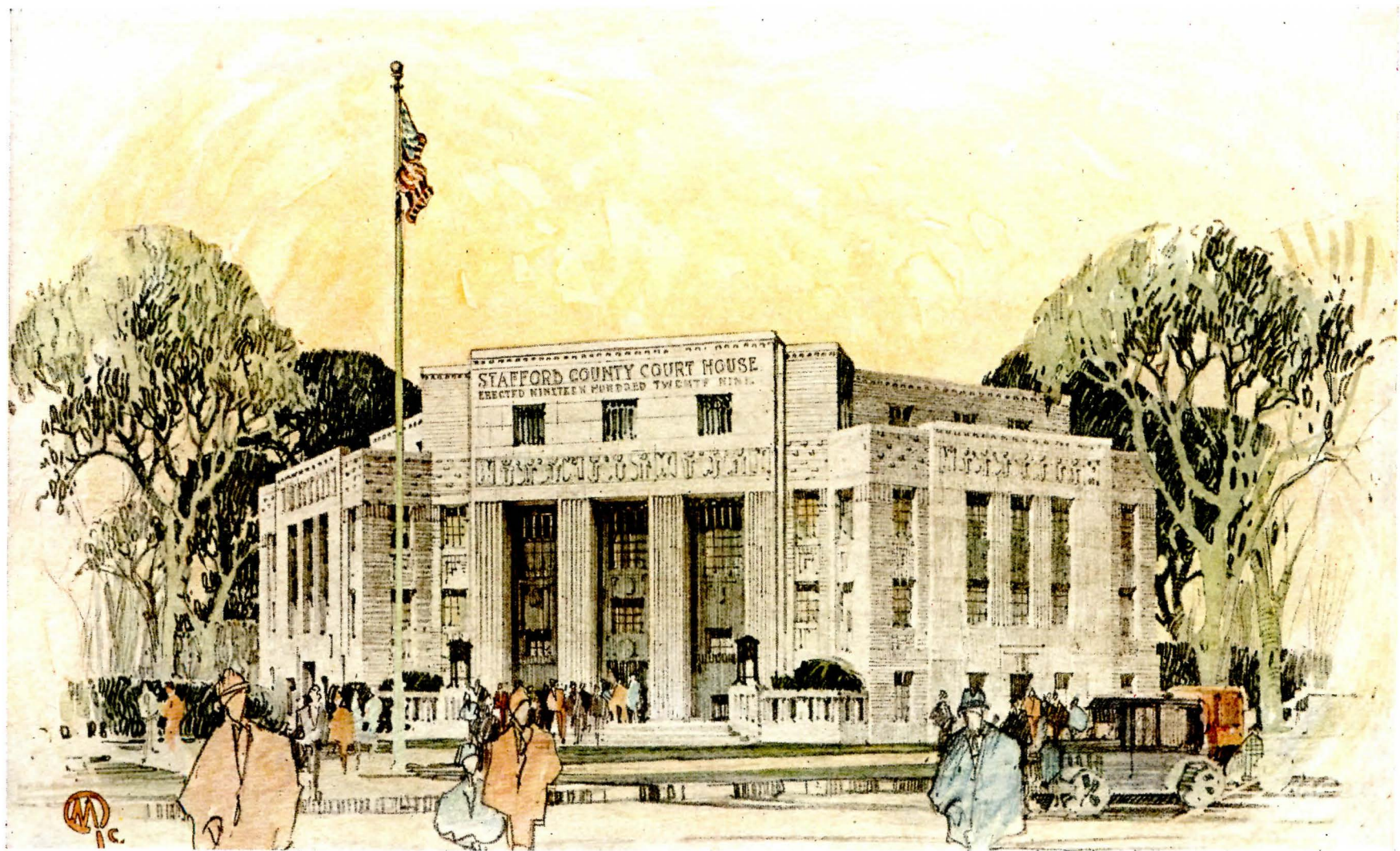


PENCIL DRAWINGS BY PAUL H. WAESE, SCULPTOR—DESIGNS FOR PANELS ON A MAUSOLEUM

PENCIL POINTS SERIES of COLOR PLATES

This rapidly executed but effective rendering was made on Alba tracing paper with very soft pencil which was then lightly fixed. After this the drawing was floated onto a piece of wall board and rendered very lightly with color, using sign painters' colors which the artist has found to be very satisfactory for this purpose.

The original measured 22" x 13½". This subject is interesting not only as a rendering but as a piece of architectural design in the modern American manner.



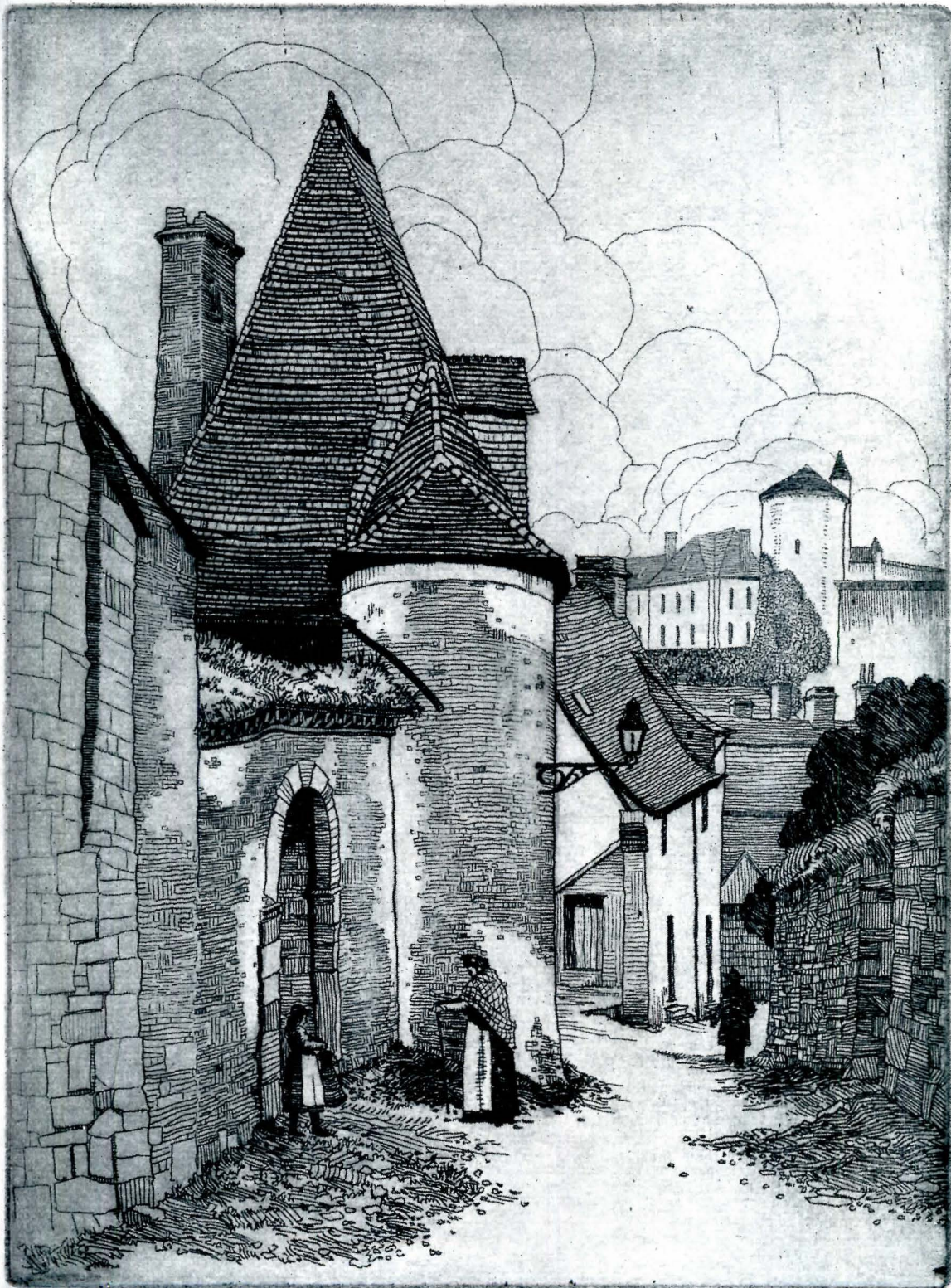
STAFFORD COUNTY COURT HOUSE, SAINT JOHN, KANSAS—MANN AND COMPANY, ARCHITECTS
FROM A RENDERING IN PENCIL AND WATER COLORS BY OTHO MC CRACKIN

PLATE IX

VOLUME X

NUMBER 3

This etching by Ernest Thorne Thompson, a number of whose woodcuts we have previously published, is reproduced at very slightly larger size than the original so that the technique may be clearly seen.



Ernest Thorne Thompson

FROM AN ETCHING BY ERNEST THORNE THOMPSON

"MAISON PIERRE LANDAIS, VITRÉ, FRANCE"

PENCIL POINTS

PLATE X

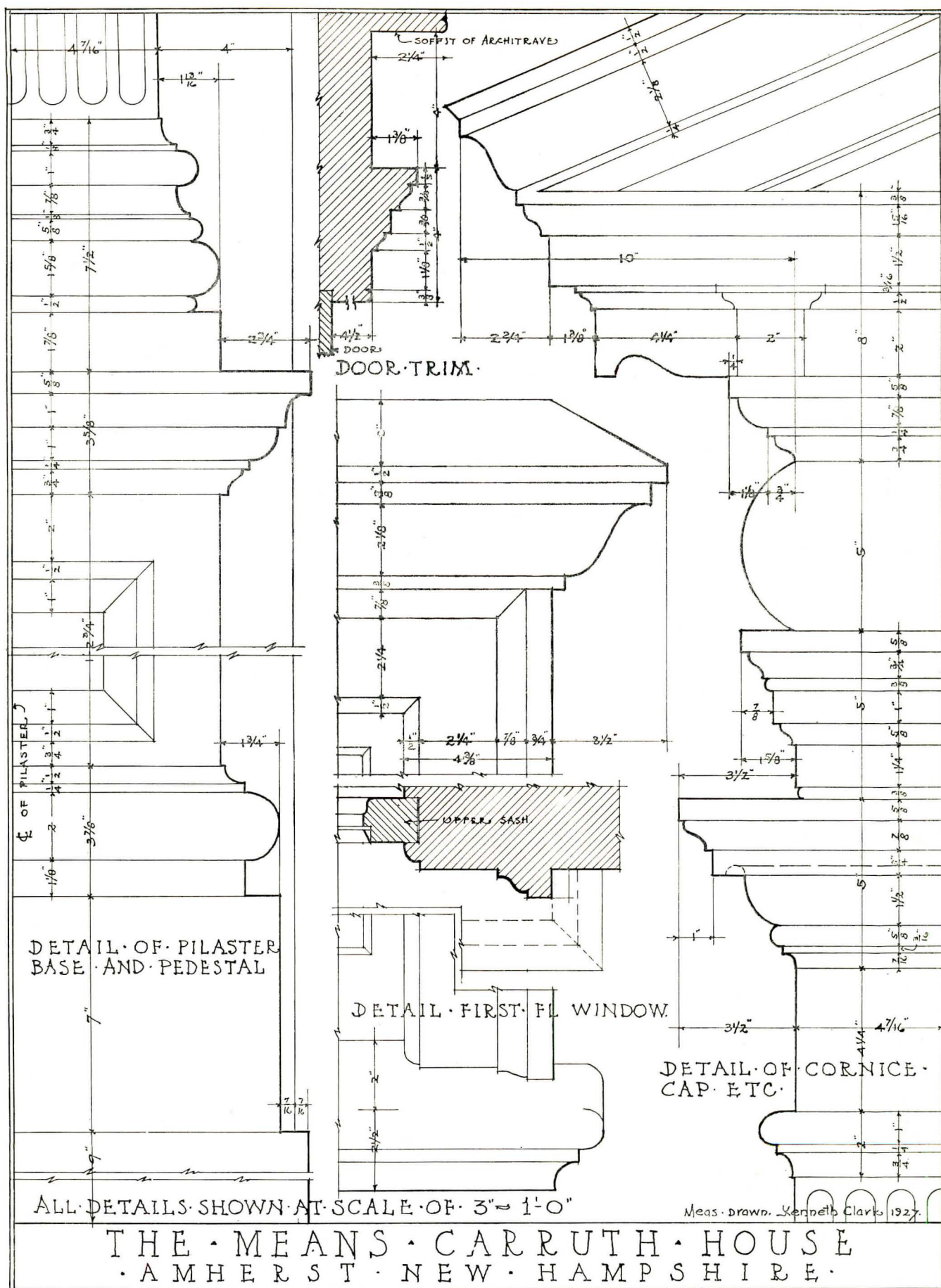
VOLUME X

NUMBER 3

This pencil drawing is one of a great many made by Mr. Imrey during his wanderings in the Orient. The artist is a native of Hungary and has traveled and sketched in all parts of the world. He is at present working in New York. The original sketch measured 10" x 13½".



FROM A PENCIL DRAWING BY FERENC IMREY
A JAPANESE TEMPLE AT KYOTO

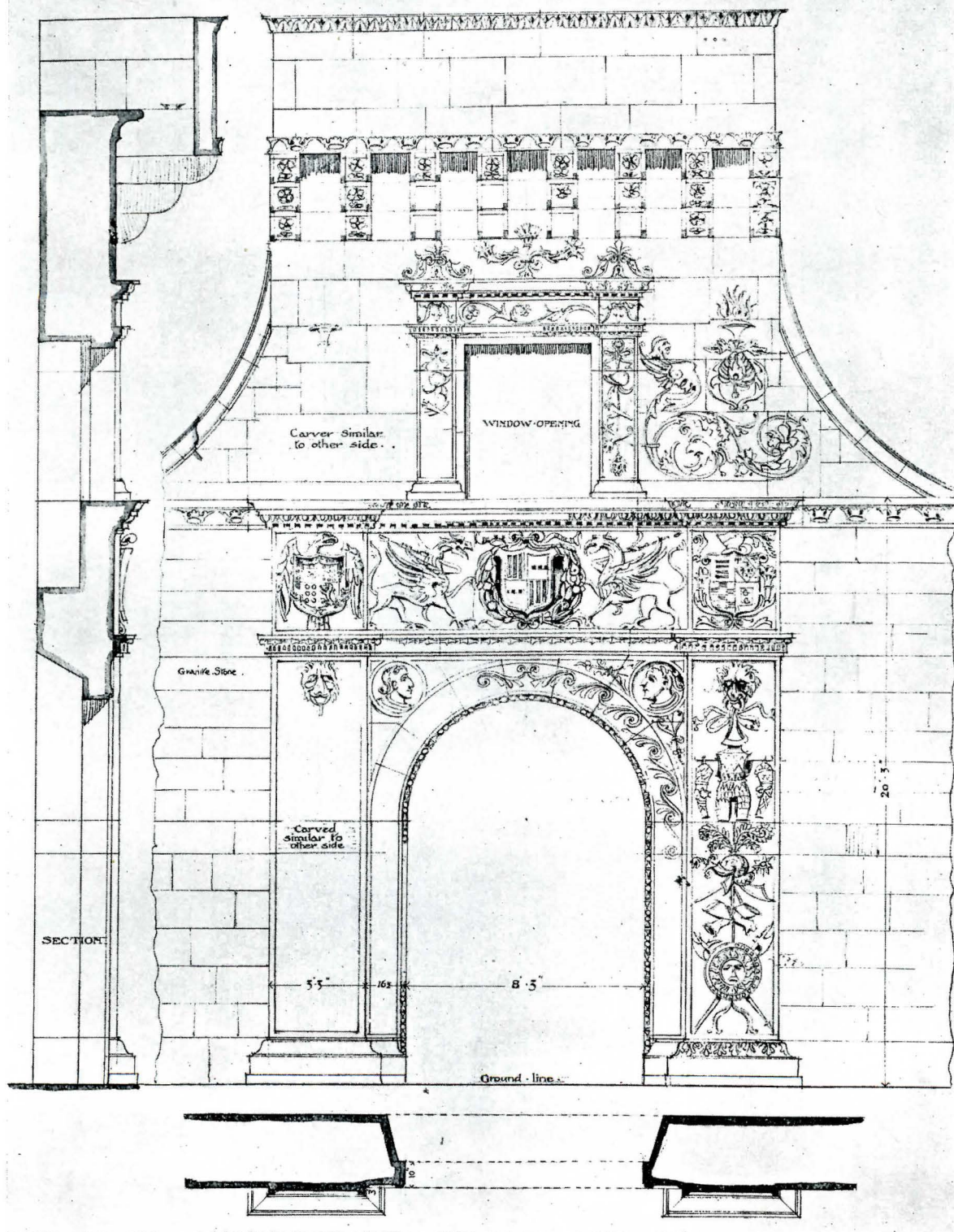


MEASURED DRAWING BY KENNETH CLARK—FROM THE GEORGE F. LINDSAY COLLECTION

PENCIL POINTS

Scale of 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 feet

AVILA CASA POLENTINA PORTAL TO COURTYARD



RENAISSANCE ARCHITECTURE AND ORNAMENT IN SPAIN

A PLATE FROM THE WORK BY ANDREW N. PRENTICE

PENCIL POINTS

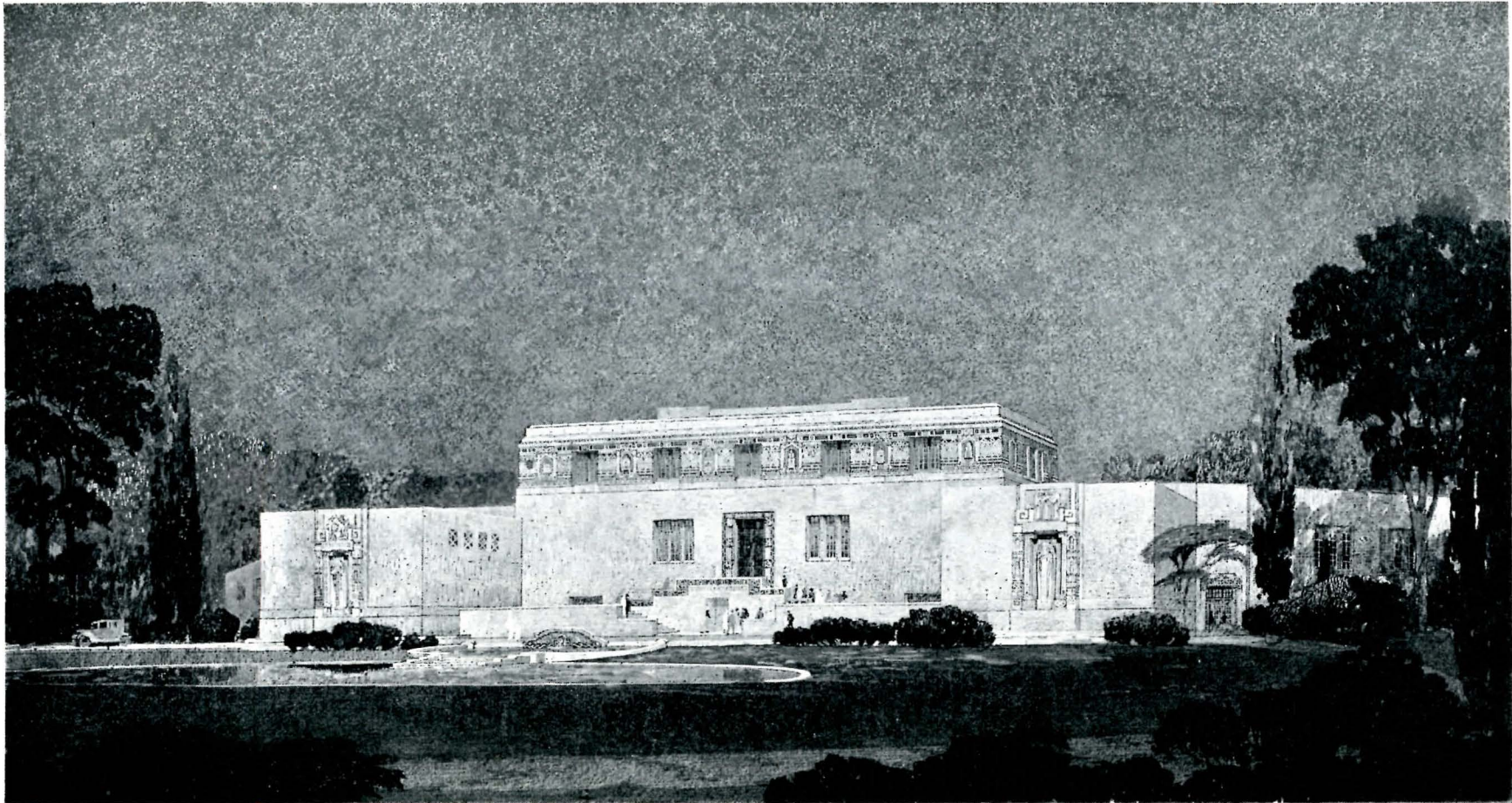
PLATE XI

VOLUME X

NUMBER 3

"A measured drawing of this curious entrance portal. The machicolated portion is coarser in detail and seems of later date than the rest of the doorway. Like many Spanish doorways it is set in the middle of a high blank wall, which forms one side of the patio shown on the previous plate, the material being granite."

A. N. PRENTICE



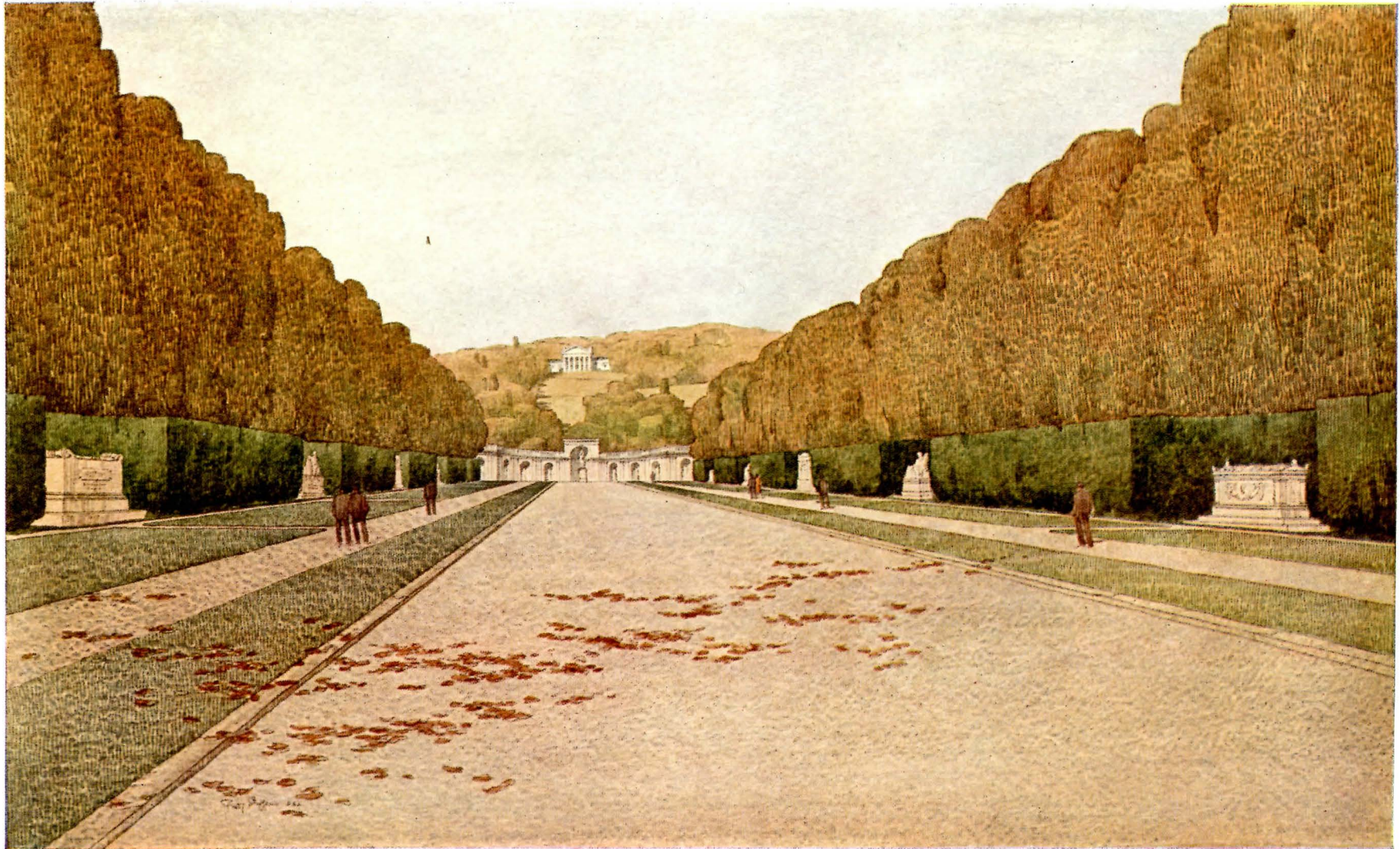
FROM A RENDERING IN TRANSPARENT AND OPAQUE WATER COLOR BY FLOYD YEWELL
ULTIMATE DESIGN FOR WICHITA ART INSTITUTE, WICHITA, KANSAS—CLARENCE S. STEIN, ARCHITECT
(See plans on pages 189 and 190)

PLATE XII

VOLUME X

NUMBER 3

This beautiful rendering by John Floyd Yewell was done on shade cloth with both transparent and opaque water color. It will be reproduced later in PENCIL POINTS in full color and at the same time we will publish a number of the architect's preliminary sketches and working drawings to show the development of the design of this notable piece of American architecture.

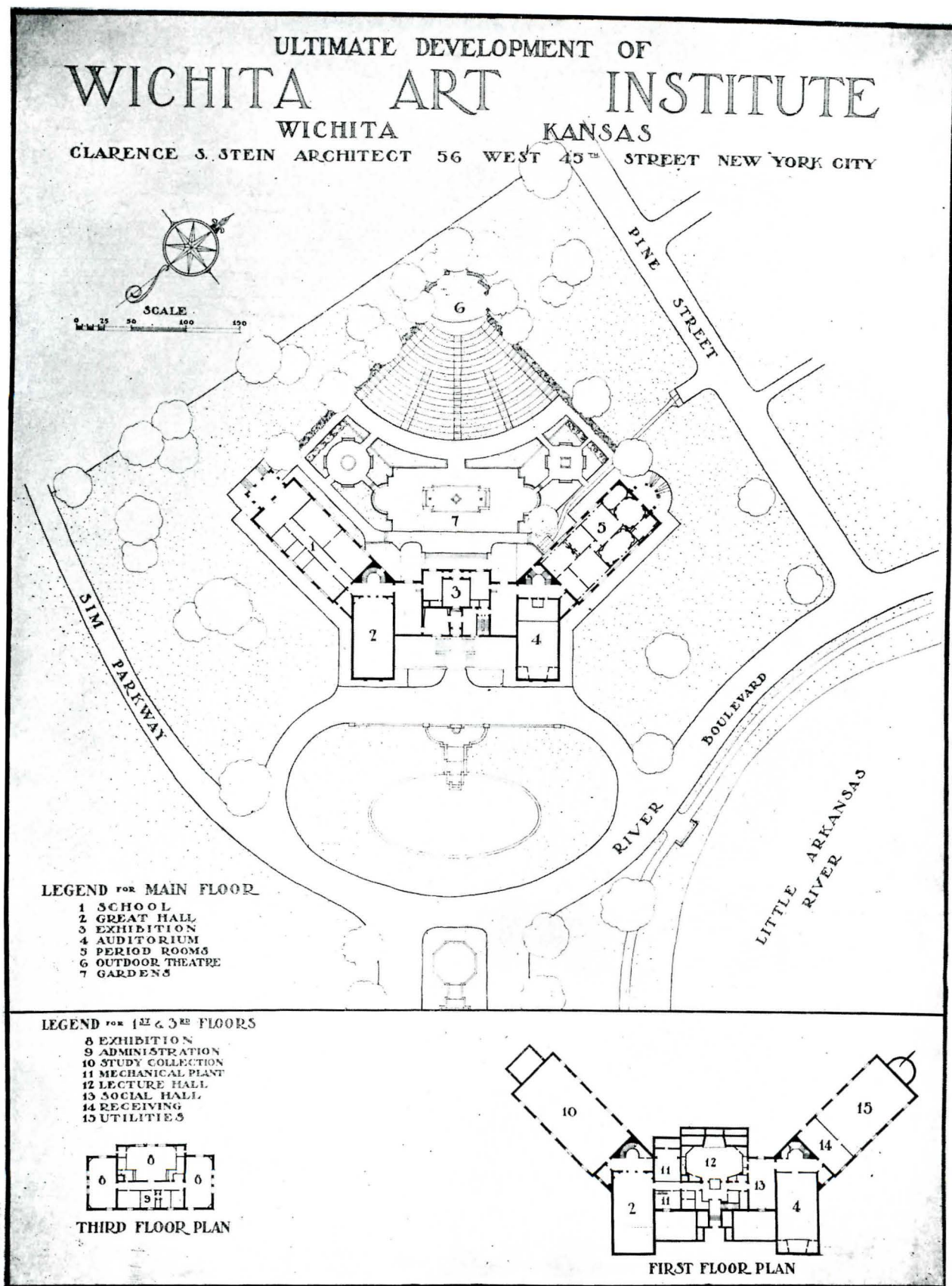


STUDY FOR APPROACH TO ARLINGTON CEMETERY, WASHINGTON, D. C.—McKIM, MEAD, AND WHITE, ARCHITECTS

FROM A PENCIL AND WATER COLOR RENDERING BY FRITZ STEFFENS

PENCIL POINTS SERIES of COLOR PLATES

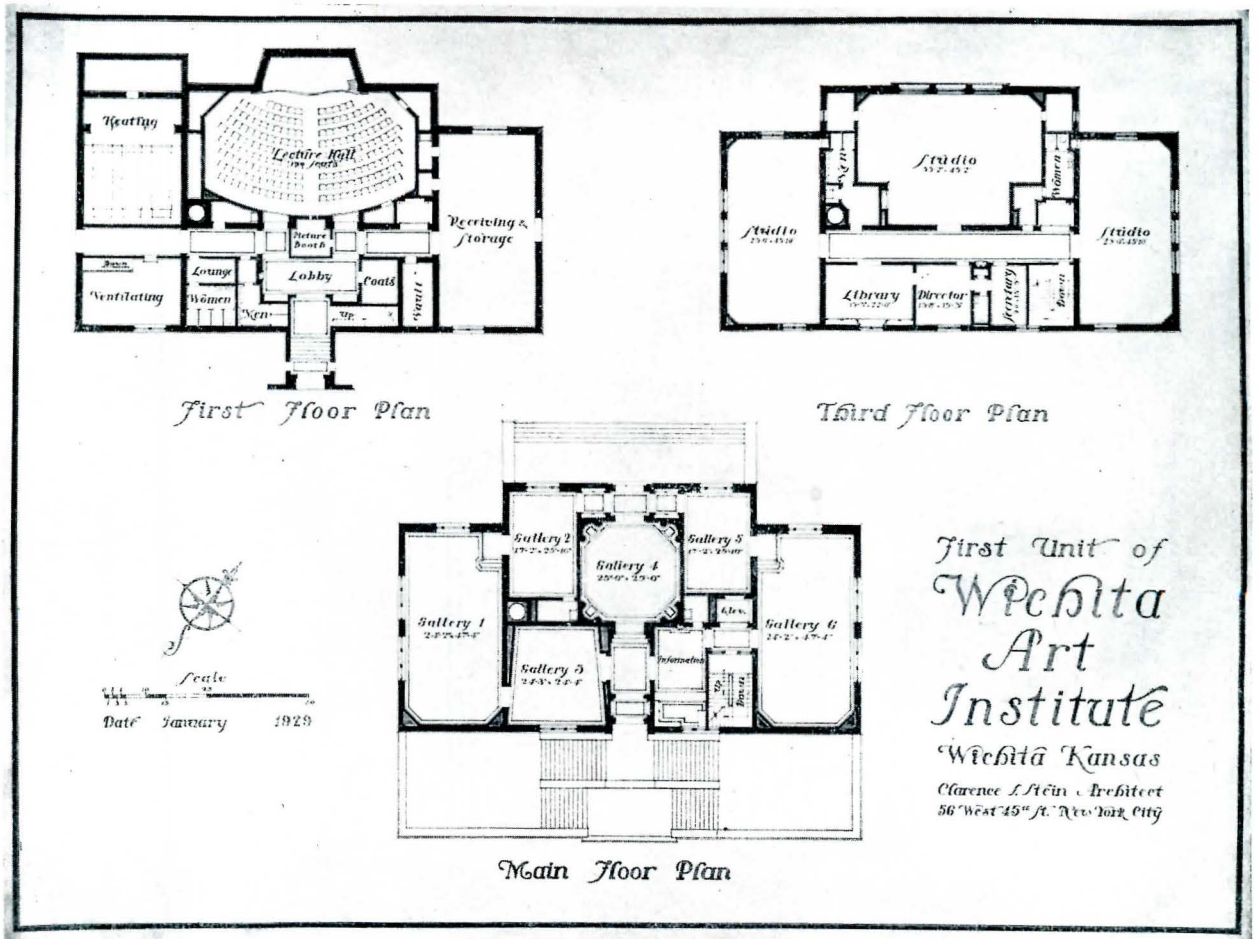
This rendering, which measured 22½" x 14" in the original, was drawn on tracing paper with a fairly hard pencil over a preliminary pencil layout, also on tracing paper. The drawing was then floated onto a rough cardboard which gave a good texture for the application of color washes. The rendering was done with a five color palette and each of the washes contains all five of these colors in varying proportions. The renderer has found that by following this procedure the drawing photographs well in black and white and good reproductions can be obtained from it.



PLOT PLAN—ULTIMATE DEVELOPMENT OF WICHITA ART INSTITUTE, WICHITA, KANSAS

CLARENCE S. STEIN, ARCHITECT

(See elevation on preceding page)



FIRST UNIT OF WICHITA ART INSTITUTE, WICHITA, KANSAS

CLARENCE S. STEIN, ARCHITECT

(See also page 189 and Plate XII)

THE NEW YORK ARCHITECTURAL CLUB

THE LAST FEW MONTHS have been very active ones for the Club; the present administration has outlined a very busy program for the year, and an excellent start has been made on it.

The Monthly "Smokers" in December, January, and February, were all well attended, and marked a new step in Club activities. They were instrumental in getting many of the regular members into the Club rooms, and demonstrated the ability of the Club to promote sociability and fellowship among the men in the architectural field.

Another Smoker is being planned for March 6th. This one will be operated by the Associate Members Committee and an exceptional program will be expected.

The Tennis Tournament will give a dance on March 23 as a preliminary movement in the work of this Committee which expects to have a very active season.

The 1929 Year Book has now been distributed throughout the architectural field, and has met with considerable notice. It contains much of interest, both to Club members and to others in the field. Work has also been started on the 1930 Year Book, and it promises to be even bigger and better than the present book.

Interest is centering on the coming Annual Meeting on April 2 for the election of new Board members.

Men in the architectural field are urged to visit the Club rooms and take advantage of the services offered so

that they can see the advantages of membership. The Atelier and Life Class are both very active and add a great deal to the work the Club is doing.

The coming Tennis Tournament and the Baseball League are also beginning to get a little notice, and the Club is now in a position to operate these two activities in a very able manner.

Other Clubs are encouraged to keep in touch with us and keep the plan going for a National Association.
—Edward F. Clapp, *President*.

COMPETITION FOR TRAVELING FELLOWSHIP
IN ARCHITECTURE

THE COLLEGE OF ARCHITECTURE of the University of Michigan announces that the annual competition for the George G. Booth traveling fellowship in architecture will be held during the two weeks beginning April 6, 1929. This competition is open to all graduates in Architecture of the University of Michigan whose thirty-first birthday comes after the opening day of the competition. The stipend is \$1,200.00.

Competitors may make their drawings at their present place of residence. Those intending to compete should write as soon as possible to Professor Emil Lorch, College of Architecture, University of Michigan, Ann Arbor, Michigan.

"WHY" COMPETITION JUDGMENT

TIME — Monday, February 4, 1929

PLACE — Lafayette Hotel, New York

JURY — H. Van Buren Magonigle
Hardie Phillip
Ben J. Lubschez

WINNER — W. C. Douglas
609 Tenth Avenue, Roanoke, Va.

PRIZE — A collection of architectural books valued at between two and three hundred dollars (see November 1928 PENCIL POINTS, Page 734).

HONORABLE MENTIONS — Max R. Horwitz
3674 Second Avenue, Los Angeles, Cal.
Milton Lowenthal
234 Heberton Avenue, Port Richmond, N. Y.

ABOVE ARE THE facts, cold and unembellished, but let it be known that the jury meeting was far from lacking in either warmth or embellishment. The genial host, who can, unfortunately, be referred to here only as "The Mysterious Donor," saw to it that the judges were put into the proper state of mind to approach their judicial task by assembling them in that rare hostelry, the Lafayette Hotel, and there providing them with delicately blended food and drink (blended as only the French can blend them). Stimulated by the excellent dinner, which was topped off with mild Havanas, no judges in the world could fail to be inspired to super-keenness of judgment; nor did these judges disappoint. Manuscripts were passed back and forth, paragraphs were read from one to another amid "ohs" and "ahs," and, one by one, entries were eliminated from the running. Finally a unanimous choice was made and W. C. Douglas, as above noted, was awarded the prize. The donor thereupon expressed himself as highly pleased with the result and stated that the winning letter reflected exactly the attitude towards the profession he wished the competition to bring out. It is printed here together with two other letters which were awarded honorable mentions.

HONORABLE MENTION

Submitted By Max R. Horwitz

I love architecture. From childhood, every building, large or small—church or home—had an individual and especial message for me. There they stood—those living things in brick and stone. They said things—some were grim—and harsh—gray—forbidding—others so inviting, sympathetic and friendly. A walk down a street and I would greet them—these my friends—who never faltered. I would wander into strange sections of the town, ever seeking, ever finding new friends and pleasant surprises. I began to discriminate—this one has too many windows—looked so bleak and dumb that was awkward with its bays and roofs projecting gawkishly; here, one plain, honest and friendly.

Near the lake, and on the North side, I found my dream houses. How I would drink in every line, every detail. But a glance at a building and I would place it immediately in its category—good, bad, friend or enemy.

Many a time I would steal into a church, awed and hushed with the great power and sublimity of its lofty spaces—of its upward sweep to the sky. The quiet thrilled me, and I was glad within to enjoy the stolen spree.

Whenever I saw a house being built, I closely followed the various steps. How I envied those men who could take things—brick, mortar, wood—put them together with their hands and build—build—build.

I would build some day—I must, it is in me—it is part of me. That spirit to create—that will to mold those bricks and stones for all to see.

What a feeling, what a glow, went through my body when I thought of the time to come.

As I grew older—as I matured—and began to know more and more about building and buildings, so did my desire to build increase. It seemed to me the noblest of all work of man. Think of it—to take bricks and mortar and stone—to form arches, piers and walls that were ever present and staunch—that stood for ages!

What was law, medicine, teaching, anything, compared to this marvelous creative work?

In School I thought of all my studies in their relationship to Architecture. History, Civics, Political Economy, Geography, Music—all things revealed themselves to me as but a part of the whole—the whole which was the expression of it all—Architecture. Music especially was my teacher.

In each note I saw an opening—in each bar I saw a motive—in each piece I saw a composition—a building.

Why did I choose architecture? There was no choice.

HONORABLE MENTION

Submitted By Milton Lowenthal

Since childhood my ambition has been to be an architect. Why? Ah, that may be hard to explain but I will try to give what I feel are the real reasons.

As far back as I can remember there has been the desire in me to make and fix things. I say as far back as I can remember—my father remembers the time when I drove a nail into the piano (this may or may not have to do with my choice of profession). Just what it was that made me decide on architecture, however, I don't know. It

The Prize-Winning Letter

WHY?

Faith is the first requisite of the followers of Architecture: faith in the profession, its progress and ultimate achievement; faith, borne up by History, that Architecture will always take its place in the foremost ranks of all the Arts; faith in fellow Artists and yet another kind of faith, that invested in us to carry on.

Hope leads even through the darkest hour: hope always of noble accomplishment and the bettering of the Art and Humanity; hope of attainment with its reward of happiness and hope for that ever-beckoning perfect work, that perfectly received and perfectly executed masterpiece that is every Artist's mirage.

Love forms the greatest bulwark against all doubt: love of ambition and ideals; love of the beautiful and the struggle to create the beautiful; love of accomplishment and power and, even greater, the honest love of the work for its own sake.

Why? The reasons are three: "Faith, Hope, and Love, and the greatest of these is Love."

may have been the influence of having an architect for a neighbor. Perhaps our playing around houses in the course of construction had something to do with it. Or maybe it was the impression made on me by the sky-line of Manhattan as we used to see it from the ferry whenever we'd go to the city. Any one of these incidents may have impressed the subconscious mind enough to have been an influencing factor. But it matters little which is responsible; the impression was made.

The first occasion I had to give reasons for my choice was on applying for admission to a school of architecture. I have a hazy recollection of having said something about wanting to design beautiful buildings and having implied that there was a great need for more beauty in our architecture. This may not have had any bearing, but I was not admitted to that school. I was told later by an alumnus that the answer to that question should have been that I liked mathematics and drawing and everything else that an architect should show an aptitude for. But I couldn't very well put down such an answer, for mathematics always did bother me and I had never done much drawing, probably for fear of finding out how poor I might be. As for other reasons, I had very little idea of the details of an architect's work. Just one thing I knew, and that seemed sufficient, to me. There was a desire to express myself in something beautiful. But why architecture? There are music, painting, and poetry, any of which might do as well. But the opportunity to unite beauty with an important useful art such as building is not

given by these fine arts. The idea of making "useful things beautiful" appealed to me.

That there is little chance of making a financial success of my profession doesn't bother me much (I am still a student) but I have faith in the belief that the man who does a thing well (the true artist always puts his best into everything he does) need not worry about the necessities of life, and we can ask for little more, already having a profession we love.

PRATT ARCHITECTURAL CLUB

THE MEMBERSHIP COMMITTEE reports twenty-nine new members signed up since October—and there are more coming. The January *Bulletin* was sent off to all graduates and if you didn't get one it's because we have not your correct address.

At two of the recent luncheons at the Fraternity Club we enjoyed talks by Scott Button of the General Electric Company and W. K. Denton of the Railroad Coop. Bldg. and Loan Association. Mr. Denton made a statement of interest to all architects that last year over \$800,000,000 was loaned for small homes to be built from borrowed plans not directly prepared by architects. There is a field large enough for all of us whether Pratt men or others.

At the time of writing we have under consideration several important plans for our future activities and preparations for the Annual Dinner on May 1st are under way.



MEMBERS OF MELBOURNE UNIVERSITY ATELIER, MELBOURNE, AUSTRALIA

NATIONAL BETTER HOMES ARCHITECTURAL COMPETITION

AN ARCHITECTURAL small house competition involving a total of \$27,500 in prize money has just been announced by the Home Owners Institute.

Raymond M. Hood, who is well known to the readers of PENCIL POINTS, has agreed to act as Chairman of the National Committee of Arrangements for this competition and also as Chairman of the Jury of Award of the National Competition.

C. Stanley Taylor, President of the firm of Taylor, Rogers & Bliss, Inc., and a member of the firm of Lyon & Taylor, Inc., architects and building consultants of New York, has been retained as consultant in the development of the competition program.

The jury will be selected in accordance with details presented in later paragraphs.

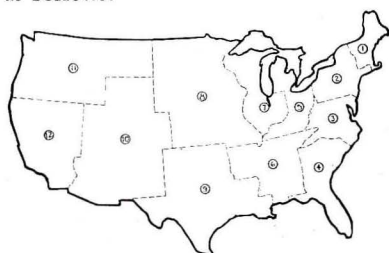
In order to render this competition attractive even to leading architectural firms in the residential field, prizes amounting to \$27,500 will be awarded as follows:

A First Grand Prize of	\$ 5,000.00
A Second Grand Prize of	3,000.00
A Third Grand Prize of	1,500.00
36 Regional Prizes of \$500.00 each	18,000.00

Total Prize Awards	\$27,500.00
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It is quite probable that in addition to these prize awards several of the cooperating newspapers will offer special awards.

The general procedure in this proposed competition is as follows:



A geographical sub-division of the United States will be made, splitting the country into twelve areas, in accordance with the accompanying map. The first step of

the competition will be that architects, draftsmen, or architectural students will compete in a local competition, each within the area in which his home or home office is located. In each of these areas one popular newspaper will act in cooperation with the Home Owners Institute, publishing the details of the competition and the prize winners. There will be a local Jury of Awards appointed in each area and consisting probably of three or more architects, a contractor, and a real estate expert recommended by the National Real Estate Board. The local jury in each of the twelve areas will select the three prize-winning designs submitted. Each of these designs will be awarded a prize of \$500 in the local competition and the three designs will immediately be submitted to the National Jury. This will provide 36 entries in the National Competition from which the first, second and third prizes of \$5,000, \$3,000 and \$1,500 respectively, will be awarded.

Unlike other competitions the program will provide that competitors must design houses using nationally advertised, trade-marked, high grade materials which have national distribution. A definite outline specification will be provided with the competition program in order to produce a well balanced practical home and there will be certain plan restrictions which will insure practicability of the house for the average sized lot.

Two types of dwellings will be called for in this com-

petition. In fact, it will be divided into two classes and all competitors may submit as many designs as they wish. All designs must come under the following two descriptive classifications:

Class A—6 Principal Rooms, including at least 3 Bedrooms, 1 Bathroom and Lavatory.

Class B—7 Principal Rooms, including at least 4 Bedrooms, 2 Baths and Lavatory.

Each of the above types of houses will be given a cubic foot limitation so that all houses will fall within two approximate cost limitations.

While many small house competitions have been conducted in the past, it is obvious that with the tremendous volume of home building which is now going on, lessons are constantly being learned and planning is being made more practical and more efficient. There is a general trend in the United States today toward the use of materials and equipment of better quality and toward the elimination of high maintenance and replacement costs through the medium of good construction. There is a trend toward economy through more efficient planning and the architect's contribution to comfort and convenience without greatly increased cost has become generally recognized.

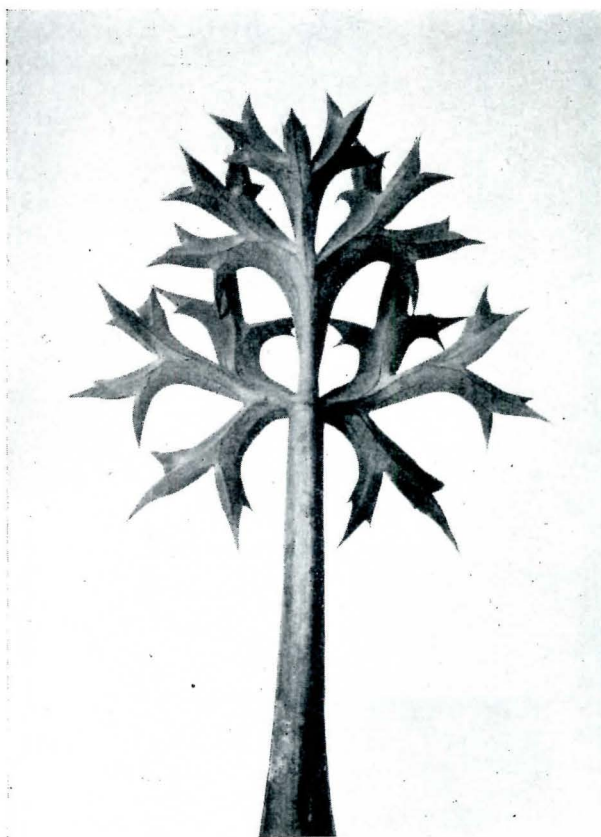
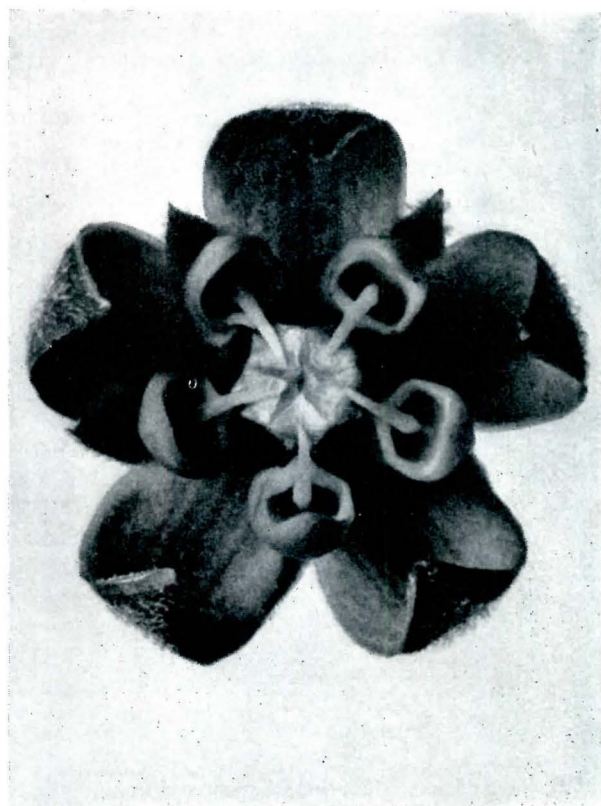
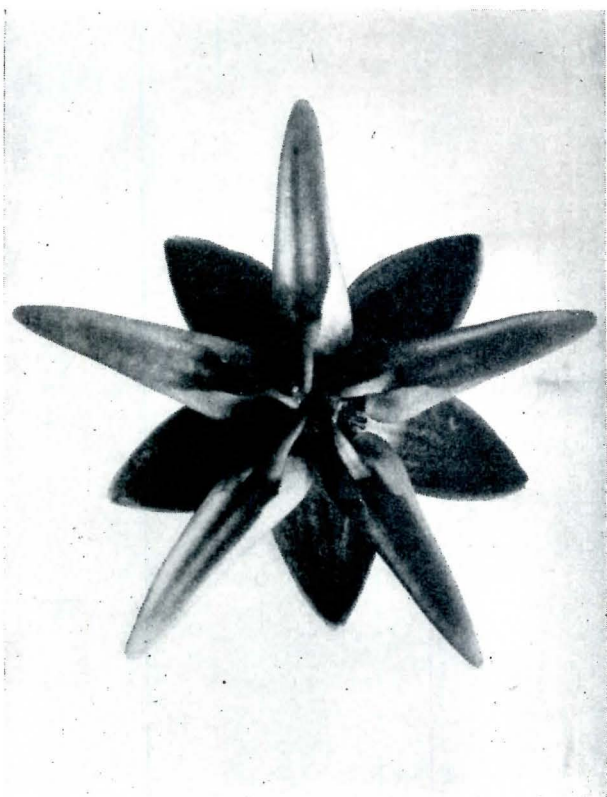
The moderate cost home building field is found in the following two popular ranges of cost—first, from \$7,000 to \$15,000 and from \$15,000 to \$25,000. It is this field that particularly needs the development and dissemination of practical information regarding home planning, construction and equipment. It is this field that needs to learn more completely and conclusively the lesson that cheapness does not represent sound economy. The Home Owners Institute having developed and supervised the construction of model homes in more than sixty communities throughout the United States during the past three years, has decided that a National Architectural Competition, such as that described herein, will result not only in the production of many interesting and practical dwelling plans but in the development of planning and construction ideas of great value in their application to new homes everywhere. This question has been discussed with many prominent architects, with the National Association of Real Estate Boards, with editors of architectural and building publications and with many others, all of whom have strongly approved this proposed program.

Here is an unusual opportunity for the readers of PENCIL POINTS to compete for not only substantial cash prizes but national recognition in the field of small house design. Each of the prize winning houses will be published in newspapers throughout the country and in each instance the architect will be asked and amply paid for preparing complete working drawings. Immediately upon completion of the competition the prize winning houses will actually be built in each region and presented to the public as model houses, following the program which the Home Owners Institute has carried out for several years.

The official programs of the competition will be ready about the middle of March and may be obtained at that time from the Home Owners Institute, 441 Lexington Avenue, New York.

Mr. Hood and Mr. Taylor both express themselves as believing that this prize of such a substantial nature should call forth the efforts of a large number of those skilled in domestic architecture and for this reason the quality of the resulting plans should be of the highest degree ever attained in any national competition of this nature.

PENCIL POINTS



ILLUSTRATIONS FROM BLOSSFELDT'S "URFORMEN DER KUNST"

REDUCED TO ABOUT ONE-QUARTER OF THEIR SIZE IN THE ORIGINAL BOOK—SEE PAGE 195

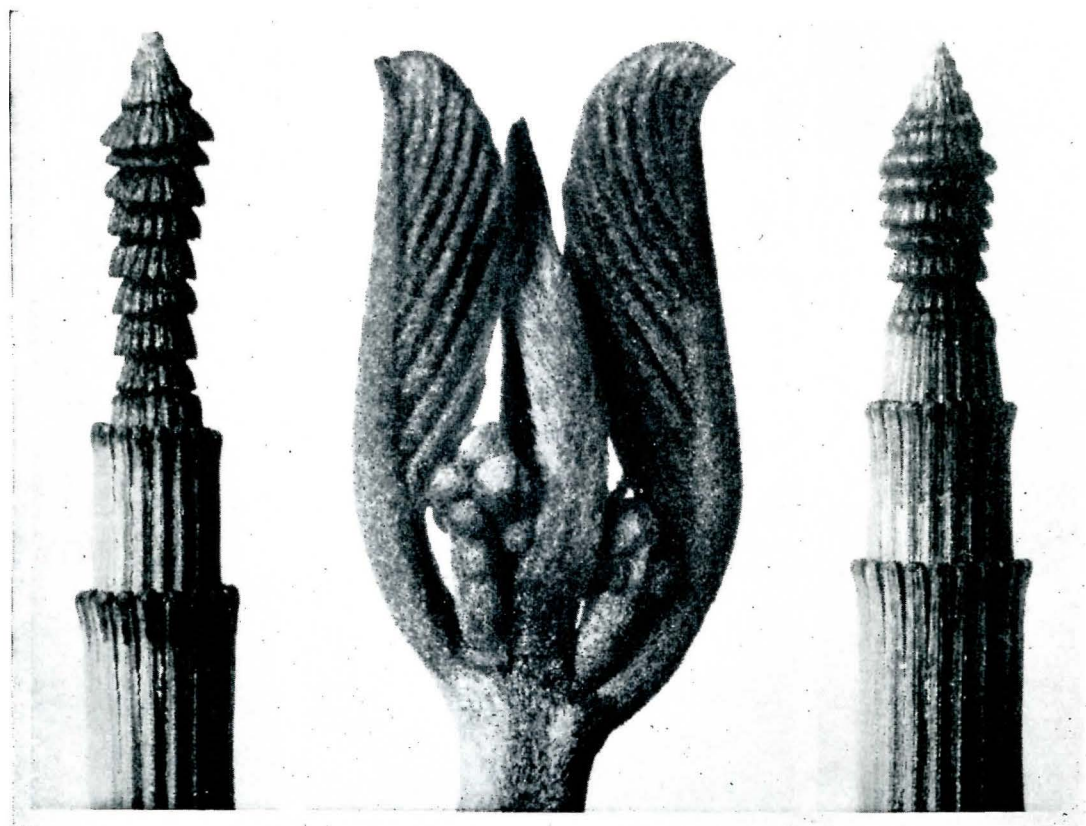


ILLUSTRATION FROM BLOSSFELDT'S "URFORMEN DER KUNST"

A SOURCE BOOK FOR ORNAMENT

Urformen der Kunst, by Karl Blossfeldt; 120 plate pages, 9½" x 12½"; price \$10.00; published by Ernst Wasmuth in Germany and handled in the United States by E. Weyhe, New York.

WE OCCASIONALLY come across a book, nonarchitectural in subject matter, which yet is of great value to the architectural designer. Such a work is *Urformen der Kunst*, by Professor Karl Blossfeldt, published in Germany and sold in the United States by E. Weyhe of 794 Lexington Avenue, New York.

The designer of architectural ornament has, since the earliest times, been influenced by natural forms. The Egyptians conventionalized the lotus, the Greeks the acanthus, and derived a variety of ornamental forms which have persisted to this day. Other flowers and plants were also used as inspiration by Egyptian and Greek designers and by artists and architects of all peoples since, save when religion forbade their doing so. We are all familiar with the many established ornamental forms which these people have left to us as a heritage.

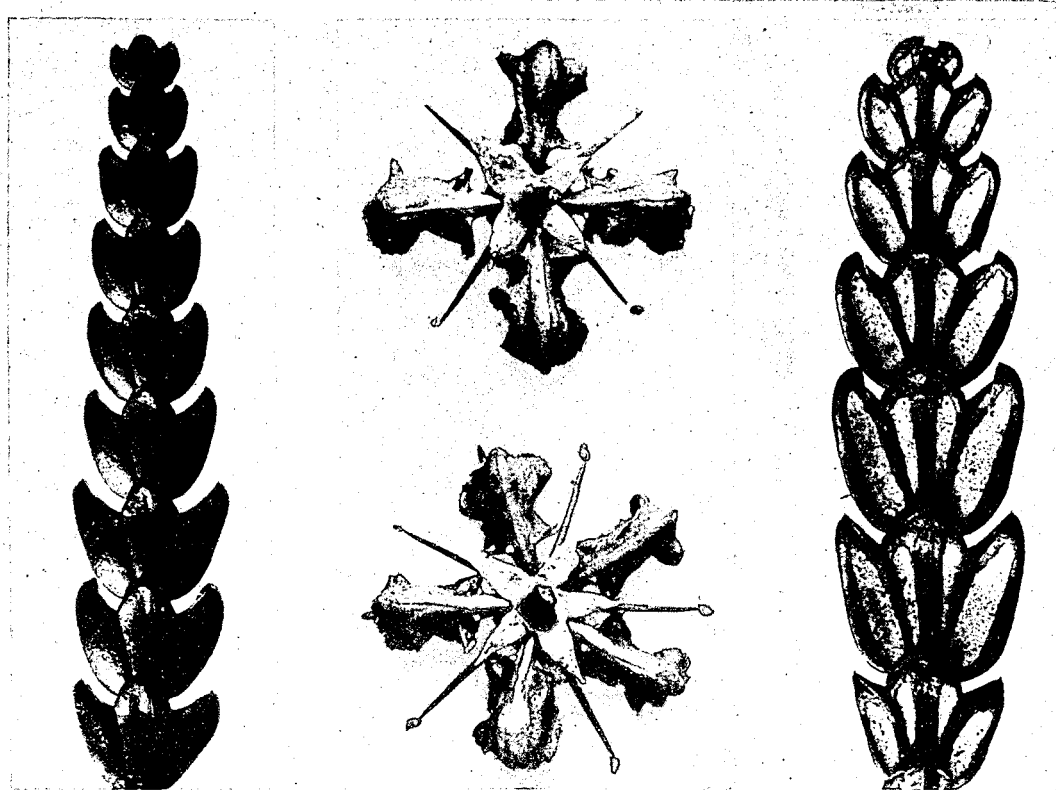
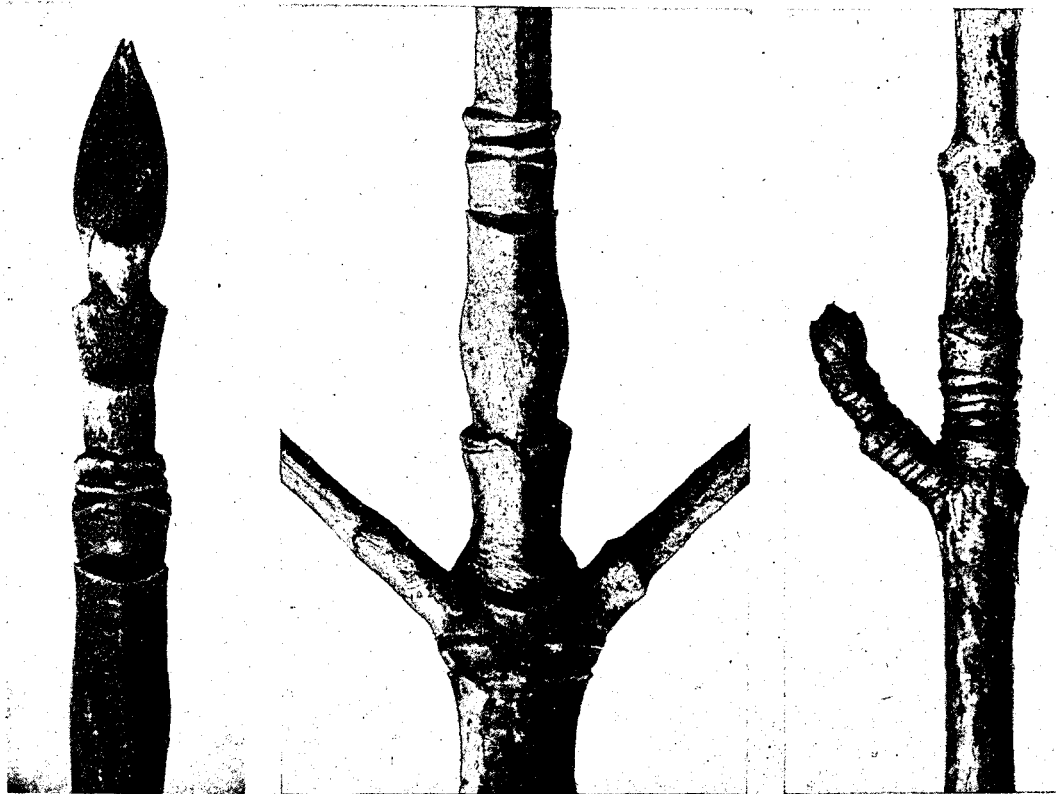
But many people are tiring of copying what some one else designed long ago for use under entirely different conditions than prevail today. This age, like others that have preceded it, calls itself "modern" and why should it not express itself in a "modern" way? Why should

we not take, as ornamental motives, things which are fresh and which are capable of yielding new beauties for the modern age to enjoy?

The compiler of this book has grasped the need for these new ornamental forms and has provided a wealth of material for the designer to draw upon. By means of the modern camera, equipped for microscopic magnification, he has taken photographs of plants and flowers and of portions of them and has brought them up to a size where we can see the delicate detail and subtle modulations which the naked eye might miss. He has done this for scores of plant forms (there are one hundred and twenty plates in all, many of them including several subjects) and has thereby unlocked a whole treasure chest of possibilities for the designer of even slight ingenuity. We have reproduced a few here on pages 194 and 196, somewhat reduced from the size at which they appear in the book. Even at this reduced size they suggest ways of adapting them to modeled architectural forms.

But these few plates give only a suggestion of the wealth of stimulative material in the volume, which must be seen to be fully appreciated. We will watch eagerly for evidences of its influence on the ornament of buildings. Already we have seen at least one piece of ornament which we are sure we have traced to this book as its source, and that there will be others we cannot help believing.

PENCIL POINTS



- ILLUSTRATIONS FROM BLOSSFELDT'S "URFORMEN DER KUNST"
REDUCED TO LESS THAN HALF THEIR SIZE IN THE ORIGINAL BOOK—SEE PAGE 195

BEAUX-ARTS INSTITUTE OF DESIGN

WALTER L. HOPKINS SCHOLARSHIP FOR AN ARCHITECTURAL DRAFTSMAN

A SCHOLARSHIP OF the value of \$500, offered by Mr. Alfred Hopkins, in memory of his brother, Walter L. Hopkins, will be awarded to the Class "A" student in the Department of Architecture who obtains the highest number of values in the five first Class "A" *Projet* and *Esquisse-Esquisse* competitions of the current school year 1928-1929.

The scholarship is open to all architectural draftsmen who have never been abroad and who have been employed in architects' offices for a period of at least two years previous to the date of award, May 14, 1929, and to students who have not attended an Architectural School for a period of over one year. It is the intention of the scholarship to help only those draftsmen who have come up through the architects' offices and who have not had the advantage of study or travel outside of the United States. The ruling on these points will be strict as the intent of the terms of the scholarship are clear.

White students, who must be citizens of the United States are only eligible. Students desiring to compete for this scholarship must signify their intention in writing to the Institute prior to April 1st, 1929, so that their values may be calculated from the Institute records.

In case of a tie in the highest number of values, preference will be given,—First: To the student who has obtained values by medal awards; Second: To the student who has submitted the greatest amount of work, in this or previous school years.

A first and second alternate will be selected to take the place of the winner in case he should be unable to go abroad at the time designated.

It has been determined to widen the scope of the scholarship to permit the winner either to attend the American School of Fine Arts at Fontainebleau, throughout its term of three months, or to spend an equal time in traveling.

S. BRECK P. TROWBRIDGE FONTAINEBLEAU SCHOLARSHIP

A FONTAINEBLEAU SCHOLARSHIP of the value of \$500, offered by Mr. Goodhue Livingston in memory of Mr. S. Breck P. Trowbridge, will be awarded to the student in Class "A" who receives the highest number of values during the current school year, 1928-1929, in the five first Class "A" *Projet* and *Esquisse-Esquisse* competitions.

To be eligible for this Scholarship, students must be American citizens of the white race, a condition that is fixed by the regulations of the French Government for the Fontainebleau School of Fine Arts, and they must be registered in Class "A." The usual regulations in the Circular of Information governing Class "A" competitions will apply, except that this Scholarship will not be awarded to any member of a school faculty or an instructor of architecture.

Students desiring to compete for this Scholarship must signify their intention in writing to the Institute, prior to April 1st, 1929, so that their values may be calculated from the Institute records.

In case of a tie in the highest number of values, preference will be given, *first*, to the student who has obtained values by medal awards, *second*, to the student who has submitted the greatest amount of work in this or preceding school years.

A first and second alternate will be selected to take the

place of the winner in case he should be unable to go abroad at the time designated.

The winner of this Scholarship must agree within seven days of the announcement of the award:

FIRST: To attend the three months' course for architects at the Fontainebleau School of Fine Arts for American students.

SECOND: To make a written report to the Director of the Department of Architecture of the B. A. I. D. on his return, covering his work during his stay abroad.

THIRD: To loan for an exhibition if requested all drawings and sketches made while abroad.

The Scholarship does not cover passport expenses or fare to Port of Departure from the winner's home, or other incidental expenses.

Circulars of the Fontainebleau School of Fine Arts, may be secured from the Fontainebleau School of Fine Arts, National Arts Club Studios, 119 East 19th Street, New York, N. Y.

WHITNEY WARREN FONTAINEBLEAU SCHOLARSHIPS

TWO FONTAINEBLEAU SCHOLARSHIPS of the value of \$500 each, offered by Mr. Whitney Warren, will be awarded by the Jury selected for the judgment for the two best designs submitted for the Class "A" IV *Projet* in the school year 1928-1929, of the B. A. I. D. Department of Architecture.

To be eligible for these Scholarships the students must be registered in Class "A" and they must be American citizens of the white race, a condition that is fixed by the regulations of the French Government for the Fontainebleau School. The usual regulations in the Circular of Information governing Class "A" competitions will apply, except that these Scholarships will not be awarded to any student who has previously won any other architectural scholarship for foreign travel or study, or to any member of a school faculty.

A first and second alternate will be selected by the jury to take the place of anyone who may decline the scholarship.

The winner of each scholarship must agree, within fifteen days of the announcement of the award:

FIRST: To attend the three months' course for architects at the Fontainebleau School of Fine Arts for American students upon his return.

SECOND: To make a written report, to the Director of the Department of Architecture of the Beaux-Arts Institute of Design, covering his work during his stay abroad.

THIRD: To loan for an exhibition, if requested, all drawings and sketches made while abroad.

The Scholarships do not cover passport expenses or fares to Port of Departure from the winners' home or incidental expenses.

WHITNEY WARREN, *Director*
Beaux-Arts Institute of Design
EDWARD S. HEWITT, *Director*
Department of Architecture

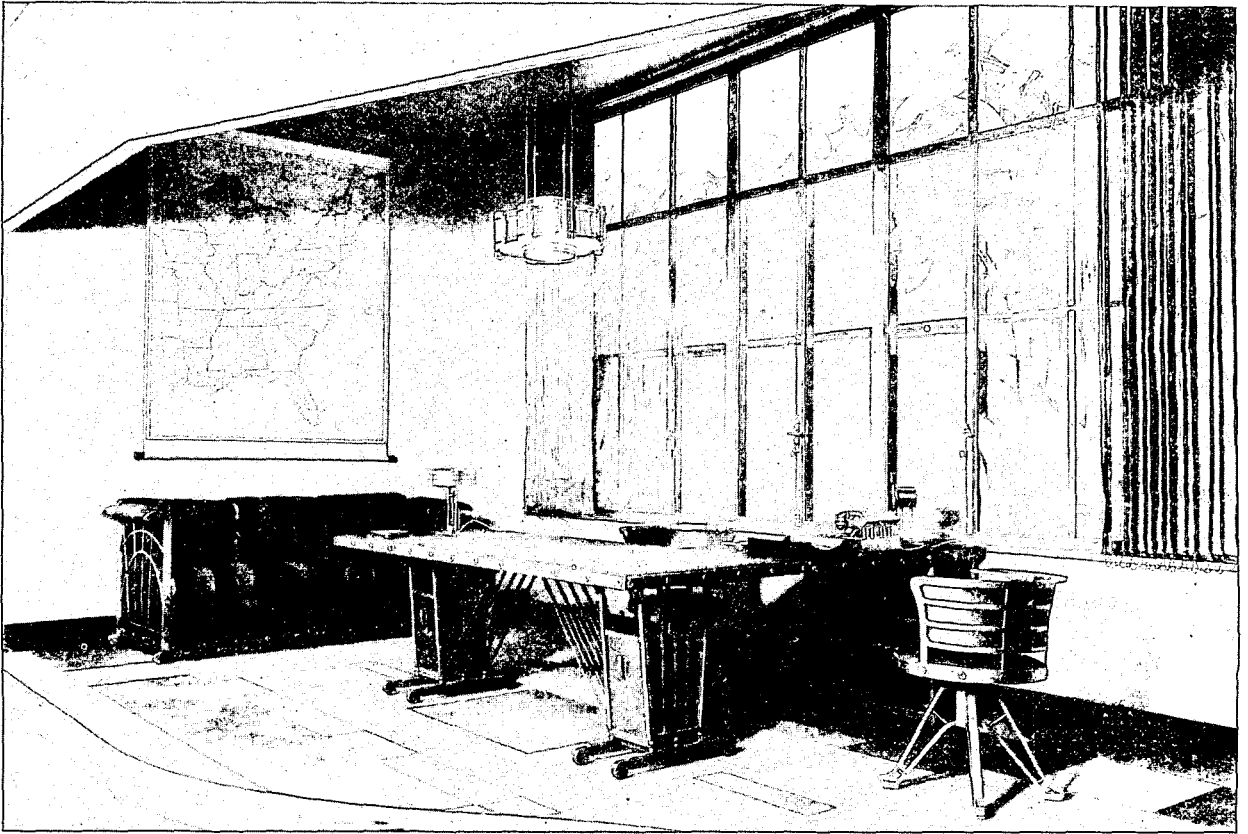
SAN FRANCISCO ARCHITECTURAL CLUB

ELECTS OFFICERS

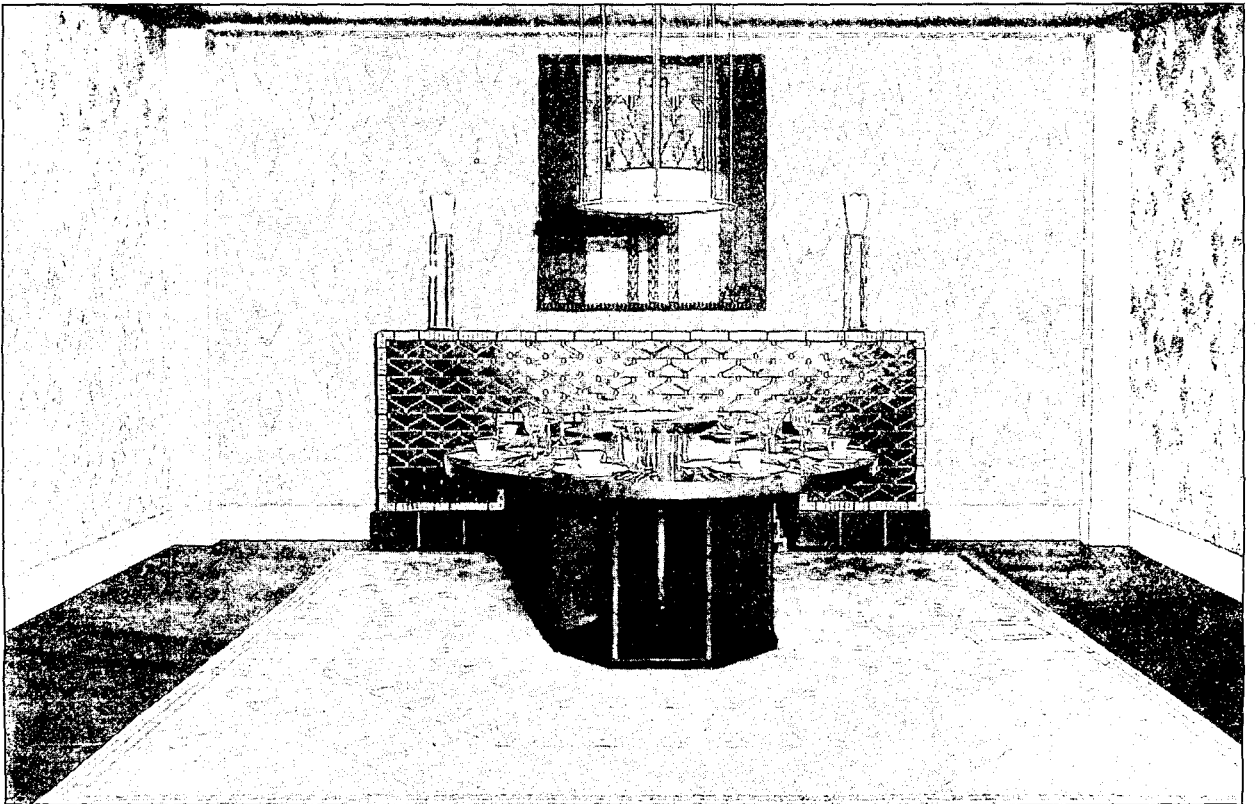
AT THE ANNUAL MEETING of the San Francisco Architectural Club the following men were elected for the current year: Harry Langley, *President*; T. G. Ruegg, *Vice-President*; F. A. Nielsen, *Secretary*; D. A. Kensit, *Treasurer*; and W. B. Rue, *Director*.

Activities of the Club will be published in PENCIL POINTS from time to time.

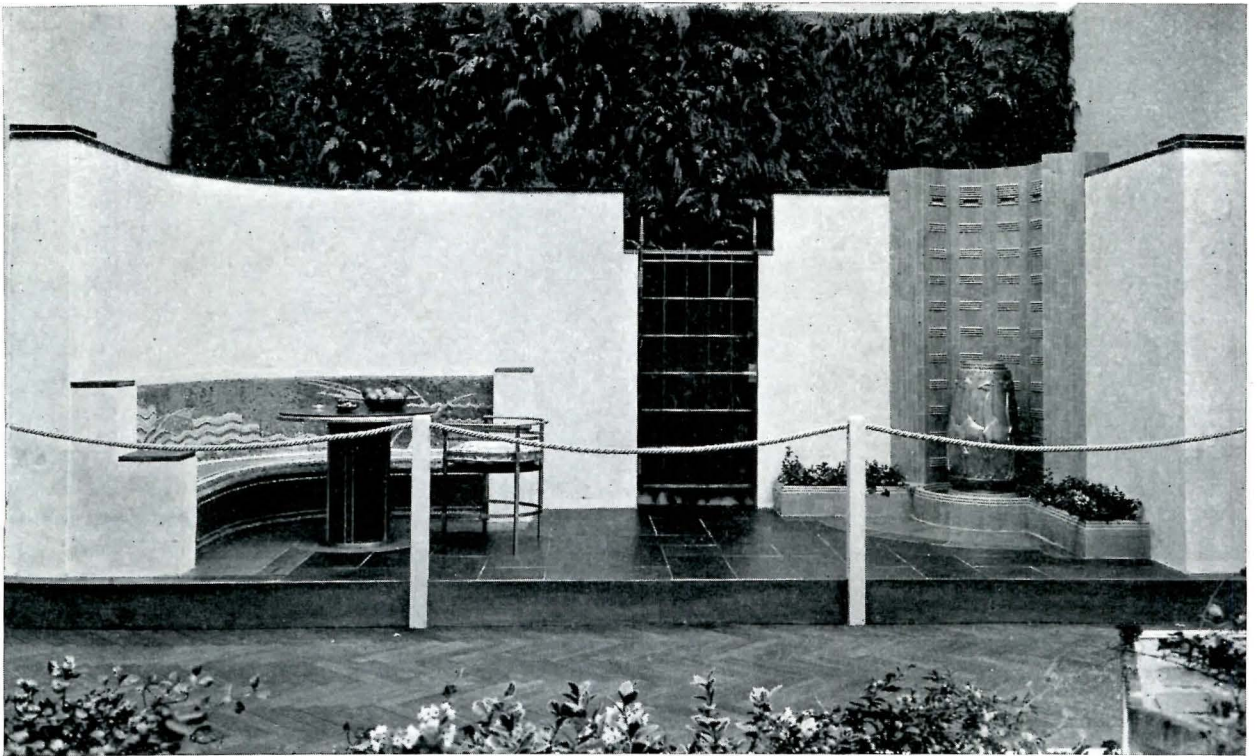
PENCIL POINTS



BUSINESS EXECUTIVE'S OFFICE DESIGNED BY RAYMOND M. HOOD, ARCHITECT
Arthur Crisp Collaborating on Color, Harry V. K. Henderson Collaborating on Design
(See text opposite)



DINING ROOM DESIGNED BY ELIEL SAARINEN, ARCHITECT
 FROM THE EXHIBITION OF CONTEMPORARY AMERICAN ART AT THE METROPOLITAN MUSEUM OF ART IN NEW YORK
(See text on page 202)



BACKYARD GARDEN DESIGNED BY ELY JACQUES KAHN, ARCHITECT
WITH THE COLLABORATION OF AUSTIN PURVES, JR., PAINTER, EDMOND AMATEIS, SCULPTOR

AN EXHIBITION OF CONTEMPORARY AMERICAN ART

Illustrations by Courtesy of Metropolitan Museum of Art

THE EXHIBITION OF AMERICAN CONTEMPORARY ART now at the Metropolitan Museum of Art in New York demonstrates the close cooperation between the designer and the producer, particularly important in this instance because the designer is in each case an expert acting entirely apart from any manufacturing establishment. It emphasizes the importance of the architect as a source of design in many fields other than the design of buildings and interprets the word "architect" as covering the entire conception of the building and its contents. All of the objects in the exhibition are of contemporary American design and manufacture throughout.

The general scheme of the exhibition is one involving a number of group displays, suggesting room interiors but representing actually the elements of rooms. The groups shown range from a backyard garden, shown above, to a business office, reproduced opposite, and from a man's den, page 201, to a nursery.

The committee which cooperated with the Museum in presenting the exhibition is composed of the following:

Raymond M. Hood, architect; Ely Jacques Kahn, architect; Eliel Saarinen, architect; Eugene Schoen, architect; Leon V. Solon, ceramic designer; Ralph T. Walker, architect; Armistead Fitzhugh, landscape architect; John Well-born Root, architect; Joseph Urban, architect and scenic designer.

The exhibition will be on view until March 24th and all who are able to take advantage of seeing the work displayed are earnestly urged to do so. Unfortunately, lack of space prevents us from reproducing all of the exhibits, but we illustrate here a number of photographs which we hope will give our readers a fair idea of the quality of the exhibition. Believing that each artist is

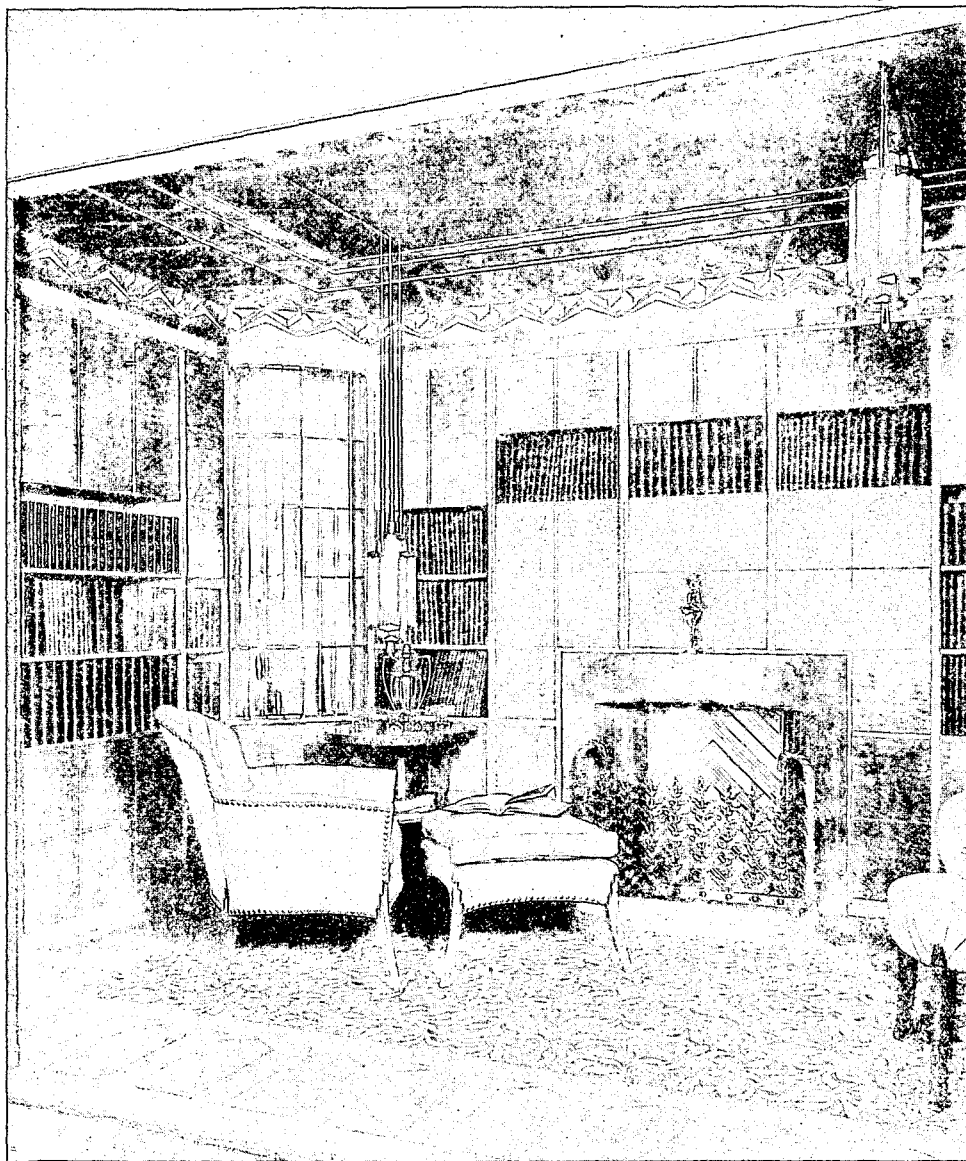
best capable of describing the effect he has wished to achieve we present herewith a brief description of the work by the particular designer.

BUSINESS EXECUTIVE'S OFFICE

(See page 198)

"The task of the contemporary designer is first to search for the practical solution of his problem, and then to avail himself of every material, every invention, every method that will aid him in its development. He does not forget that it is his business to fashion the materials he uses into a beautiful form, but he realizes that only by this road can he hope to find the real beauty which will be the harmonious expression of modern life. Especially must there be acknowledgment of the fact that the machine, as a tool of the designer, has replaced the craftsman in contemporary production, and has, therefore, tremendously influenced modern design.

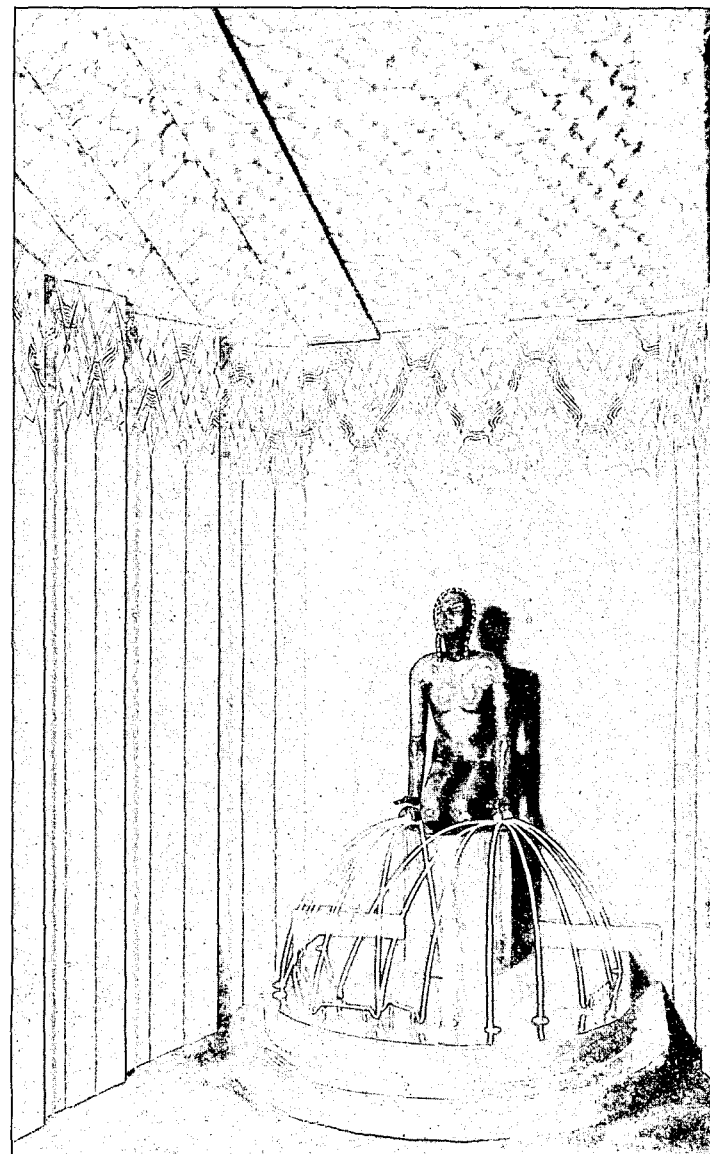
"Perhaps I can best express my conception of the new movement by an illustration. If I were asked if I could build a more beautiful business office than Michelangelo, I should say, 'No, but I can build a better business office.' My office would be better lighted, better heated, have furniture better suited to its needs, and so on, all for the simple reason that I have new materials, new processes, and new inventions at my command, of which Michelangelo did not dream. The office might not be so beautiful, but it would certainly be more convenient, more comfortable, and better suited to its purpose. But it would not be as good, and would undoubtedly be less beautiful than Michelangelo's, were I to limit myself to the materials, the craftsmanship, and the relatively simple contrivances of his period. *(Continued on page 202)*



MAN'S STUDY FOR A COUNTRY HOUSE DESIGNED BY RALPH T. WALKER, ARCHITECT

(See text on page 202)

FROM THE EXHIBITION OF CONTEMPORARY AMERICAN ART AT THE METROPOLITAN MUSEUM OF ART IN NEW YORK

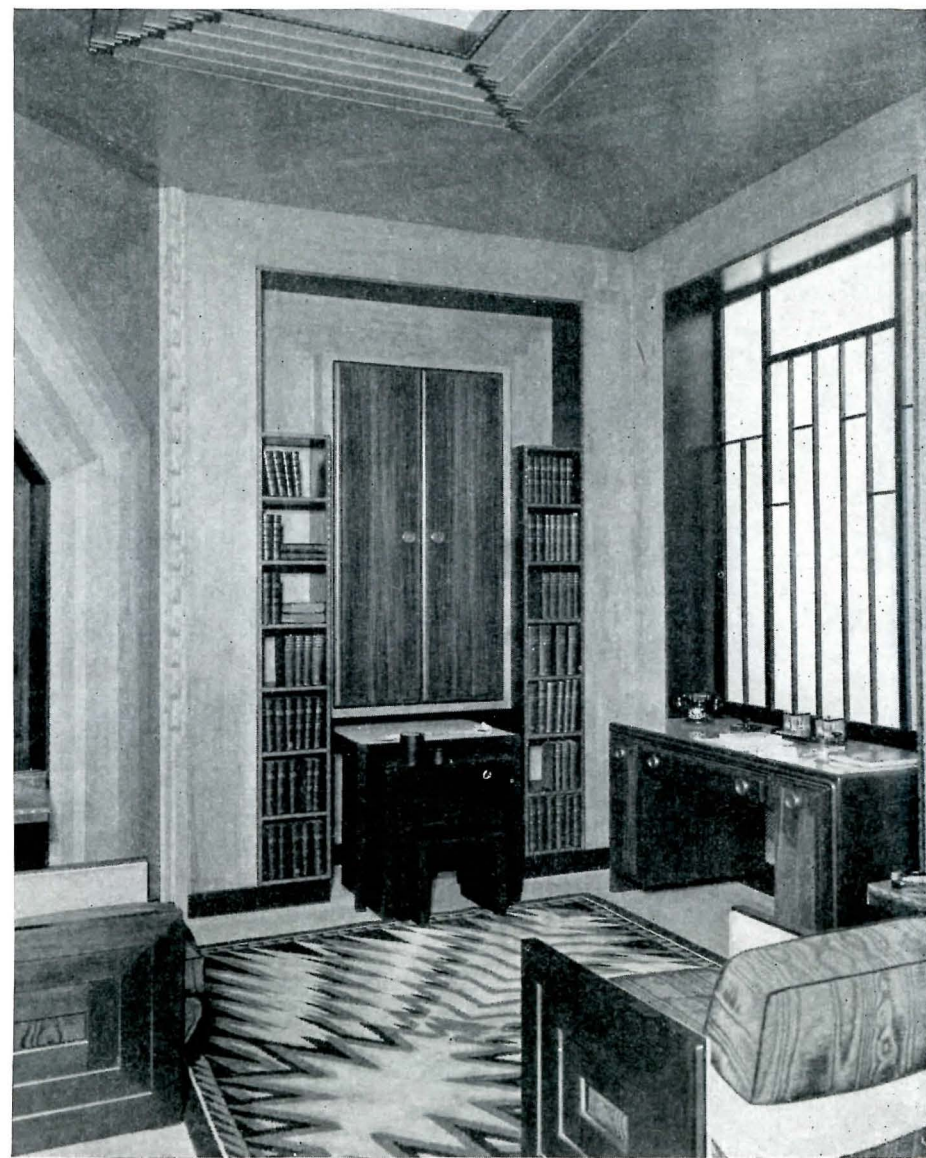


"FOUNTAIN OF LIGHT," DESIGNED BY R. T. WALKER AND EGMONT ARENS

Figure Designed and Executed by Otto and Lora Wester



APARTMENT HOUSE LOGGIA DESIGNED BY RAYMOND M. HOOD, ARCHITECT
H. V. K. Henderson and Arthur Crisp, Collaborators



MAN'S DEN DESIGNED BY JOSEPH URBAN
(See text on page 108, Advertising Section)

FROM THE EXHIBITION OF CONTEMPORARY AMERICAN ART AT THE METROPOLITAN MUSEUM OF ART IN NEW YORK

"This introduction will explain my point of view in the development of the business office and the apartment-house loggia (page 201). The layout and design of the different elements were controlled by present-day requirements. In general, each material has been chosen because of its fitness for the work it is to do, and with regard to economical upkeep and sanitary qualities. Its decorative treatment, then, has been dictated by the capabilities of the machine or process by which it is made.

"The executive sits with his back to the light as people enter. His desk is arranged to receive the proper working light, and at the same time to give him the restful distraction of an outdoor view. Facing him is his secretary's chair, while his visitors may group themselves about the conference table contiguous to his desk at right angles without disturbing his work. The walls and ceilings are covered with fabrikoid, a machine product which far excels in durability, cheapness, quality of surface, sureness of effect, and variety of expression the old methods of plaster and paint and wood paneling. The furniture is made of aluminum, a material as strong, light, and adaptable for the purpose as wood, but one that is not subject to shrinking, swelling, warping, and the necessity of repeated refinishing. The large window, made possible by modern heating, lights the room with a great area of subdued light, rather than by a small area of intense light. The curtain permits a complete regulation of light and air."—*Raymond M. Hood*

DINING ROOM

(See page 198)

"*Modern Features of Art:* What are the distinctively modern features of art? At what do modern artists aim? These questions can be answered best by reference to the past.

"Throughout its whole development art has been an expression of contemporary life and modern points of view. In the beginning it has proceeded carefully, feeling its way with simple forms, then developing diverse and numerous manifestations, but always up to date. The Greeks did not build in the Greek style, as we sometimes say. While the Greeks built their style grew—their modern art. The Gothic style, too, sought its nourishment from the life about it and consequently during its whole development it was always modern, expressing in its form even the slightest gradations of contemporary life and thought. Only in times when the creative power is undeveloped is art not influenced by the life about it, and during these times artists are compelled to avail themselves of ancient forms.

"At the present we live our modern life, and is it not logical that modern art should develop from this life? We have as yet no modern style, only tendencies toward such a style, and we have no indications as to its ultimate development, but we do have the principles of development which have held true in other epochs.

"The only thing we are sure of—a thing we must always keep in mind—is that we should begin with simple forms, looking for truth and logic in regard both to construction and to material. Every style must possess its fundamental idea, its original principle around and within which the style may further develop. This idea, this principle, should be logical, simple, and true, and should be of a constructive, not a decorative, nature. If it is not so, there is no prospect of a consequent development of the style, which will grope and shortly be corrupted. To

begin in a simple way, to aim at truth in our means of expression—this is the most important inheritance we have from the great epochs of creative culture. And is not simplicity itself characteristic of our modern point of view, when scientific methods of expression have superseded the romantic and mysterious?

"The future will show how much creative power our age possesses for the development of its own style. We cannot know that now. But if future generations can say that our age founded its style on true, logical, and organic principles, then our times have been proved strong and creative, and future periods have received a firm foundation on which they can build further and develop."—*Eliel Saarinen*

MAN'S STUDY FOR A COUNTRY HOUSE

(See page 200)

"The problem of a room is stated for each individual who thoughtfully creates one. It changes with the individual's viewpoint, and the only lesson it can point is one of personal experiment. The business of a room is first to inclose and house the body, and then to afford escape for the spirit through the mind.

"It is first of all obvious that were there no utilitarian need there would be no room. In it such machinery factors as economy, efficiency, and selectiveness are those of instruments of use, which are but a small part of the need expressed in the creation of a room; they are wholly physical in their nature and utilitarian in their relationship, and while they condition the life to be lived in the room they do so only as any other instrument or tool has done in the history of man. Our minds comprehend that which our eyes do not clearly see.

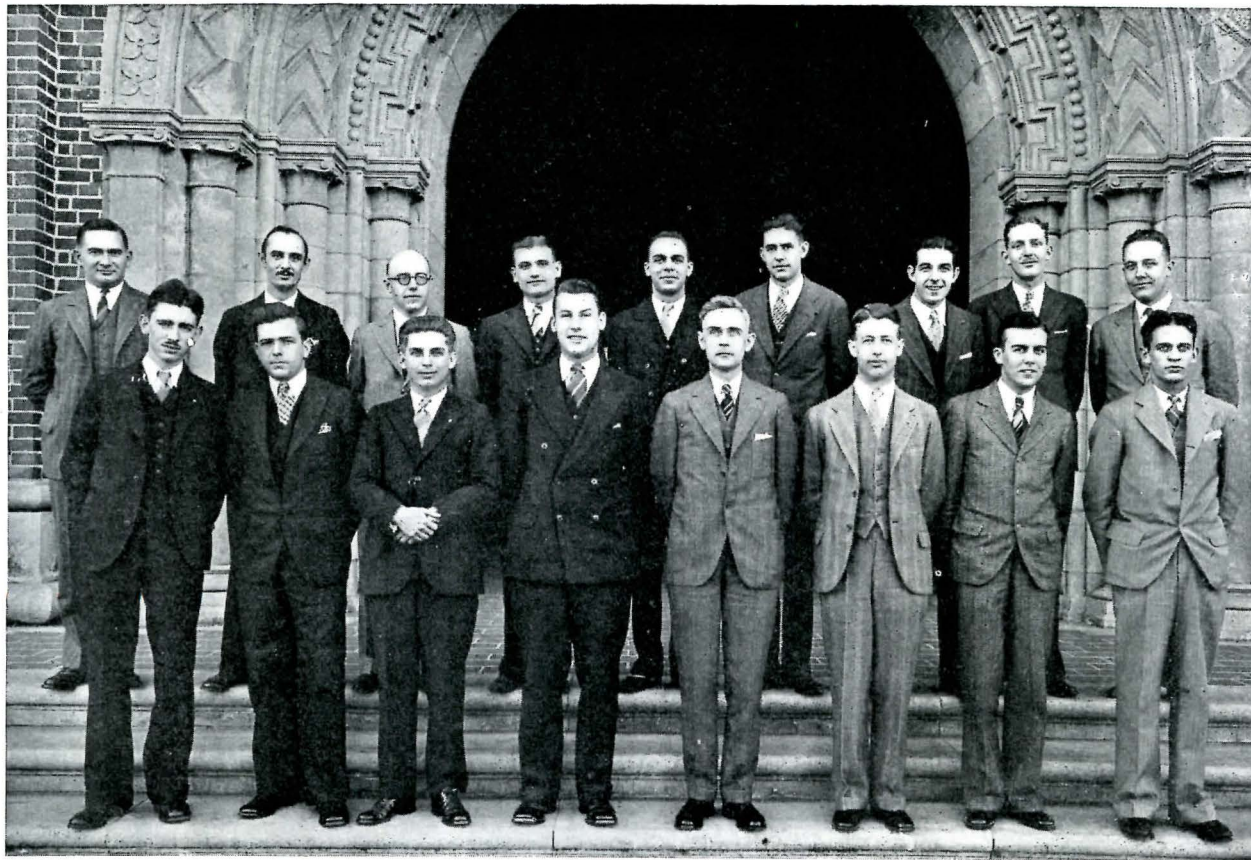
"A room is different from a motor car or an aeroplane in that it is static because of the very inert nature of the materials of which it is built, and is mobile only in the sense of the time necessary for its appreciation. The room, therefore, must not express finality in any sense, but a movement of thought in time—a breaking down of the immediate and the opening up of a mental horizon of widening viewpoints. It should be lacking in sharp contrasts, in primary forms and colors, which are wanting in sophistication and which breed momentary appreciation only. In its space elements should be so designed as to engender time elements, through which appreciation can be led from one thought to another, forming a stimulus toward, and an opportunity for, fresh viewpoints, and so encouraging a more continuous period of appreciation."—*Ralph T. Walker*

APARTMENT HOUSE LOGGIA

(See page 201)

"The adaptability of materials to the open air was a controlling factor in the design of the open-air loggia, which I have imagined as opening off the salon high up in a large city apartment house. The fireplace, about which the furniture is grouped, is an element even more sociable outdoors than indoors, and is practical if properly arranged. The cast concrete on the walls is more solid than marble, and has a wider range of possible effects. One of the modern, non-corrosive metals, chromium, has been used for the ceiling and overmantel. The furniture is of aluminum, and is covered with fabrikoid on account of its waterproof qualities."—*Raymond M. Hood*

(Continued on page 108, Advertising Section)



SOME OF THE DELEGATES TO THE CONVENTION OF ALPHA RHO CHI ARCHITECTURAL FRATERNITY

FRONT ROW: H. P. Fowley, Michigan; Carl Votaw, Oklahoma A. & M.; R. W. Ware, Michigan; C. W. Denney, Convention President, U. S. C.; D. P. Ely, Grand Council; V. L. Annis, Grand Council; B. L. Pickens, Illinois; L. L. Scribner, Virginia. REAR ROW: R. F. Boxmeyer, Minnesota; C. A. Millhouse, Texas; A. D. Baker, U. S. C.; L. A. Melkus, Minnesota; W. R. King, Ohio; L. W. Olmstead, Kansas State; H. L. James, U. S. C.; T. H. Shive, Convention Secretary, U. S. C.; G. R. Postle, Illinois.

ALPHA RHO CHI CONVENTION

THE FOURTEENTH ANNUAL CONVENTION of the Alpha Rho Chi, National Social Architectural Fraternity, was held recently at the University of Southern California, in Los Angeles. This was an event of no small importance to the Fraternity since it was the first of its conventions to be held on the Pacific Coast. The accompanying photograph shows the delegates present at the business sessions.

LOS ANGELES ARCHITECTURAL CLUB

THE LOS ANGELES ARCHITECTURAL CLUB held its January meeting at the Artland Club on the 15th. Sixty-six members and their guests attended the dinner.

Election of officers comprised the chief business of the meeting. A motion was made by the nominating committee that a straight ballot be cast to re-elect old officers. The important work undertaken by the Club should not be interrupted by the introduction of new officers, it was decided. The officers now are: George P. Hales, *President*; John R. Jarvis, *Vice-President*; Kemper Nomland, *Treasurer*; C. Kenneth Hazen, *Sec'y*. The directors remain the same as last year: H. Roy Kelley, Julian Garnsey, and Harold O. Sexsmith.

An interesting program followed, in the presentation of two motion-picture films. The first, shown through the courtesy of the Reading Iron Co., was a picture titled *The Painted Molecule*. The second, presented by Associated

General Contractors, was a remarkable depiction of the St. Francis Dam Catastrophe.

SECOND VAGABOND TOUR

THE VAGABOND TOUR FOR ARCHITECTS will sail July third for sixty-five days in Europe. This economical trip was so successful last summer that it is being repeated.

The party will be met at Southampton by a private *char à banc* and start on a motor journey through Rural England. The route continues from Winchester and Salisbury to Wells, Gloucester, the Cotswolds, Stratford, Oxford and London. A week in London followed by a stop at Canterbury, then across the Channel.

After doing Paris thoroughly another motor tour makes a circle of France starting in the Chateaux, swinging North into Normandy then East and South into fine old Burgundy. By train we cross Switzerland via Lake Geneva and direct our steps to the shrines of Italian Art, Milan, Venice, Florence, Rome and Siena. Then Northwest to the Riviera and back to France for a Motor Drive around Arles and Nîmes in Provence. Sailing from Cherbourg the party lands in New York September third.

The accommodations, as before, will be comfortable but modest. Donald B. Kirby again leads the tour and information can be had from him at 180 Fifth Ave., New York, or from the sponsors, the Bureau of University Travel, Newton, Mass.

HERE AND THERE AND THIS AND THAT

CONDUCTED BY RWR

This department conducts four competitions each month. A prize of \$10.00 is awarded in each class as follows: Class 1, sketches or drawings in any medium; Class 2, poetry; Class 3, cartoons; Class 4, miscellaneous items not coming under the above headings. Everyone is eligible to enter material in any of these four divisions. Competitions close the fifteenth of each month so that contributions for a forthcoming issue must be received by the fifteenth of the month preceding the publication date in order to be eligible for that month's competition. Material received after the closing date is entered in the following month's competition.

THE PRIZES IN THE February competitions have been awarded as follows:

Class I—Gordon E. Mayer of San Diego, California
 Class II—B. E. Laidlaw of New York.
 Class III—L. H. Friedheim of New York
 Class IV—Charles F. Smith of Beloit, Kansas

Don't forget the competition for "A BACHELOR'S RETREAT." A complete program was published on page 132 of the February issue of PENCIL POINTS. The competition closes March 15th at 5 P. M. when all drawings must be delivered to our New York office. Three prizes are to be awarded and they are well worth working for.

THE AMERICAN HOME

OR THE LOS ANGELES REALTOR'S PARADISE

By Max R. Horwitz of Los Angeles

Colonial doors are oh! so cute,
 Mansard roofs are fine,
 English chimneys keep the soot
 From Spanish walls divine.

Italian grilles and Frenchy frills
 Give the home some "class."
 Latin tiles and Norman sills
 Please all who look and pass.

Swinging casements, a lowly cave,
 Wooden lintels, a chimney pot
 How they train one to deceive—
 These fake antiques and bally rot.

L'Envoi—or something or other.

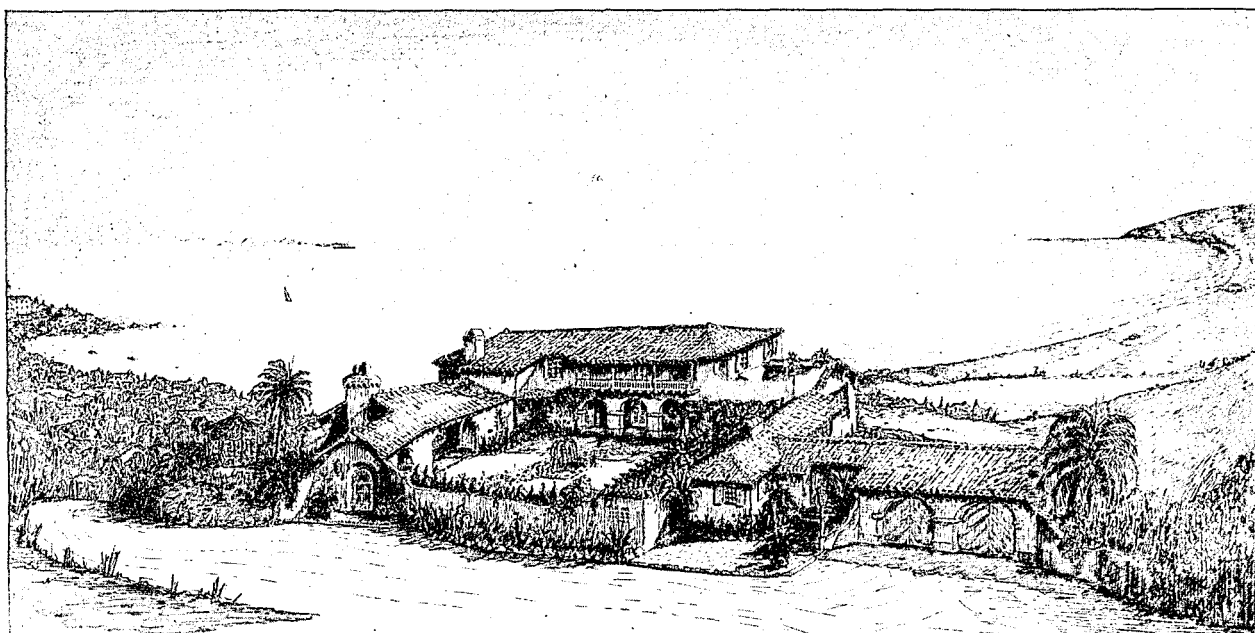
A little bit of old Madrid,
 A dash of Devonshire,
 Just a pinch of gay Paree,
 A sniff of staid old Rome—
 All combine—in any old clime—
 To make the American Home.

NEW WINE

By B. E. Laidlaw

(PRIZE—Class Two—February Competition)

I sent some verse to PENCIL POINTS a little time ago,
 And wondered if they liked the stuff, how soon they'd let
 me know;
 That I should do so strange a thing, may seem to you quite
 funny—
 Laugh not! I busted into print, but not into the money.
 Now this success so lately mine paints bright a future rosy,
 I'll give up drafting as my job and browse in fields of
 posey;
 With beauty leading onward I will think when all is sunny,
 At least I will bust into print, if not into the money.



PEN AND INK RENDERING WITH DILUTED INK WASH BY GORDON E. MAYER, ARCHITECT, SAN DIEGO, CALIFORNIA

House for J. Lewis Morse at La Jolla, California

(PRIZE—Class One—February Competition)

If I abhor all mundane things and live but for my art,
There may some satisfaction be in concrete things apart
From Architecture and the grind for stupid milk and
honey,
At least I may bust into print, the devil take the money.

THE ORIGIN OF AN "X"

OR
WHY BEAU-X-ARTS?

A playlet in no acts

By Gabriel Nathan of Richmond Hill, N. Y.

SCENE: Exhibition Room, Beaux-Arts Institute of Design.

TIME: Judgment Night.

CHARACTERS: Two Judges. Both Hard of Hearing.

(The judges are standing in front of a drawing, in discussion of its merits. They speak in loud tones in order that they may hear each other, both afflicted by deafness.)

First Judge: M-m-m—not so bad.

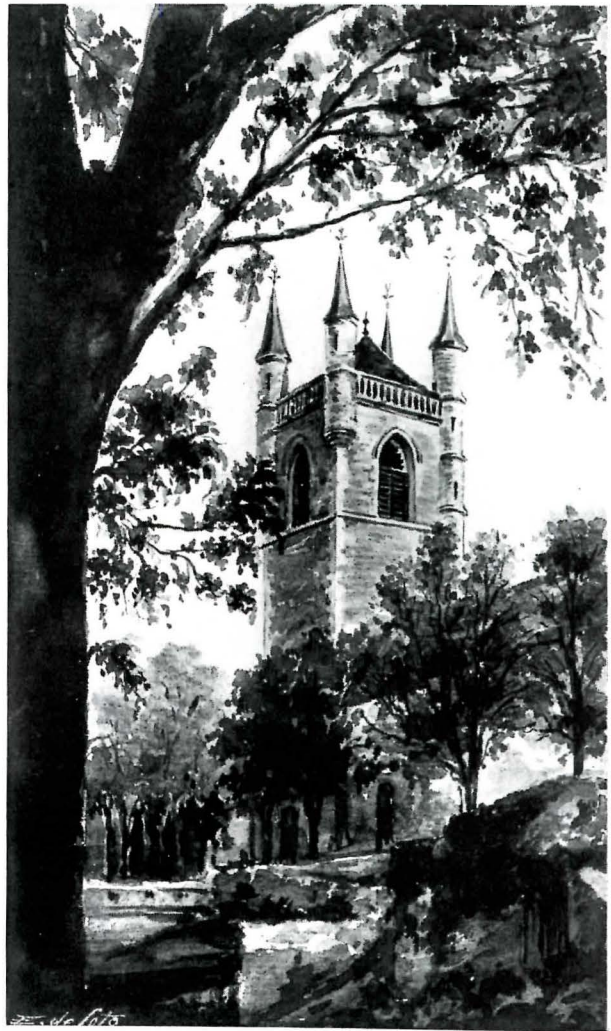
Second Judge: Eh? (cups hand to ear)

1st J.: Rather fair. But I wonder who did his rendering.

2nd J.: Yes, I guess so. Look at the esquisse.



"HAS IT OCCURRED TO YOU?"—DRAWN BY
E. W. LAGERSHAUSEN OF WILMETTE, ILLINOIS



WATER COLOR BY E. DE SOTO OF HAVANA
Church of St. Martin, Verrey, Switzerland

1st J.: What say?

2nd J.: The tones are rather dark.

1st J.: I don't see any park.

2nd J.: I can't hear you.

1st J.: You don't think so?

2nd J.: Well, anyway, the rendering isn't bad.

1st J.: Got a match? (puts cigar into mouth)

2nd J.: Eh? (hand to ear)

1st J.: I want a light.

2nd J.: It isn't. His sky is rather dark.

1st J.: Where do you see a park? I want to light this cigar.

2nd J.: What's that?

1st J.: I want a match. (very loud into the other's ear)

2nd J.: Oh! (searches pocket and gives match to 1st judge)

1st J.: Thanks. (puffing on cigar)

2nd J.: Eh? (hand to ear)

1st J.: I said thank you.

2nd J.: Oh, don't mention it.

1st J.: What did you say?

2nd J.: Don't mention it. (very loud into the other's ear)

1st J.: What's that? Don't mention it? (affixes the well (un)known X)

"X"eunt.



CARTOON BY L. H. FRIEDHEIM FOR THE ANNUAL REUNION OF SCHWARTZ & GROSS (NEW YORK) ALUMNI ASSOCIATION
(PRIZE—Class Three—February Competition)

AND YET ANOTHER COMPETITION

Submitted by Charles F. Smith, of Beloit, Kansas

(PRIZE—Class Four—February Competition)

MR. SMITH sent in the two clippings, reproduced herewith, from *The Beloit (Kansas) Daily Call*, and a note of explanation:

"It looks as though the famous PENCIL POINTS Competitions are being outclassed. Note that Architects are barred from competition. On second thought, however, the results (if any) may not be so disastrous to the profession as might be imagined, especially if the project is carried through to completion and the house built according to the plans submitted.

"Personally, I intend to follow the developments of the contest with great interest in the hope of getting some new ideas on how to approach that wily individual, laughingly referred to as the perspective client."

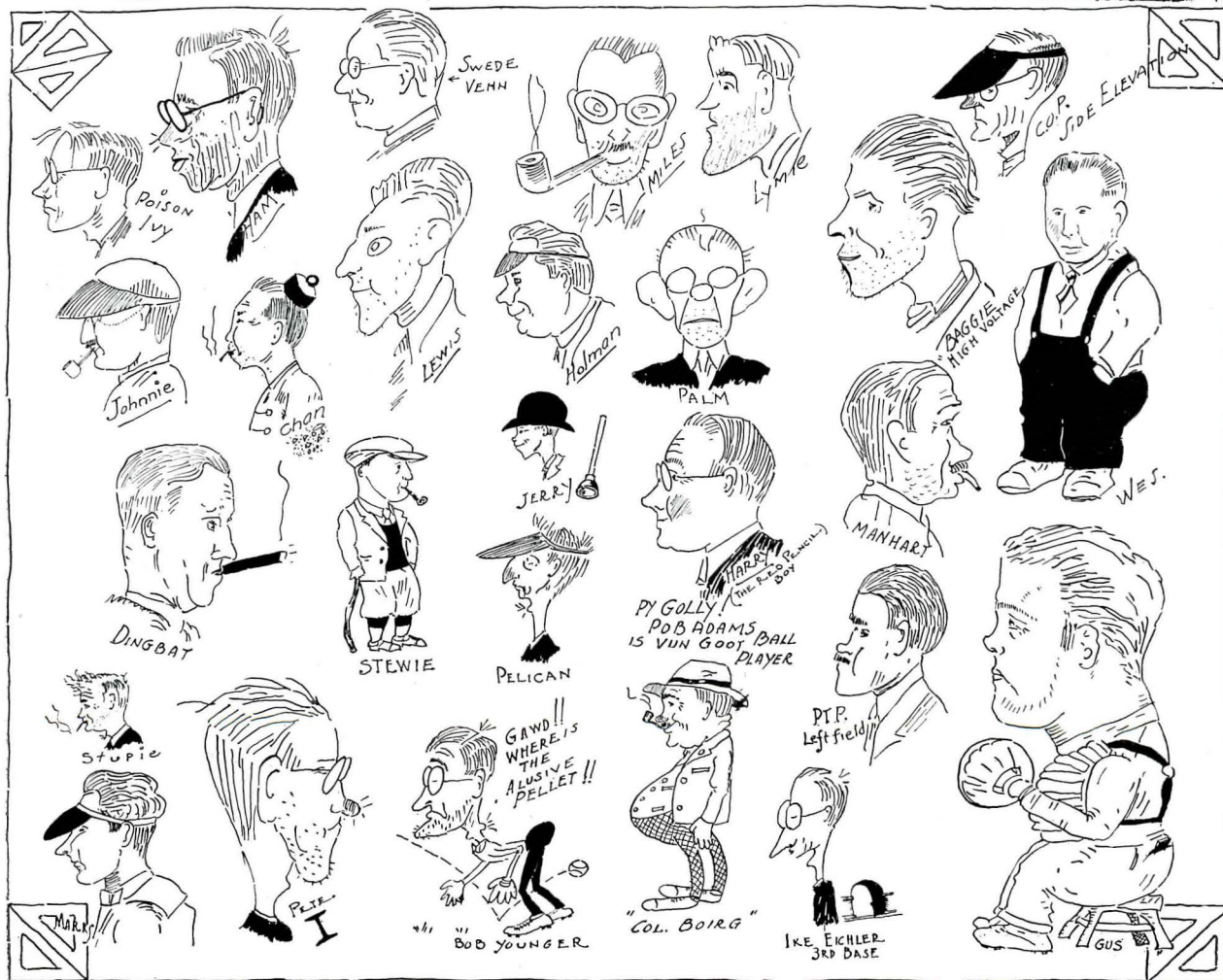
WANTED

WANTED—Original design of floor plan and ideas for modern cottage, 5 rooms and bath; prize of \$10 for plan which I accept and use, \$5 second prize. Professional contractors and architects barred from competition. Contest closes Feb. 16. Submit all plans to C. W. Tweed. 6t-91

We have written to Mr. Smith asking him to cooperate with us in an endeavor to secure publication rights on the winning drawings for this modern cottage, and we earnestly hope for the privilege of presenting the prize design to our readers next month!

Contest For House Plans

Reference to the classified advertising column of *The Call* tonight will pay persons who have a gift for planning houses. C. W. Tweed, who will build this spring on a fifty foot lot on West Man street, desires an original floor plan, and is offering \$10 for the one which he accepts and uses. In addition he will give a second prize of \$5. The contest will close February 16. He contemplates erection of a modern cottage of five rooms and bath, to be sold or rented after it is completed. He hopes to have many conveniences included in the plans that will be offered, and by that means to build a dwelling that will be notable for its beauty and practical features. The contest is on now, and plans may be submitted to Mr. Tweed just as soon as they are prepared, until the 16th of February. He hopes to start construction as soon as the weather is favorable.



SOME OF THE MEMBERS OF THE DIVISION OF ARCHITECTURE, STATE OF CALIFORNIA—CARTOON MADE BY

AL STRUBINGER UPON THE OCCASION OF THE ANNUAL BASEBALL CLASSIC BETWEEN THE MARRIED MEN VS. THE SINGLE MEN

DOUBLE HUNG WINDOWS

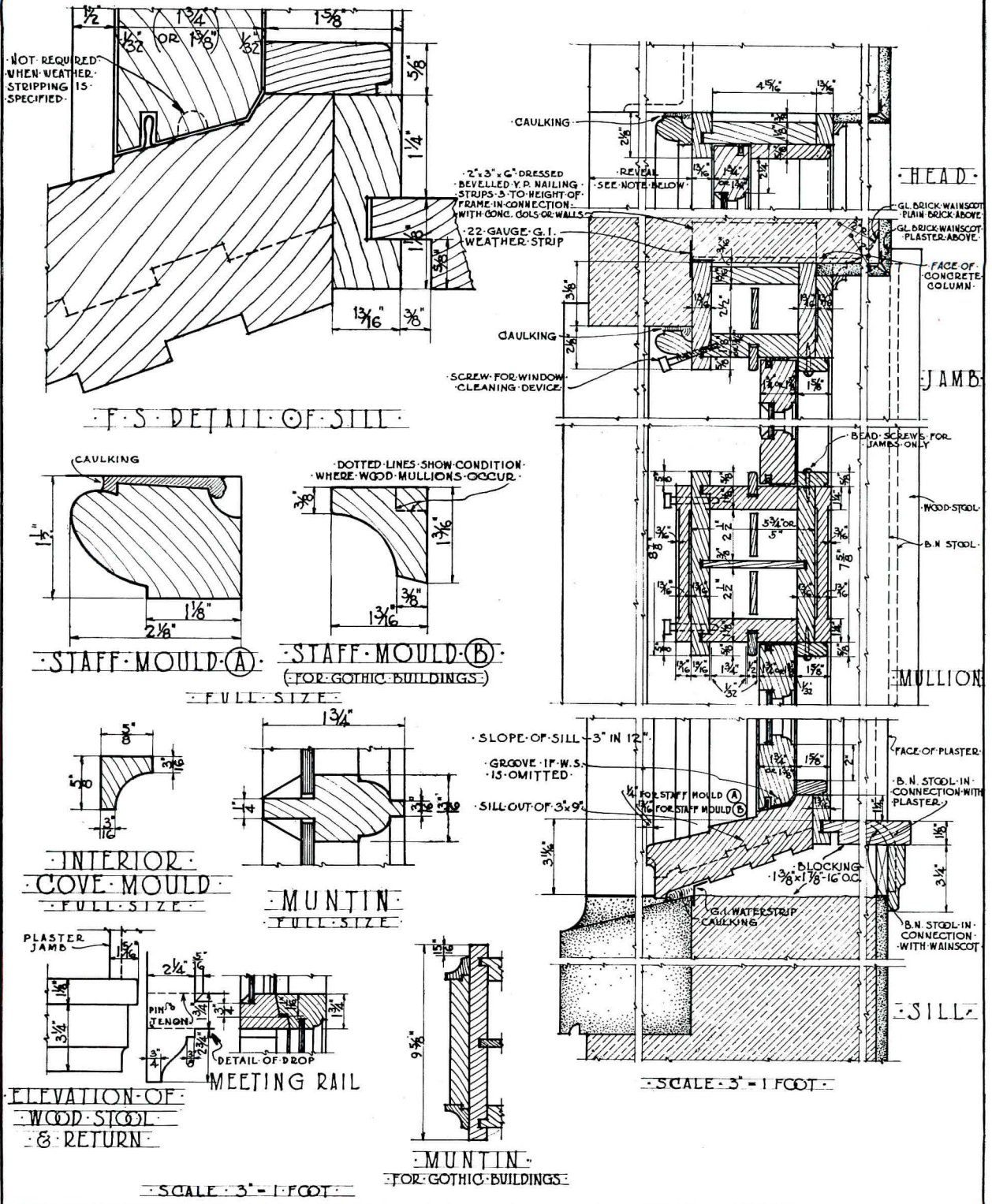


PLATE ISSUED BY PHILADELPHIA BUILDING CONGRESS IN CONNECTION WITH A DOCUMENT FOR ARCHITECTURAL WOODWORK

(See text opposite)



THE SPECIFICATION DESK

A Department for the Specification Writer

PHILADELPHIA BUILDING CONGRESS ISSUES STANDARD DOCUMENTS

UPON THE RECOMMENDATION of the Philadelphia Chapter of the American Institute of Architects, and other co-operating bodies affiliated with the Philadelphia Building Congress, group conferences have been organized in different branches of the local construction industry to consider clarifying or unifying various subjects in connection with designing, specifying, estimating and contracting in each of such divisions of building construction.

In recognition of the fact that these and other subjects of mutual interest frankly discussed and definitely acted upon by leaders in each branch of the industry will result in improved relations and be helpful to all concerned with architecture and building, the Philadelphia Building Congress, concurring in the foregoing recommendation, decided as its first study to bring about unification of the best local practices with respect to Millwork and Finish Lumber, and, conferring with the Sash and Door Manufacturers Association of Philadelphia and Vicinity, received its expression of cordial participation and support.

As a result of this concurrence in principle, the Congress sought and secured the further cooperation of organizations and individuals, who, during the past two years, have given of their time and knowledge in developing the recommendations which are herewith presented on behalf of all interests.

It is the belief of all concerned in the issuance of this document (Document No. 1, Architectural Woodwork), which they unanimously endorse, that through practically uniform adoption—by architects, engineers and other specifiers, and by millmen, lumbermen, builders and others locally—of the recommendations which follow, there will accrue, as a result of the economic simplification and better mutual understanding, substantial benefits and satisfaction to all, including property owners and occupants of buildings in Philadelphia and its environs.

Individuals representing the following organizations composed the members of the conference: the Philadelphia Chapter, American Institute of Architects; the Sash and Door Manufacturers Association of Philadelphia and Vicinity; the Philadelphia Builders Exchange and Employers Association; the Philadelphia Chapter, Associated Pennsylvania Constructors; the Retail Lumbermen's Association of Philadelphia; the Master House Painters and Decorators Association; and the Philadelphia Building Congress.

The report of this building industry group conference constitutes a digest of the agreements arrived at regarding the varied recommendations and suggestions which have been discussed at the many meetings of the Conference and its sub-committees during the past two years, and which have resulted also from correspondence and consultation with experienced architects, engineers, craftsmen and other authorities. While the work embraced the gathering of informative data valuable alike to the architect, draftsman, specifier, builder, and millman, it revealed consider-

able difference of opinion and indicated, as work progressed, the need for such agreement on general principles in order to relieve the confusion, misinterpretation and irregularity which was found to exist. It also developed the fact that while the conference was called primarily to discuss Millwork, the subjects of lumber and the uses of wood, as well as priming and painting, were so closely allied with good architectural woodwork that the recommendations of the lumber industry and the painting industry were sought and are referred to herein but will each, it is expected, be more fully covered in later documents. The first document covering the completed millwork report of the first of the Philadelphia Building Congress' Industry Group Conference is now ready for distribution and may be had upon application to the Philadelphia Building Congress, 112 South 16th Street, Philadelphia, Penna. The plate shown opposite is being distributed as a part of this document on architectural woodwork.

In supporting these industry group conferences the Philadelphia Building Congress is going a long way toward establishing a standard of local practice and it is to be hoped that other sections of the country will follow their good example.

PAINT PRACTICE, NOT WOOD, BLAMED FOR PAINT FAILURES

EDITOR'S NOTE:—*The following statement has recently been issued by the Forest Products Laboratory of the Forest Service, United States Department of Agriculture. In reply to this the Paint Engineers, Inc., have sent us an article by G. A. Beem, President, which is printed following the official statement.*

"UNMISTAKABLE differences in the painting characteristics of wood indicate a need for improvements in painting practice rather than an inherent lack of 'paintability' of certain woods.

"There is good reason, laboratory authorities claim, for believing that paint does not really adhere to wood, at least after the paint has dried out thoroughly, but that it hangs on chiefly by gaining mechanical grips in minute openings in the surface of the wood. Where there are plenty of openings the paint hangs on, but where the openings are too few, or too small, as in very dense wood, the paint does not hang on so well.

"To understand how the grain of wood may affect paint retention, it is only necessary to observe paint failure on woods having wide annual growth rings and in which there is a sharp contrast between springwood and summerwood. In such woods the summerwood is much denser than the springwood. Paint scales off the bands of summerwood more quickly than it does off the bands of springwood.

"The real problem involved in studies of the painting of different woods, then, is to find some way of making paint adhere better to wood. If this could be accomplished it is likely that the durability of paint on all woods would be improved and that the differences in their painting characteristics would largely disappear."

And Mr. Beem's article:

PAINT PRACTICE, NOT WOOD, BLAMED FOR PAINT FAILURES

By G. A. Beem, President, Paint Engineers, Inc.

There is no question but that there are different characteristics in wood; while each and every wood grown has a similarity but of different character. The extreme variance comes between springwood and summerwood. There is a distinct variance in the grain and saps of each and every wood grown. Some saps being of a resinous nature that will come to the surface when exposed to direct heat; others contain saps that are destructive to paints in many ways; those containing the resinous saps give the most trouble.

Any wood improperly painted will give trouble, therefore much time and thought must be given to the character of the wood to be painted in order to meet conditions successfully. Our opinion justifies us in saying that the paint is affected more by sap and resinous conditions than by the grain, be it springwood or summerwood. As an illustration, take the same paint that is applied to wood and has proven unsatisfactory, and apply same on a steel or copper panel and it will last indefinitely. This disposes of the theory that paint does not adhere to the surface.

Paint that is used on wood should not be too long in oil or non-volatiles. It must have deep penetrating power and be an exact mixture that will give deep penetration, will firmly adhere and be designed to handle the sappy conditions that nature has provided in the wood. No matter how dry the wood may be (even kiln dried) when the trim is set in a new building, it immediately is required to meet a different condition. The condensation alone will start the sap conditions working and the usual disastrous results will follow.

Any white too long in oil will turn to yellow or in some cases will turn to a yellowish brown. This is mostly caused by paint not coming in direct contact with daylight. To those of the Old School, they will well remember the time when the bulk of the oil was washed out of the lead with turpentine before using as an undercoater for white enamel. Lead is usually ground in 6% oil and if 3% of the oil was washed out of the lead before it was used it means that there was but 3% non-volatile oil to hold the pigment to the wood. Therefore, it is really unfair to expect the lead to do the impossible without the proper amount of non-volatiles to make it properly adhere.

Great trouble is brought about by applying the coats too close together in this day and age, and in many cases one coat is applied daily, which is absolutely unsafe. The longer the time between coats the more satisfactory will be the job.

There was a time when the exterior of practically each home was primed with yellow ochre ground in linseed oil. This pigment was mixed with oil and applied directly to the surface. The result was that the ochre became fuzzy and in most cases no matter how good the paint it would peel. The modern primer of today is pure carbon of lead reduced with two parts of linseed oil and one part of turpentine, which allows deep penetration and gives very satisfactory results. Where priming is done on exterior woodwork with paint of a fatty nature, trouble is sure to arise, but regardless of the precautions you may take, the constant heat and cold that comes in contact with the siding, contraction and expansion along with condensation makes exterior woodwork a problem that is hard to handle. In every case interior woodwork of yellow pine is hard to handle as it is full of resinous pitch.

We have spent many years' time on actual experiments with various woods in view of creating a paint that will adhere to any wood surface, that will not crack or peel, and handle sappy conditions, gives a foundation to build on that is safe and reliable. We have devised an undercoater for interior woodwork that is meeting with the desired results.

Any further information desired on this subject can be obtained by inquiring through PENCIL POINTS.

SAVING THE ARCHITECT'S AND MATERIAL MAN'S TIME

By F. S. Laurence, Executive Secretary,
The Producers' Council, Inc.

EDITOR'S NOTE:—This communication from Mr. Laurence presents a matter which is already recognized as a problem in all large architectural offices and in many of moderate size. It is also true that the representatives of firms offering materials for the consideration of architects are vitally concerned with this question. Comments from architects and others who interview material men are invited and will be considered for publication in later issues of PENCIL POINTS.

QUITE RECENTLY there came to the writer's desk a thoughtful article appearing in the February issue of PENCIL POINTS. The writer of that article started something which is a large subject, much larger than the one fundamental question dealt with therein—the effectiveness of the salesman's personal approach and subsequent continuing policy in maintaining agreeable relationship with the architect.

There is need of a system, flexible as it may have to be, under which lost motion may be avoided, even where the salesman is all that he ought to be in his appreciation of the architect's personality, needs, and methods of necessary procedure in specifying materials.

No salesman, however well equipped in these particulars, can know the status of any particular piece of work on which the architect is engaged or may have in prospect, unless informed by some other means than the usual construction reports, which are generally relied upon for determining the advisability of seeking an interview.

Why should not architects' offices adopt the simple expedient, for one thing, of placing a bulletin board in an outer office, upon which could be listed the projects upon which the office is engaged, their status of development and the names of the persons in charge of the various jobs or delegated to receive material men's calls in relation thereto? While there may be reasons why an architect might hesitate to post information about any prospective work there are many instances where this would present no embarrassment either to the architect's or the client's interests. Certainly this would appear to be the case with all work which had reached the stage of an award of the general contract or other contracts which assure the actual carrying out of the work.

A slate blackboard with columns ruled for brief statement in chalk, after the manner of the train arrival bulletin boards in railway terminals, would seem perfectly feasible and likely to dispose of much lost motion. The salesman on entering, could see at once whether he was "on time," too early, or too late, from the notation of status given in the appropriate general column, and so avoid useless requests for an interview when untimely, or ask directly for the right person if his visit did appear to be timely. The supreme being who is usually envisioned

(Continued on page 104, Advertising Section)



SERVICE DEPARTMENTS

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 under this heading free of charge.

QUERIES AND ANSWERS. In this department we shall undertake to answer to the best of our ability all questions from our subscribers concerning the problems of the drafting room, broadly considered. Questions of design, construction, or anything else which may arise in the daily work of an architect or a draftsman, are solicited. Where such questions are of broad interest, the answers will be published in the paper. Others will be answered promptly by letter.

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. Such notices will also be posted on the job bulletin board at our main office, which is accessible to all. Owing to the very large number of advertisements submitted for publication under this heading we are asking those desiring to use this service to make their advertisements as short as possible, *in no case to exceed forty words.*

Notices submitted for publication in these Service Departments must reach us before the fifteenth of each month if they are to be inserted in the next issue. Address all communications to 419 Fourth Avenue, New York, N. Y.

THE MART

George Burnap, Landscape Architect, 1741 Rhode Island Ave., Washington, D. C., has carved oak grotesques for sale, grotesques from storied façades of old French houses, suitable for fireplace, beamed ceiling or half timber construction. Photographs on request.

R. G. Kirby, Box 228, Pittsburgh, Pa., would like to secure a copy of *PENCIL POINTS* for August, 1928 at a reasonable price.

John G. Hironimus, 247 Park Avenue, New York, has for sale at 40c. each the following back numbers of *PENCIL POINTS*: June, July, August, September, November and December, 1920; January, February, March, June, July, August and October, 1921; May, June, July, 1922; January, March (2 copies), April (2), May, June (2), July, September, November and December, 1923; January, 1924.

George Ross, 933-21st Street, Union City, N. J., has for sale: *Architectural Composition*, \$5.00, by Curtis; *Elements of Form and Design in Classic Architecture*, \$2.50, by Jacobs; *The Small House Primer*, \$1.50, by Bonta; *The Spanish House for America*, \$2.75, by Newcomb; 5 Volumes *Architectural Carpentry and Building*, \$15.00, by American Technical Society; 1 Portfolio 58 plates of the orders \$2.50, by American Technical Society; also Lefax Data Sheets on architectural and allied subjects.

C. Molinelli, Martinsville, Indiana, has for sale the following copies of *The White Pine Series of Architectural Monographs*: Volume I, Nos. 1, 2, 3; Volume II, Nos. 4, 5, 6; Volume III, Nos. 2, 3, 4, 5, 6; Volume IV, Nos. 1, 2, 3, 4, 5, 6; Volume V, Nos. 1, 2, 3, 4, 5; Volume VI, Nos. 1, 2, 3, 4, 5, 6; Volume VII, Nos. 1, 2, 3, 4, 5, 6; Volume VIII, Nos. 1, 2, 3, 4, 5, 6; Volume IX, Nos. 1, 2, 3, 5, 6; Volume X, Nos. 1, 2, 3, 4, 5, 6; Volume XI, No. 1. All may be had for \$12.00.

J. F. DeYoung, 400 Professional Building, Huntington, W. Va., has for sale the following copies of *PENCIL POINTS* at 35c. each: February, March, July, December, 1921; January, February, March, April, May, June, July, August and September, 1922.

Harrison E. Byan, 402 Hildreth Building, Lowell, Mass., has for sale the following copies of *The White Pine Series of Architectural Monographs*: Volume I, Nos. 1, 2, 3; Volume II, Nos. 1, 2, 3, 4, 5, 6; Volume III, Nos. 1, 2, 3, 4, 5, 6; Volume IV, Nos. 1, 2, 3, 4, 5, 6; Volume V, Nos. 1, 2, 3, 4, 5; Volume VI, Nos. 1, 2, 3, 4, 5, 6; Volume VII, Nos. 1 and 2. Thirty-four issues in all.

Wolfe Markam, Everson Building, 116 South Salina Street, Syracuse, N. Y., has the following parts of *The White Pine Series of Architectural Monographs* for sale: Volume II, No. 4; Volume V, Nos. 3, 4 and 5; Volume VI, Nos. 1, 2, 3, 4, 5, 6; Volume VII, Nos. 1, 2, 4, 6; Volume VIII, Nos. 1, 2, 3, 5, 6; Volume IX, Nos. 1, 2, 3 and 4.

Little-Tree Farms, c/o H. E. Vincent, Framingham Centre, Mass., would like to secure a used Blue-printing Frame to take 3' by 4' plans.

C. L. Cannon, Chief, Acquisition Division, N. Y. Public Library, 476 Fifth Avenue, New York, would like to secure a copy of the December, 1928 issue of *PENCIL POINTS*.

Ira H. Springer, 414 16th Avenue, San Francisco, California, will pay 50c. each for the following copies of *PENCIL POINTS* in good condition: July, September, October, December, 1920; July, November, 1922; March, 1926.

J. N. Ferber, 1317 Russell Blvd., St. Louis, Missouri, has for sale the following copies of *PENCIL POINTS*, 36 issues: the years of 1925-1926-1927 complete at a reasonable charge.

Fred J. Woodward, 728 Seventeenth Street, N. W., Washington, D. C., has for sale a complete volume of *PENCIL POINTS* for 1923 at 30c. a copy, and the following of *The White Pine Series of Architectural Monographs* at 20c. per copy: Volume II, No. 4; Volume III, No. 4; Volume IV, No. 4; Volume V, No. 4; Volume V, No. 1, (2); Volume VI, No. 2; Volume VII, Nos. 1, 2, 4, 6; Volume VIII, Nos. 2, 3, 4; Volume IX, Nos. 4, 6; Volume X, Nos. 3, 5, 6; Volume XI, No. 1.

PERSONALS

FRED SHAWN, architectural student, 41 Lombardy Place, Newark, N. J., would like to receive manufacturers' samples and catalogues.

L. H. W. MEYER, ARCHITECT, opening an office at 3701 Winchell Road, Shaker Heights, Ohio, is starting an A.I.A. file and would like to receive manufacturers' samples and catalogues.

J. R. ARENA, architectural student, 2940 Greer Street, St. Louis, Missouri, would like to receive manufacturers' samples and catalogues.

PAUL A. METZGER, 2004 Holly Street, Harrisburg, Pa., would like to receive manufacturers' samples and catalogues for his A.I.A. file.

W. DAVIS ROBINSON, ARCHITECT, Box 398, Wellington, Texas, would like to receive literature on Hospital Equipment.

ROBERT T. MAIORANY, architectural student, 1841 Tomlinson Avenue, Bronx, N. Y., would like to receive manufacturers' samples and catalogues.

WM. H. HARRISON, architectural draftsman, 6450 Hayes Drive, Los Angeles, California, is starting an A.I.A. file and would like to receive manufacturers' samples and catalogues.

M. A. WASSERMAN, architectural draftsman, 3378 Rich-ton Avenue, Detroit, Michigan, would like to receive manufacturers' samples and catalogues for his A.I.A. file.

DAVID SUPOWITZ, ARCHITECT, announces the opening of a new office at 260 So. 15th Street, Philadelphia, Pa., and would like to receive manufacturers' samples and catalogues for his A.I.A. file.

RAYMOND J. PURDY, ARCHITECT, 350 Madison Avenue, New York, would like to receive manufacturers' samples and catalogues.

PERCIVAL HUTTON, ARCHITECT, has opened a temporary office at Zellwood, Florida.

H. A. BOGARD, formerly of Indianapolis, Indiana, has moved to Brazil, Indiana, and is in the Architectural Department of the Clay Products Company, Inc. He would like manufacturers' samples and literature sent to him at this new address.

ELMER GREY, ARCHITECT, 832 W. 5th Street, Los Angeles, California, announces the resumption of his professional practice.

HARVEY E. HARRIS, 815 Balboa Street, San Francisco, California, would like to receive manufacturers' samples and catalogues.

RAYMOND A. THORPE, architectural student and draftsman, c/o 31 Security Bldgs., Queen Street, Auckland, New Zealand, would like to receive manufacturers' samples and catalogues.

JACK WEINRIECH, architectural student, 812 Avenue T, Brooklyn, N. Y., would like to receive manufacturers' samples and catalogues for his A.I.A. file.

NORMAN MENDELSON, architectural student and draftsman, 712 Crona Street, Brooklyn, N. Y., is starting an A.I.A. file and would like to receive manufacturers' samples and catalogues.

GEORGE E. LILJA, architectural student, 2923 South Michigan Avenue, Chicago, Illinois, would like to receive manufacturers' samples and catalogues.

J. GILBERT BOLLINGER, architectural student, 4721 N. Albany Avenue, Chicago, Illinois, would like to receive manufacturers' samples and catalogues, also A.I.A. data, etc.

CARL V. JOHNSON, ARCHITECT, 501 Hubbell Building, Des Moines, would like to receive manufacturers' samples and catalogues.

P. J. CROSSIN, architectural draftsman, 14 Kelso Road, Columbus, Ohio, is starting an A.I.A. file and would like to receive manufacturers' samples and catalogues, also technical handbooks of all descriptions.

CLAUSSEN & CLAUSSEN, formerly of 508 Macleay Building, have moved their offices to 1109 Buyers Building, Portland, Oregon.

PETERS, HAYNES & STRANGE have changed the name of the firm to Peters, Strange & Bradshaw, Lester Fisher Bldg., Big Spring, Texas.

WM. C. HALBERT, JR., formerly of 11 North Avenue, is now located at 202 North Avenue, New Rochelle, N. Y.

CHARLES L. KOESTER, ARCHITECT, 163-18 Jamaica Avenue, Jamaica, New York, would like to receive manufacturers' samples and catalogues.

TONY J. DE FILIPPIS, architectural student, 2039 W. Harrison Street, Chicago, Illinois, would like to receive manufacturers' samples and catalogues.

STEPHEN M. BEDNAR, architectural designer and draftsman, 313 Munson Avenue, McKees Rocks, Penna., is starting an A.I.A. file and would like to receive manufacturers' samples and catalogues.

F. S. MARTINEZ, architectural student, 1022 New York Avenue, Brooklyn, N. Y., would like to receive manufacturers' samples and catalogues for his A.I.A. file.

A. CAROL SANFORD, architectural student, University of Cincinnati, Cincinnati, Ohio, would like to receive manufacturers' samples and catalogues for his A.I.A. file.

H. P. RICHTER, architectural student, 3939 Federal Street, Chicago, Illinois, would like to receive manufacturers' samples and catalogues (especially plates on detail work).

R. J. GROSEL, architectural draftsman, 14821 Pepper Avenue, Cleveland, Ohio, would like to receive manufacturers' samples and catalogues.

CLARENCE S. LYNCH, architectural draftsman, Westlake Court, Rockville Center, L. I., would like to receive manufacturers' samples and catalogues.

FRANCIS L. STEVENS, architectural draftsman, 5 James Street, Pawtucket, Rhode Island, is starting an A.I.A. file and would like to receive manufacturers' samples and catalogues.

JOHN B. AICHER, architectural student and draftsman, 2000 Washington Blvd., Easton, Pa., would like to receive manufacturers' samples and catalogues for his A.I.A. file.

BEN C. RUDOLPH, architectural student and draftsman, 3351 Hull Avenue, New York, would like to receive manufacturers' samples and catalogues for his A.I.A. file.

LOUIS K. KARLSBERGER has opened an office for the practice of architecture at the Schultz Building, Columbus, Ohio, and would like to receive manufacturers' samples and catalogues.

ARM KARTWOLD, architectural student and draftsman, 621 E. 8th Street, Oakland, California, would like to receive manufacturers' samples and catalogues for his A.I.A. file.

ARTHUR M. BURGESS, 5031½ Clinton Street, Hollywood, California, is starting an A.I.A. file and would like to receive manufacturers' samples and catalogues.

JAMES H. DYNES, ARCHITECT, 7 Palisade Avenue, Garfield, N. J., is starting an A.I.A. file and would like to receive manufacturers' samples and catalogues.

J. M. JACOB, architectural student, 608 E. Madison, Ann Arbor, Michigan, would like to receive manufacturers' samples and catalogues, data sheets, specifications, and details for his A.I.A. file.

KEMPER NOMLAND, ARCHITECT, has moved to 1151 South Broadway, Los Angeles, California, and would like to receive manufacturers' samples and catalogues.

PERSONALS (Continued)

CHARLES HARRIS, ARCHITECT, announces that he is opening an office for the practice of architecture at 343-44 Standard Life Bldg., Decatur, Illinois, and would like to receive manufacturers' samples and catalogues.

HENRY F. DILGEN, architectural student, 2611 Broadway, Pittsburgh, Pa., would like to receive manufacturers' samples and catalogues for his A.I.A. file.

GEORGE E. LAW, architectural student, Ferndale, Maryland, is starting an A.I.A. file and would like to receive manufacturers' samples and catalogues.

CHARLES HINMAN, architectural draftsman, Route No. 3, Council Bluffs, Iowa, would like to receive manufacturers' samples and catalogues.

JAMES C. WADE, draftsman, Braddock Heights, Alexandria, Virginia, would like to receive manufacturers' samples and catalogues.

TED KALAMAJA, architectural draftsman, 3828 So. 24th Street, Omaha, Nebraska, would like to receive manufacturers' samples and catalogues for his A.I.A. file.

ANGELO ZUCCO, ARCHITECT, Suite 39, 39 West Adams Street, New York, would like to receive manufacturers' samples and catalogues.

IRVING R. EPSTEIN, architectural student, 492 Atlantic Avenue, Brooklyn, N. Y., is starting an A.I.A. file and would like to receive manufacturers' samples and catalogues.

THOS. J. MURPHY, architectural draftsman and student, 415 East 62nd Street, Los Angeles, California, is starting an A.I.A. file and would like to receive manufacturers' samples and catalogues.

FREE EMPLOYMENT SERVICE

(Other items on pages 162, 164, and 166,
Advertising Section)

POSITION WANTED: Graduate architectural engineer, 6 years' construction experience and five years' experience as structural and architectural draftsman, desires position as architect's superintendent of construction. West preferred. Box No. 177, care of PENCIL POINTS.

POSITION WANTED: Young man, three years' experience as Junior draftsman and now attending Columbia University Extension would like to locate in an office in New Rochelle, N. Y. Box No. 178, care of PENCIL POINTS.

POSITION WANTED: Draftsman, 23 years of age, experienced in layouts, details for store, office alterations, wants position with architect in New York City. Box No. 179, care of PENCIL POINTS.

POSITION WANTED: Young man, 21 years old with drafting room experience desires position in architect's office. Capable of making neat, accurate architectural drawings and tracings. Edmund George Grodzicki, 273 Irving Ave., Brooklyn, N. Y.

POSITION WANTED: Architect's superintendent and specification writer. Box No. 182, care of PENCIL POINTS.

POSITION WANTED: Registered architect desires executive position of responsibility. Long and broad experience in all phases of architecture and allied engineering practice and in contracting. Middle West location preferred. Box No. 180, care of PENCIL POINTS.

POSITION WANTED: Structural engineer on steel frame and reinforced concrete buildings, would like to connect with architect's office for either part time or evening work. Box No. 185, care of PENCIL POINTS.

POSITION WANTED: Young lady, 21 years old with B. S. in architecture; also stenographic course. Box No. 184, care of PENCIL POINTS.

WANTED: Architectural draftsman, capable of making complete drawings from sketches. Must be first class letterer. Permanent position for right man. Location, Southern Central New York. General Practice. Box No. 183, care of PENCIL POINTS.

POSITION WANTED: Junior draftsman, general experience, wishes permanent position in architect's office, preferably in Philadelphia. Samples of work submitted. Studying evenings. Box No. 186, care of PENCIL POINTS.

PART TIME WORK WANTED: Specification writer experienced in all lines of work would like to assist Philadelphia architect who is rushed on specifications. \$1.50 per hour. Box No. 187, care of PENCIL POINTS.

POSITION WANTED: Stenographer-secretary, experienced in architectural office work, desires position in New York City architect's office. Good references. Box No. 188, care of PENCIL POINTS.

TYPEWRITING: Specifications written quickly, accurately, neatly. Sally Unger, Chanin Building, New York, N. Y. Ashland 0549.

POSITION WANTED: Architect, 20 years' experience in all classes of buildings, desires position with architect in New York City. Good contact man, specification writer, checker, draftsman, considerable knowledge of mechanical equipment. Box No. 190, care of PENCIL POINTS.

CONSTRUCTION work wanted by architectural draftsman in capacity as general utility man. 26 years old, graduate, 7 years' practical experience, 18 months in charge of building work. Name my salary and credit transportation and will report anywhere. Very willing and steady worker. William Kellner, 1129 Drexel Ave., Detroit, Mich.

POSITION WANTED: College trained, experienced draftsman wishes to connect with real estate or building development firm desiring architectural service. Location on south shore of Long Island preferred. Box No. 191, care of PENCIL POINTS.

STUDENT at Columbia University, New York, wishes work in architect's office daily until 3 P. M. Experience wanted, salary secondary. Herman Hughes, 1813 Willow Lane, Bronx, Telephone Underhill 1340.

SALESMEN for steel windows wanted: Excellent opportunity for good salesmen experienced in steel window installations to sell the complete Truscon line of quality windows. Several openings in Eastern States. Write fully (do not call) stating experience, age, salary expected and other details. Address O. W. Loew, Sales Promotion Manager, Truscon Steel Company, Youngstown, Ohio.

POSITION WANTED: Architectural draftsman, 4 years' experience, desires permanent position with large concern. Peter J. Scimeca, 298 Montauk Ave., Brooklyn, N. Y.

POSITION WANTED: Architect, 20 years' experience, qualified, English training, wide experience in most types of buildings. Capable of handling drafting room, good knowledge of design. Wishes change of location. Box No. 193, care of PENCIL POINTS.

POSITION WANTED: All-round architectural draftsman, 15 years' experience. Box No. 194, care of PENCIL POINTS.

WORK WANTED: Structural steel and reinforced concrete designing by competent engineer. All work completed with dispatch. Tonnage basis. Box No. 195, care of PENCIL POINTS.

OFFICE SPACE to rent for architect. Very desirable location. Sally Unger, 1918 Chanin Building, New York, N. Y. Ashland 0549.

PRACTICING ARCHITECT desires work on free lance basis. Part time or periods of full time. Box No. 197, care of PENCIL POINTS.

PUBLICATIONS

OF INTEREST TO THE SPECIFICATION WRITER

Publications mentioned here will be sent free unless otherwise noted, upon request, to readers of PENCIL POINTS by the firm issuing them. When writing for these items please mention PENCIL POINTS.

Cornell Rolling Doors.—A.I.A. File No. 16-d-13. Catalog fully describes and illustrates numerous types of Cornell steel rolling shutters and Underwriters Labeled automatic fire doors and shutters. Vertical sections, floor plans, dimensions, diagrams and specifications. Standard filing size. 32 pp. Cornell Iron Works, Long Island City, N. Y.

Pardee Tiles.—Interesting and valuable book for architects, devoted to white wall tile, Flint tile and ceramics, Grueby-Faience, satin-finish tile and fixtures and Royal-Delft Faience. Many color plates and illustrations of installations. Full size sections and elevations. Standard filing size. 48 pp. The C. Pardee Works, 1600 Walnut Street, Philadelphia, Pa.

Dahlstrom Standard Steel Partitions.—A.I.A. File No. 28-a-3. New illustrated catalog with drawings covering this type of improved and modern adjustable steel partitions adaptable to all requirements. Standard filing size. 24 pp. Dahlstrom Metallic Door Company, Jamestown, N. Y.

Stanwin Casements.—A.I.A. File No. 16-e-1. Catalog No. 1 gives complete information on Stanwin lightweight casements and doors in all standard sizes and types suitable for smaller residences, investment buildings, including apartment houses and hotels, for schools and similar structures. Illustrations, detail drawings and specifications. Standard filing size. 20 pp. Crittall Casement Window Co., Detroit, Michigan.

Mahon Steel Roof Deck.—A.I.A. File No. 12-a-32. New catalog contains complete data and descriptive information on the Mahon steel roof deck suited to practically any type of building calling for either flat, pitched or arched roof construction. Engineering data and detail drawings in color. Standard filing size. 24 pp. The R. C. Mahon Co., Detroit, Mich.

Ebco Fixtures.—A.I.A. File No. 29-h. Catalog J. A valuable ready reference and guide describing and illustrating the complete line of Ebco toilet fixtures and enclosures, drinking fountains, washroom equipment and sinks for all types of buildings. Each line is grouped within its particular subdivision and complete specifications accompany each illustrated model. Many detail drawings. 8 x 10 $\frac{5}{8}$. 72 pp. The D. A. Ebinger Sanitary Manufacturing Company, Columbus, Ohio.

New 900 Series Buckeye Heatovents.—A.I.A. File No. 30-d-11. New bulletin No. 124, dated January, illustrates and describes this new 900 series unit ventilator for schools, hospitals, sanitariums, asylums, churches, gymnasiums, pools, etc. Cross sections, installation details, tables of engineering data, specifications. Standard filing size. 24 pp. The Buckeye Blower Company, Columbus, Ohio.

Fallston Ferro-Glazed Brick for Interiors.—A.I.A. File No. 3-F-2. Attractive new catalog, illustrated in colors, describes the artistic possibilities and sanitary features of this kind of brick as a material for interior walls for public, semi-public, industrial buildings, etc. Descriptions and color plates are also included covering four other lines of smooth and rough-textured brick for exterior uses. Standard filing size. 30 pp. Continental Clay Products Corporation, Pittsburgh, Pa.

Zouri Store Fronts.—A.I.A. File No. 26-B-1. Catalog No. 15, just off the press, contains much valuable information for the architect and draftsman on the subject of Zouri store front construction. Document also features extruded, cast and wrought bronze; bronze doors and windows and shower bath doors. Profusely illustrated. Specifications. Set of nine full-size details included in pocket. 32 pp. Zouri Drawn Metals Co., Chicago Heights, Ill.

Mural-Tex.—Handsome brochure, with color plates, showing numerous interesting effects in textured and relief decoration obtained with Mural-Tex as a wall finish. 8 $\frac{3}{4}$ x 10 $\frac{3}{4}$. 16 pp. The Muralo Co., Inc., Staten Island, N. Y.

Published by the same firm, "Directions for Using Mural-Tex." A.I.A. File No. 25-b-29. Folder explains the proper methods of securing a wide variety of textured wall finishes. 8 x 11.

Hamilton Drafting Room Furniture.—A.I.A. File No. 35-h-31. Catalog No. 7, 1929 edition just issued, describes and illustrates the complete line of Hamilton steel and wooden filing cabinets, drawing tables, stools, drawing boards, parallel rules, artists' equipment, etc. Contains much useful and interesting data for architects and draftsmen. Price list. Standard filing size. 48 pp. Hamilton Manufacturing Co., Two Rivers, Wis.

Klemp Diamond Grating.—A.I.A. File No. 14-P-21. New illustrated catalog sets forth the advantages of this type of grating for use as flooring, stair treads, landings, walkways, platforms, armoring for concrete, etc. Detail drawings and tables of loads. Specifications. Standard filing size. 16 pp. William K. Klemp Co., 6624 So. Melvina Ave., Chicago, Ill.

Toch Brothers Specifications.—Specification folder covering waterproofing, dampproofing, steel preservative paints, concrete and masonry finishes and floor hardeners. Looseleaf, standard filing size. Toch Brothers, New York, N. Y.

Published by the same firm, "Technical Paints and Waterproofing Compounds." Booklet with color charts and specification data covering complete line of technical paints, waterproofing compounds, mortar colors, elastic caulking compounds, etc. 40 pp.

Bakelite Molded.—Interesting illustrated booklet deals with the subject of Bakelite molding materials and their uses, with a brief description of the molding process and the equipment required for the purpose. 36 pp. Bakelite Corporation, 247 Park Ave., New York, N. Y.

Handbook of Reinforced Concrete Building Design.—An authoritative handbook of modern reinforced concrete design. Bound in leather 5 $\frac{1}{4}$ x 7 $\frac{1}{2}$ —264 pages with 143 design tables and diagrams. Eighteen pages devoted to a discussion of cost data, and 42 pages on the design section of a modern building code. The handbook is based on high unit stresses in concrete and reinforcing steel. A fundamental knowledge of the mechanics of structures and reinforced concrete design is essential to the intelligent use of the handbook. Regular price \$1.00. In lots of six or more to the same address, 50c. postpaid. Copies may be secured by sending the proper remittance direct to the Portland Cement Association, 33 West Grand Avenue, Chicago, Ill.

Published by the same association, "Design and Control of Concrete Mixtures." A technical treatise on proportioning mixtures for definite qualities of concrete. Includes a model specification based on the water-cement ratio method of proportioning and A.S.T.M. tests used in the field to control concrete. 72 pp. 6 x 9.

The Pick-Barth Catalog.—General catalog, No. E-32, covers the complete line of Pick-Barth equipment, furnishings and supplies for hotels, restaurants, clubs and institutions. Profusely illustrated. 8 $\frac{3}{4}$ x 11. 332 pp. Albert Pick-Barth Co., 1200 W. 35th St., Chicago, Ill.

Edwards Sheet Metal Products.—A.I.A. File No. 12. Catalog No. 75 describes and illustrates the complete line of Edwards metal Spanish tile and shingles, roofing, siding, gutter and conductor pipe, marqueses, doors and windows, skylights and ventilators, metal ceilings, portable buildings, etc. Construction data, detail drawings and specifications. 9 $\frac{1}{4}$ x 12. 184 pp. The Edwards Manufacturing Co., Cincinnati, Ohio.

Published by the same firm, "Metal Spanish Tile and Shingles." Catalog No. 72 gives complete information on subject indicated with color illustrations, sections, elevations and specifications. 56 pp.

Techniques.—Revised brochure presenting a series of treatments showing various types of art work executed with drawing inks, both black and in colors. More than 30 drawings by architects, draftsmen and artists. Of interest to all who draw with a pen. Chas. M. Higgins & Co., 271 Ninth St., Brooklyn, N. Y.

Webster Moderator System of Steam Heating.—Standard filing size folder announces the Webster moderator system, a fundamentally new development in steam heating. Warren Webster & Co., Camden, N. J.

Duraflex—A Flooring.—A.I.A. File No. 24-b. Descriptive and specification folder devoted to subject indicated. Standard filing size. The Duraflex Co., Baltimore, Md.

Published by the same firm, "Duraflex Hot Asphalt Mastic Floors." Specification folder covering Duraflex hot asphalt mastic for industrial floors and sub-floors. Standard filing size.

Airplane Hangar Construction.—Revised illustrated bulletin, which is Volume IV of construction information series of publications on lumber and its utilization, contains a great deal of information for architects interested in airport design and hangar construction. Sections and detail drawings. National Lumber Manufacturers Assn., Washington, D. C.