

PENCIL POINTS

Volume VII

October, 1926

Number 10

THE RELATIONSHIP BETWEEN THE ARCHITECT AND THE DRAFTSMAN

By Edwin H. Hewitt

I HAVE NEVER HAD much experience with large offices in the sense of large organizations, except as a draftsman myself. For years my own work has not required a very large organization. As a draftsman I had the pleasure and profit of working in several large offices. The experience was valuable, and I have always been grateful to the heads of these offices for their kindness and helpfulness to me as a draftsman.

I did not find, however, in these various offices at all times the sense of loyalty to the work which always seemed to me was required. For instance, it was a very common practice in certain offices to take on numerous men for the sake of getting out a set of working drawings quickly, and letting numbers out at the end of the work, leaving the skeleton office organization to carry on until the next time came requiring quick work on the part of the general force.

This practice at the time seemed to me to generate a spirit among the men so taken on which was not conducive to good morale; they were inclined to soldier a bit on the job in order to make it last longer, as they said. However incompetent I may have been as a draftsman myself this spirit was revolting to me.

These early experiences resulted in firmly fixing in my own mind the only policy I have ever had

regarding my own drafting room, namely, a conviction that I would much prefer to treat draftsmen as associates than as hired help. In other words, for years we have consistently maintained a permanent

organization and have taken on extra men but rarely, the idea being we would rather get out the work a little more slowly, but get it out with men who have the feeling of the office in mind, rather than rush the work out for the sake of clearing the track for the next job.

I don't suppose that my predilection for a more or less permanent organization has produced that spirit of loyalty and consideration that one would imagine but I think on the whole the practice of the profession in my own experience has been pleasanter thereby.

Really taking responsibility and helping to bear the load is another quality which is difficult to obtain, even in so-called permanent organizations of office force.

There is always the feeling that the boss' shoulders are strong enough to always take the load. How to get a feeling of loyal devotion to the job and a proper acceptance of responsibility all along the line is always a problem. A sense of security of tenure of position in the kind of office I have in mind produces a willingness sometimes to let things drift and to lessen that sense of responsibility that most likely would be more vividly present if the



EDWIN H. HEWITT, F.A.I.A.
FROM THE SKETCH BY DAVID K. RUBINS

PENCIL POINTS

man's job depended on just exactly that kind of attitude towards his work.

I sometimes think with envy of the atmosphere in the foreign offices that I have been more or less familiar with, where the head of the office will devote say two days out of the week when he is available by telephone and by appointment, or for his own superintendence on work, the other days of the week when, he can labor on his own work undisturbed, producing much of it himself. When

I compare that atmosphere with the clatter and rattle of the usual large office I sometimes marvel at the quality of work that is nevertheless produced.

I don't know that I have anything further to add to the general tenor of what I have said above. I shall look forward to the discussions on the part of other practitioners of this question because I realize that there are as many ways of regarding this matter as there are personalities.

The discussion of the relationship between the architect and the draftsman was begun in the August issue of PENCIL POINTS with an article by R. Clipston Sturgis and continued in September by J. Monroe Hewlett. Future issues will contain contributions on this subject by Charles D. Maginnis of Boston, Walter W. Judell of Milwaukee, Albert Kahn of Detroit, H. Van Buren Magonigle of New York, F. R. Walker of Cleveland, Myron Hunt of Los Angeles, Leon C. Weiss of New Orleans, William A. Boring of New York, William Leslie Welton of Birmingham, William Emerson of Boston, and Irving K. Pond of Chicago.

MASTER DRAFTSMEN, XVIII

CASS GILBERT

By Francis S. Swales

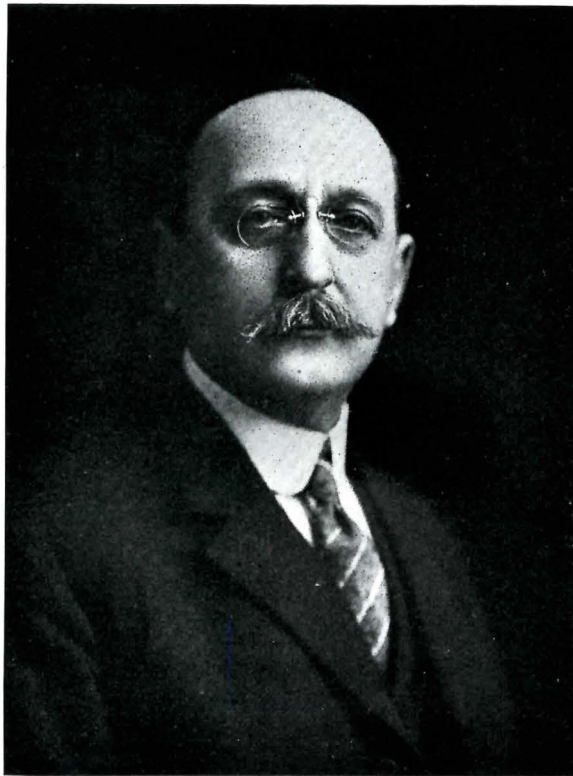
HAVING BEEN WISE in the selection of a wealthy man as a grandfather, no reason other than being fascinated by the subject and a consequent desire to create new works of architecture can be given for Cass Gilbert's strenuous career as a draftsman, architect and painter of architecture in water-colors. He began his training in an architect's office at St. Paul, Minn., in 1876. Two years later he entered the Massachusetts Institute of Technology to take a special course in architecture under the guidance of the late Professor Eugene Létang. There he won the Institute Prize for the year 1878-79. The summer of the following year he was appointed to the Coast Survey and sent to West Point, New York, to measure and plot the Point, upon which the National Military Academy is located. In January, 1880, he set out to travel and study in Europe, first going to England where he made the acquaintance of Street, Waterhouse, Pearson, and Burges, (who, it is perhaps necessary to mention, in this year 1926, constituted a group of architects that during the "Victorian period" held some such position in the English architectural firmament as did Scott, Dickens, Thackeray and Tennyson in the literary), then on to Paris, where he was attracted by the work of Viollet-le-Duc and the theories of the Ecole des Beaux Arts. He remained in Paris until the spring, when he went on a tour through Italy, followed by another trip along the Loire, and then returned by way of England to the United States.

In September of the same year, 1880, he entered the office of McKim, Mead & White, shortly after Mr. White had become a partner in the firm. He worked upon the designs for the Newport Casino, Drayton House, and Charles Barney House as White's personal assistant, and jointly with White designed the Tiffany House in New York and the

Ross Winans House at Baltimore, then collaborated with Joseph Morrel Wells upon the Villard House. He was afterwards sent to Baltimore to take charge of the work of McKim, Mead & White in that city. In December 1882, he went to St. Paul and formed a partnership with Mr. James Knox Taylor which continued during the next ten years.

The work which came to the firm of Gilbert and

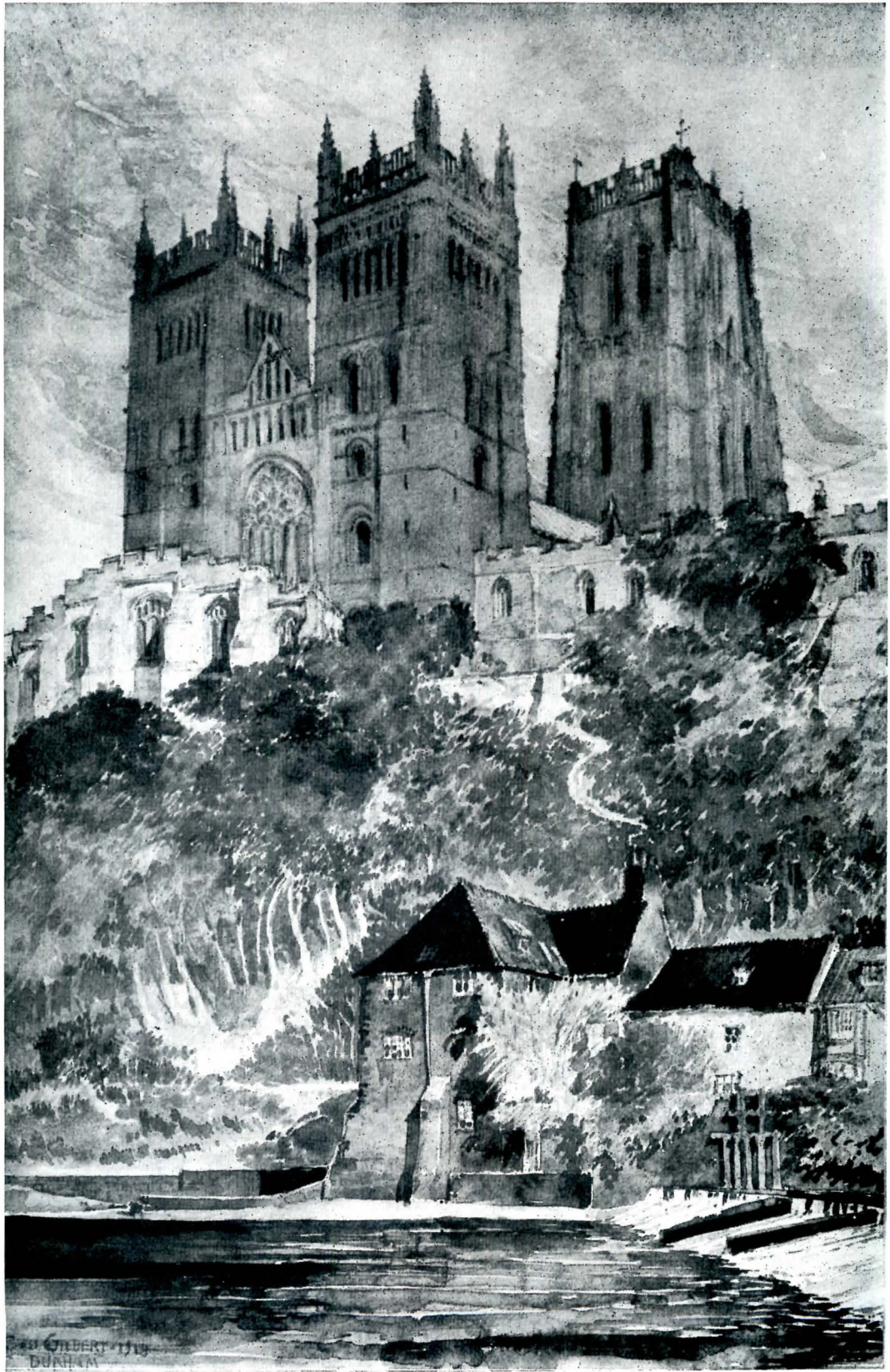
Taylor was such as is characteristic of the successful office in a small town: residences, churches, railway stations, school buildings and, occasionally, a "big job" such as the Endicott Building—which is still, or was a few years ago when I last visited that city, the best office building in St. Paul from the point of view of architectural design. The partners worked away, as most young architects do, at the drafting boards, and out on the jobs "superintending"—as it used to be called. They made most of their working drawings and details and when an "important" job hove upon the horizon, drew their own perspectives and made their own pen and ink or water-color renderings. It was due to such renderings of pictur-



CASS GILBERT

esque designs by Gilbert and Taylor that Cass Gilbert's name became familiar to architects and draftsmen who received the "architectural" journals of the day. Among such early drawings were a pen and ink sketch for the very picturesque Swedenborgian Church at St. Paul and a pleasing composition rendered in water color and gouache of a round-towered, stone and shingle cottage at White Bear Lake, Minnesota. Some of his early sketches of old work in Europe appeared from time to time in the catalogues and year books of the exhibitions of the architectural clubs, Architectural League, and so on.

In 1896, when Mr. Gilbert won the competition for the State Capitol of Minnesota, a competition



WATER COLOR SKETCH BY CASS GILBERT
DURHAM CATHEDRAL

which brought forth several excellent designs (among which linger in my memory as worth recalling, those by Ernest Flagg, Julius Schweinfurth, and Wyatt and Nolting), he became ranked as one of the leading architects of the country, so that we may count that he put in twenty years mainly at the drafting board before Dame Fortune smiled on him, and Reputation began calling upon him to appear at Directors' meetings and dinner functions.

Since the Minnesota State Capitol success, however, he has produced so many important works of first magnitude that it is needless to do more than mention a few to convey some idea of the difficulty in the way of finding time to draw, while handling the business organization necessary to produce such designs and buildings. Among these are the building in lower Broadway which converted the five-and-ten-cent-store man's name into that of the proprietor of the world's tallest office building; the great bulky U. S. Customs House at the Bowling Green—which, to my way of seeing things, is still the best planned, least bookish, most vigorously American and strongest piece of monumental designing among all the public buildings in the United States; a few State Capitols—besides Minnesota's, those of Arkansas and West Virginia, that were built, and designs which won competitions for those of Montana and Wisconsin that were not; the public libraries at Detroit, St. Louis and New Haven; a whale of a warehouse for Austin Nicholls and the vast army supply base over in Brooklyn; "the tallest office building in the middlewest"—at Cincinnati; and a few dozen or so of other public buildings, universities, office buildings, banks, railway stations, bridges, monuments, etc., costing a million or more of dollars each, that are easily overlooked in a glance at such volume of work. The striking quality in all his work whether as a matter of design or representation is its peculiarly *American* quality. It belongs neither to the French-American, German-American nor Anglo-American "schools" nor to the Slavish copying of the works of Classic Gothic or other historic period styles; nor is it obtrusively "personal" in characteristics.

Obviously such a mass of work has pressed him more and more away from the drafting room, and even from the executive office, more and more to the administrative, diplomatic and social end, which the handling of so much work entails, yet he finds time to design and draw and paint. That he is a decided success as a business man everybody knows, but anybody who knows him well, knows too that being a successful business man is the last thing in the world which interests him. While he thinks in big units and dreams in grand scale, he deprecates size as an element of architecture, and the "merely gigantic" or "merely colossal" (terms he often uses) are little to his liking. Of his executed works I think he likes best the Detroit Library or the Waterbury

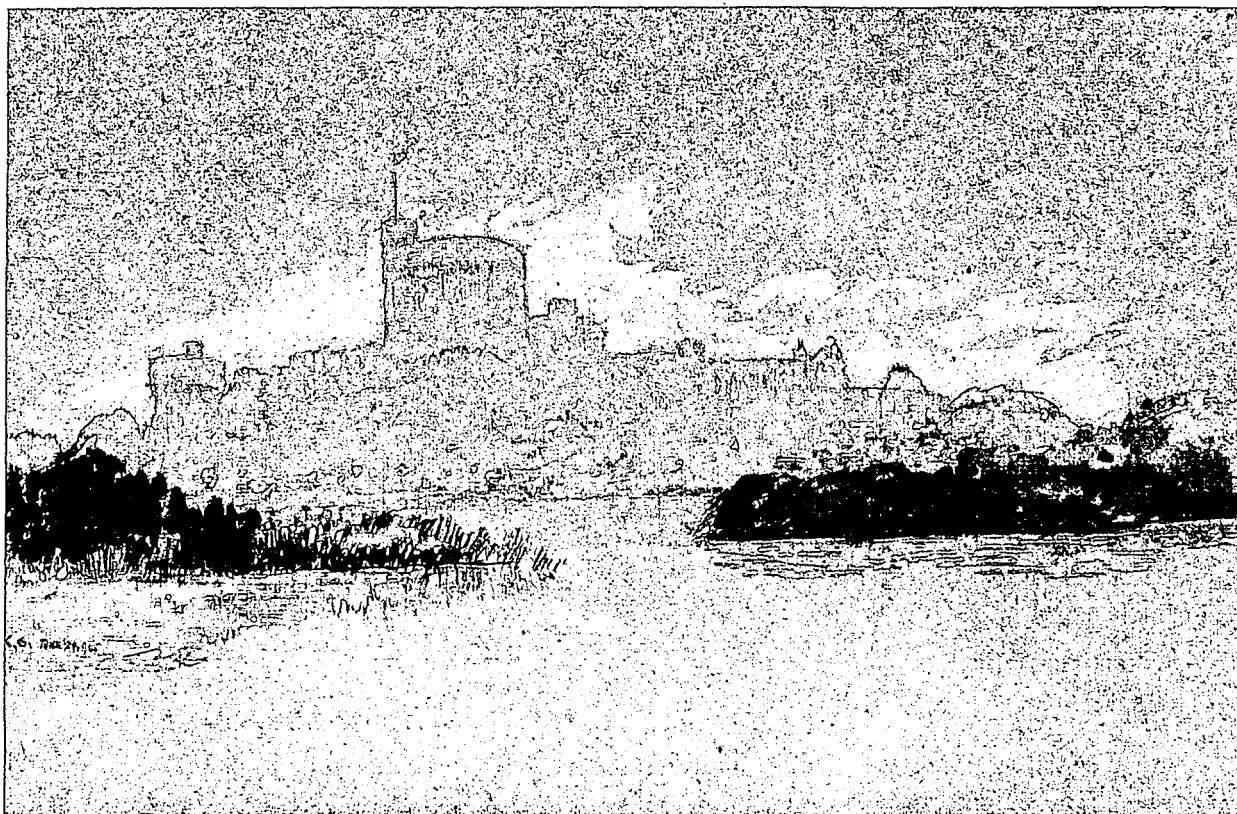
City Hall—at least he has spoken of them from time to time as having afforded opportunities for architectural qualities of truth of expression, refinement of detail, "human scale", and so on, so that it would seem that making "big plans" is not the ideal with Gilbert that it was with Burnham. (I am quite sure that "D. H. B." really liked best the *biggest* thing he ever did—or *thought* he did!). Cass Gilbert is essentially a great designer and creator of form and style. That implies a skilful draftsman, especially the kind who can express his ideas by means of good free-hand sketches. He finds time to make the sketch for each design and takes an active part in its drafting, and however much it may be refined and studied as the drafting and detailing proceeds, the final result is clearly foretold in his little, rapidly-made sketches which supply the key and solution. They mean everything to the talented and skilled assistant.

In his office a number of the most scholarly younger architects in the country have developed. To such it has evidently proved a congenial studio, since several of them have remained there twenty years or more. Mr. Gilbert has a delightful way of saying the most flattering things about his associates or assistants in a most convincing manner, and his high enthusiasm for artistic quality in the drawings and lively attentive interest in the technical skill of the men working with him should, and doubtless does, contribute to the *esprit-de-corps* which marks his office with a pleasing, old fashioned dignity and makes it a present day centre of America's finest draftsmanship. Twenty years ago, while I was at Paris, I learned that he was sending young men of talent from his office to the Ecole des Beaux-Arts and defraying their expenses, and from such men learned of his practically applied interest in draftsmanship and draftsmen.

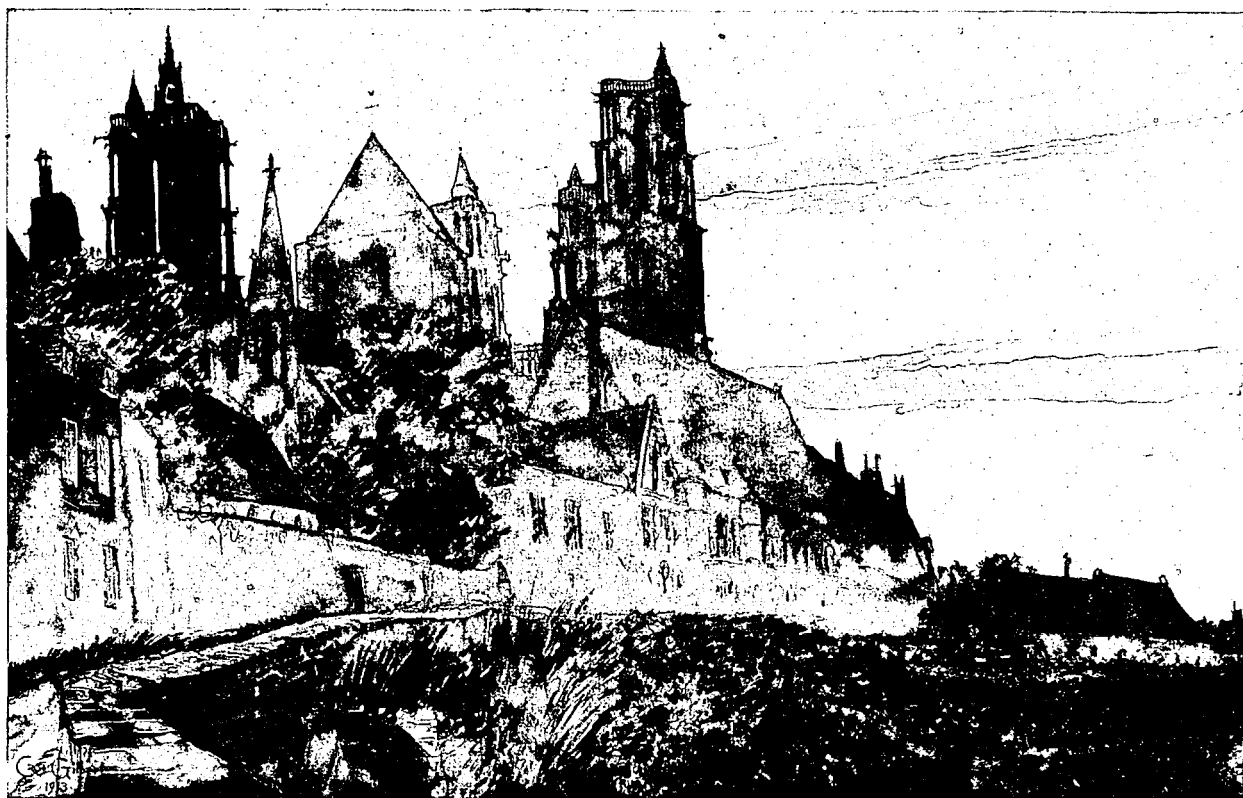
If the scope of these articles included a study of the varied facets of the subject as a leader in the modern professional practice of architecture; his part in the development of the ideals of professional societies; his genealogy; his broad vision and thoughts upon social and political conditions or his capabilities of statesmanship or qualities of an ambassadorial nature, here would be one of a very small number of outstanding figures among all American architects to whom several pages of interesting data and anecdote might well be devoted. To briefly illustrate a point or two I have in mind: The part which he took while President of the American Institute of Architects in raising the funds for the purchase of the Octagon House at Washington as national headquarters of the A. I. A. According to one of the group of principal contributors: "He stung our purse-pride into subscribing a great deal more than we would have been willing to, by asking whether we would give half as much as he would."

Another instance occurred during a conversation

PENCIL POINTS

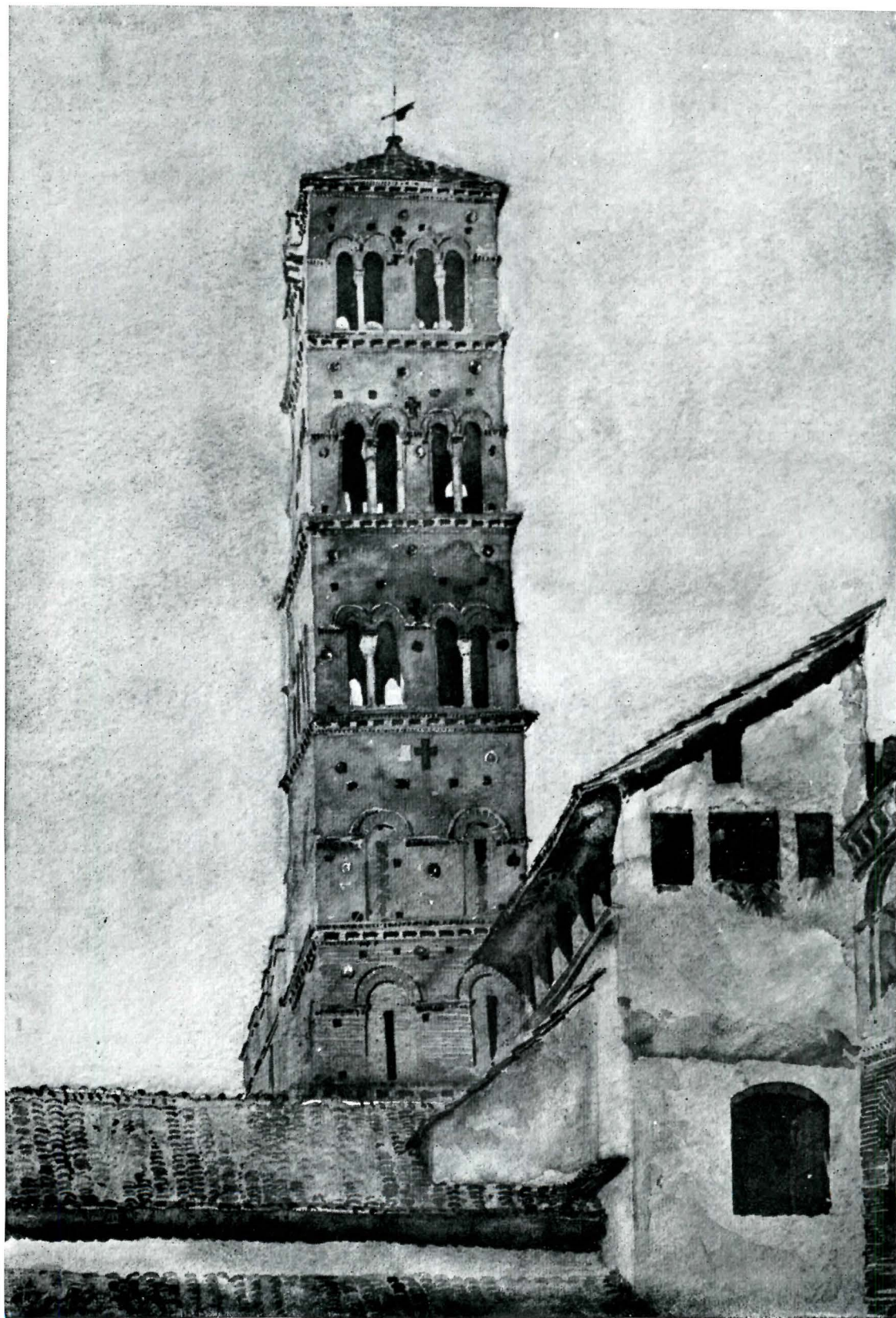


WINDSOR CASTLE



LAON CATHEDRAL

WATER COLOR SKETCHES BY CASS GILBERT



WATER COLOR SKETCH BY CASS GILBERT
TOWER OF SAN GIORGIO ROMANO, FORUM, ROME

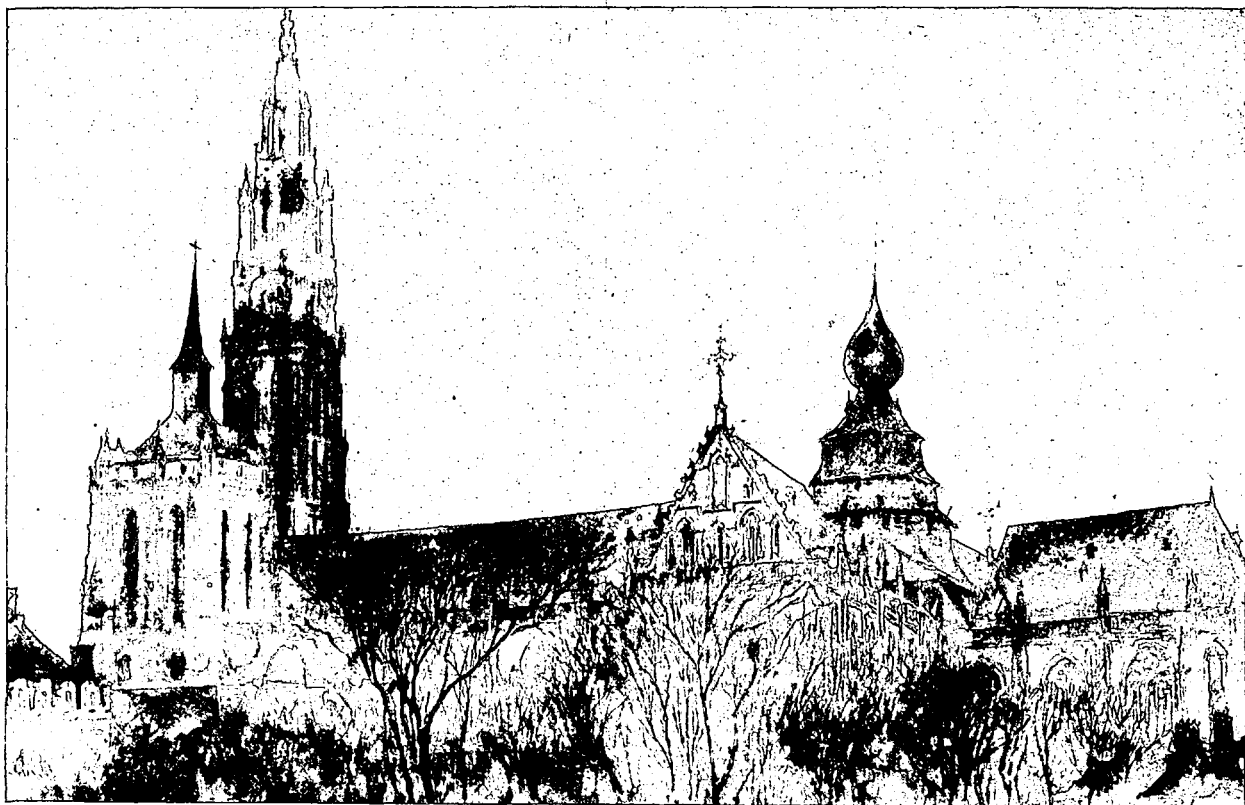
we had in London when he was first discussing the project of the Woolworth Building with Mr. Woolworth—then proposed for a site about one-quarter as large as that finally developed. He said he had not yet decided whether to keep to the theories of design of that time, or go to a more pronounced vertical character, (as he had done with the West Street Building) but thought he would adopt "Gothic lines". I refrained from asking the question uppermost in my mind as to whether the American Can Company might take the tailoring business away from the Jews by providing mediaeval suits of armour "to match" the architecture, but conveyed the thought that Gothic were an anachronism, to which Mr. Gilbert re-



BATHS OF CARACALLA

sponded: "It may be, but I think the times are running against themselves. It seems to me that we are on the verge of a new mediaevalism—a great world-upheaval—a breaking away from our heretofore fixed ideals of the order of things—and the coming of a new *individualism*." In the light of things which have since transpired the expression proved to be prophetic!

While discussing anything he has in mind in regard to architecture, painting or sculpture he has the habit of making quick brilliant little sketches illustrating ideas of design in form and in color-values. They are made on anything that comes handy—the back of an envelope or menu, (but I have noted he is pernickity about the table-cloth or



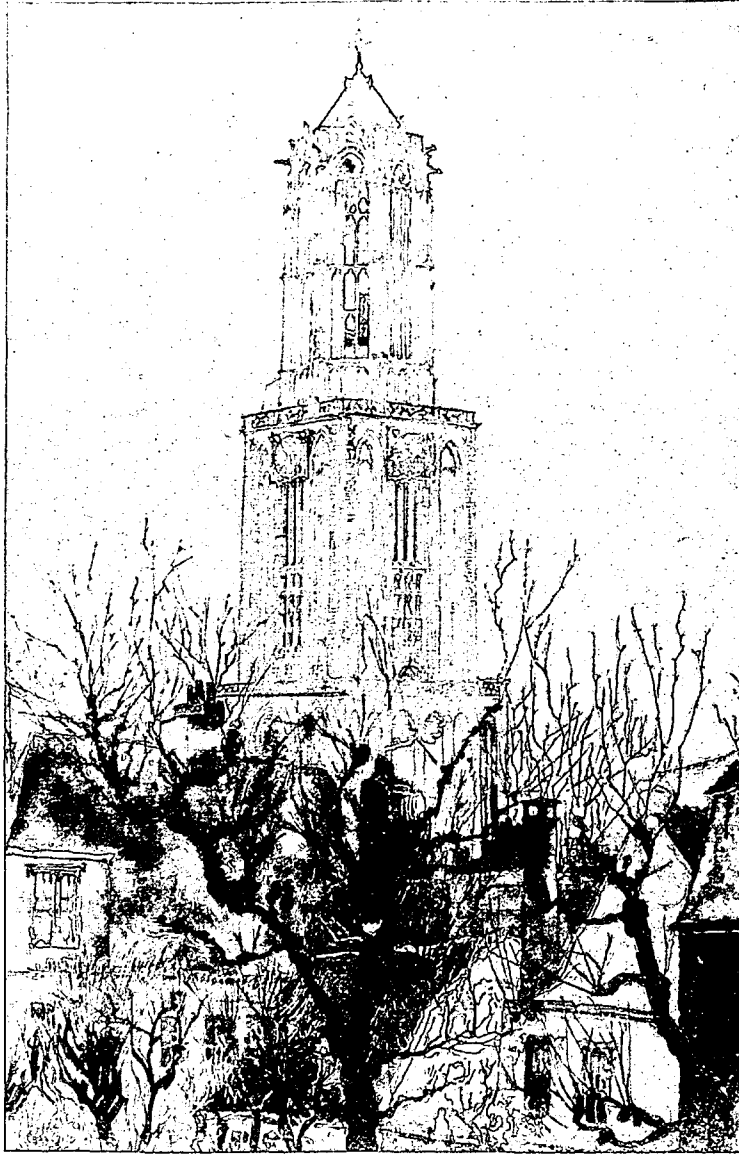
ANTWERP CATHEDRAL

WATER COLOR SKETCHES BY CASS GILBERT



WATER COLOR SKETCH BY CASS GILBERT

SEGOVIA, 1920

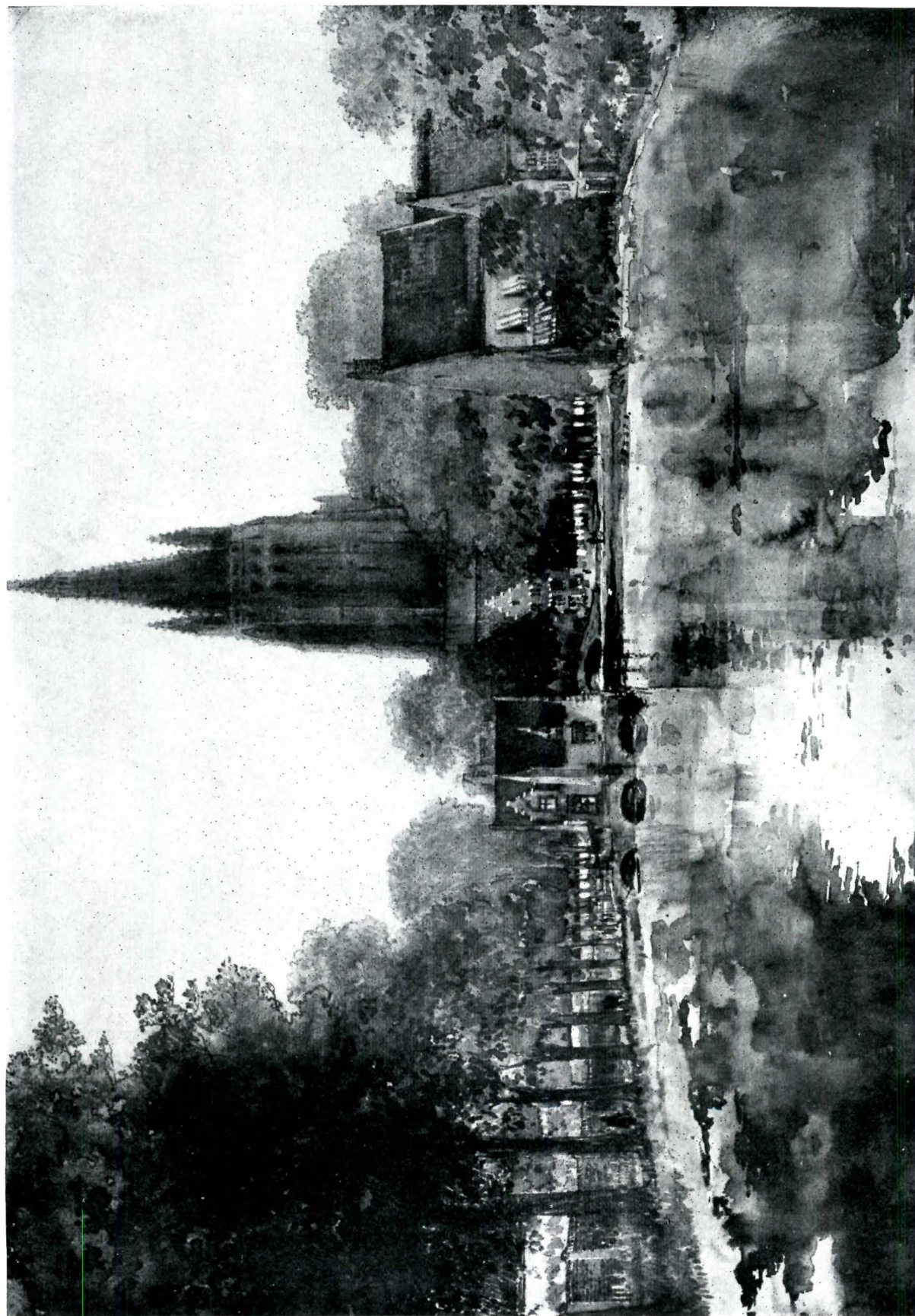


TOWER AT UTRECHT, HOLLAND



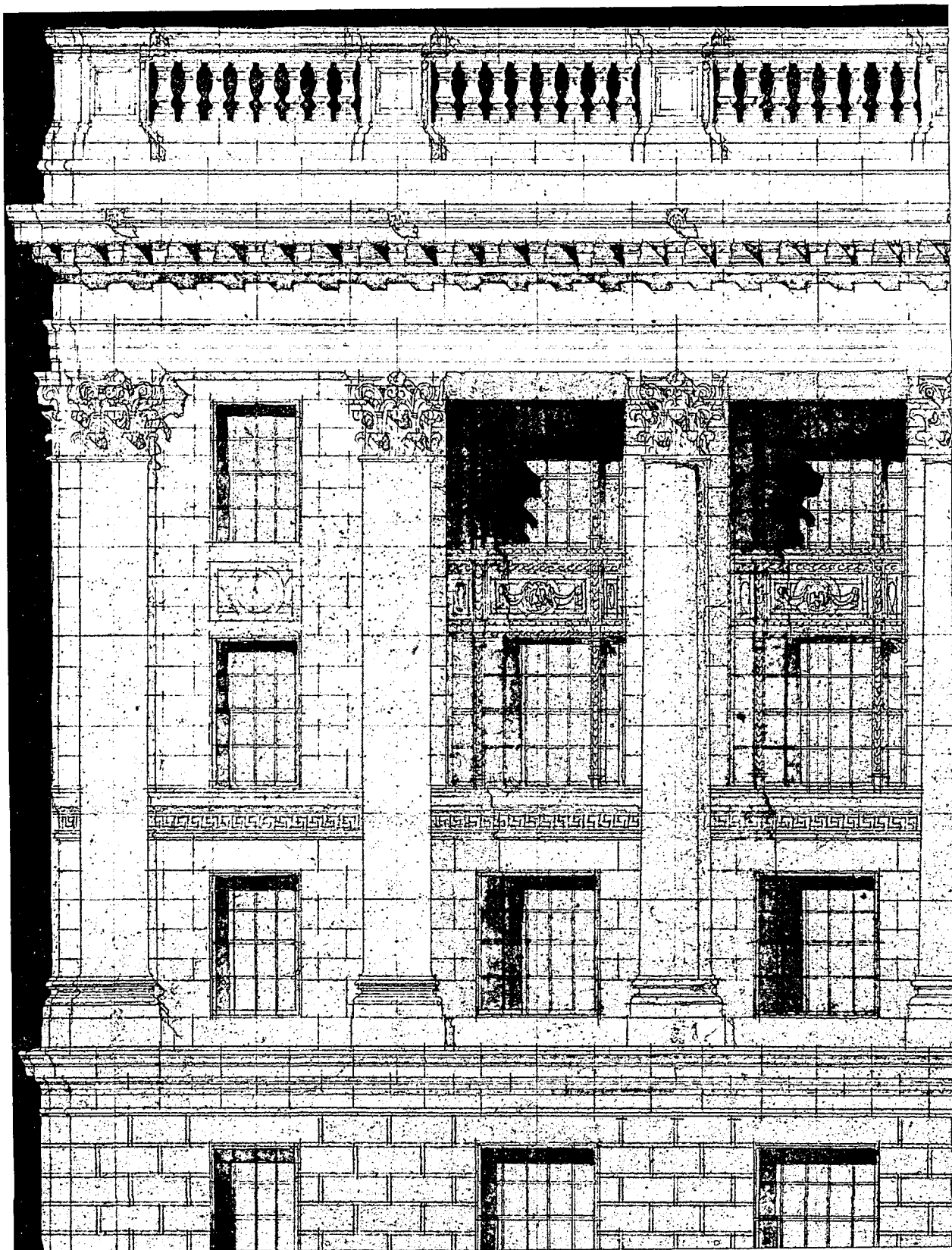
DRESDEN

WATER COLOR SKETCHES BY CASS GILBERT



WATER COLOR SKETCH BY CASS GILBERT
LAC D'AMOUR — BRUGES

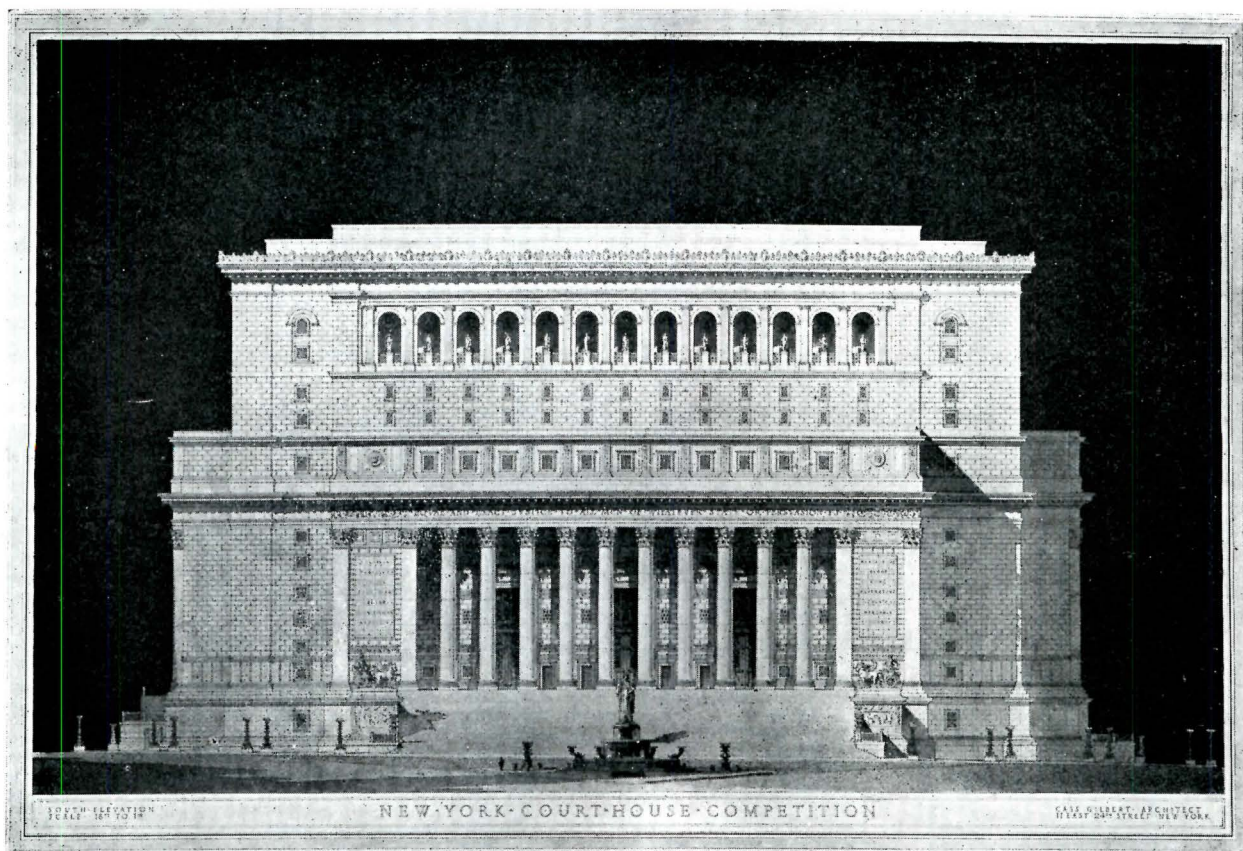
PENCIL POINTS



DETAIL OF ELEVATION AT $\frac{1}{8}$ " SCALE, FEDERAL RESERVE BANK, MINNEAPOLIS

DRAWN BY F. G. STICKLES OF THE OFFICE OF CASS GILBERT

Cass Gilbert, Architect



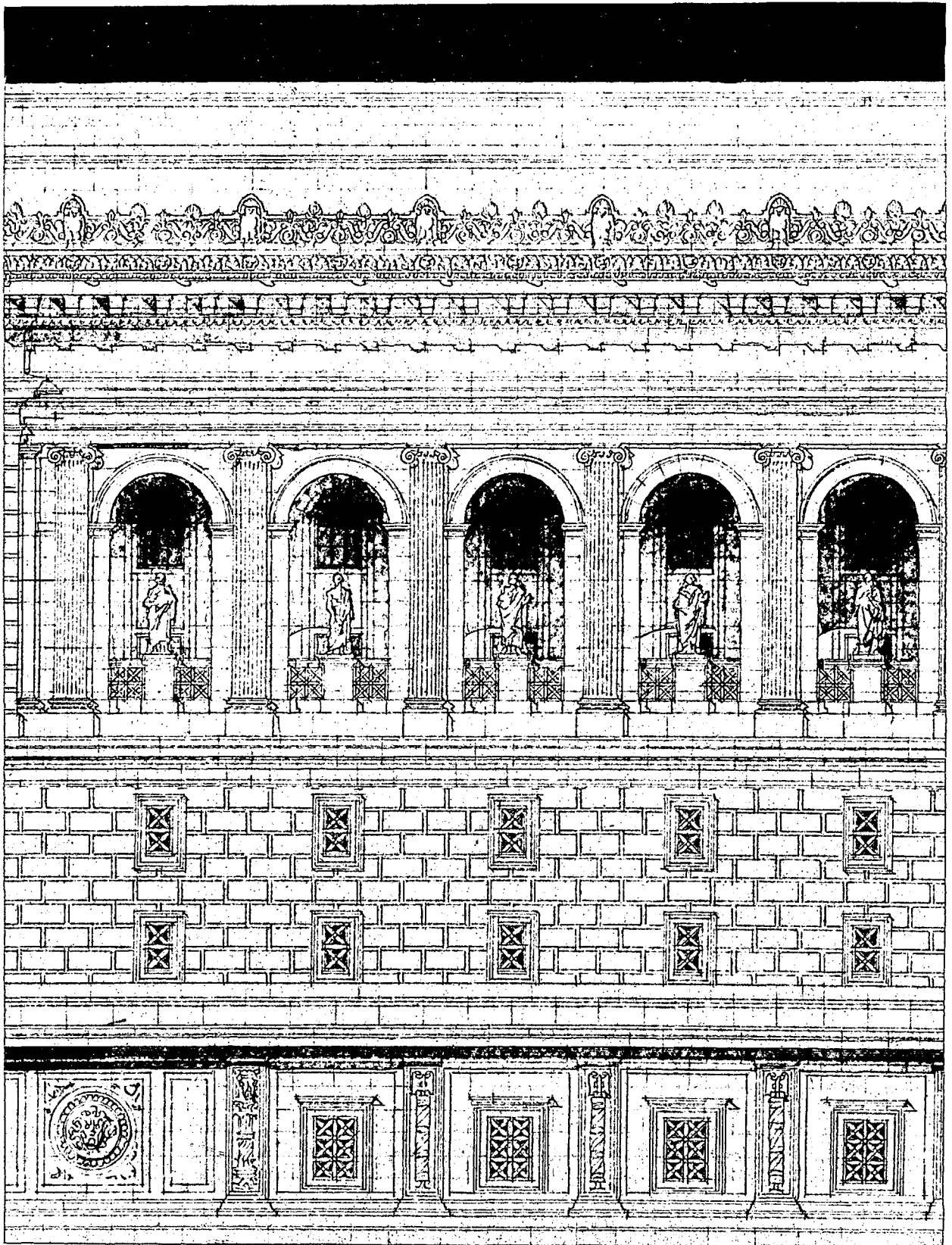
COMPETITION DRAWING FOR NEW YORK COURT HOUSE, CASS GILBERT, ARCHITECT

serviettes!) Ideas flow easily from the end of his pencil as it skims over the paper with a light, sure touch—observing his style of indication with the pencil of only the essential things of a composition one notes that it plays upon the imagination of others. By a few rapid lines following the direction of light and a movement of a finger across them following the direction of a horizontal line in perspective a graded shadow is produced in an instant—and it has a specific *color*—it is a purple-blue color and the wall that it falls upon is a greyed orange. Two or three little wiggles indicate tiles and one or two lines give the silhouette of a roof; an opening, a balcony, an ornamental railing, and the sketch is to be filled in with water-color. The drawing is a veteran water-colorist's style. Style—a well developed character—is the essence of Gilbert's drawing, of his water-coloring and of his architecture.

He has a large scrap-book full of his small sketches and studies for designs, and a pile of sketches of bits of architecture in Europe made in pencil and pen and ink. These having been made for some purpose apart from drawing for pleasure he does not regard them as worth publishing—though they would illustrate a very interesting volume. The drawings he has made for pleasure are mainly water-colors. The originals are mostly about four times the size of the reproductions in color accompanying

this article. They are nearly all pure water-color drawings or with but slight use of the pencil for indicating outlines. Where the pencil is used it plays no important part in the drawing. The original line is fine, and light in touch and the greater part of it is drawn with the brush. When the high tension of business is removed for a few weeks during the summer Mr. Gilbert goes to Europe with a golf bag packed with water-colors, brushes and a sketch block. I suspect that "golf" is a subterfuge to avoid telling anybody that he is going sketching. The human and humorous side of the artist crops out in a couple of stories I know of some of his vacation trips. On one of them he started out from London on "a short motor trip through the south of England". He was gone about a week and came back with four or five good sketches—each of which looked like a good day's work. It seems that at Winchester he made two sketches of opposite sides of the Cathedral at the same time, leaving one on the ground to dry while he went around to continue the other. An acquaintance espied him walking around the front of the church "with a small paint brush in his hand" and facetiously inquired, "Are you going to paint the cathedral?" "No", responded Gilbert, "only the two sides of it".

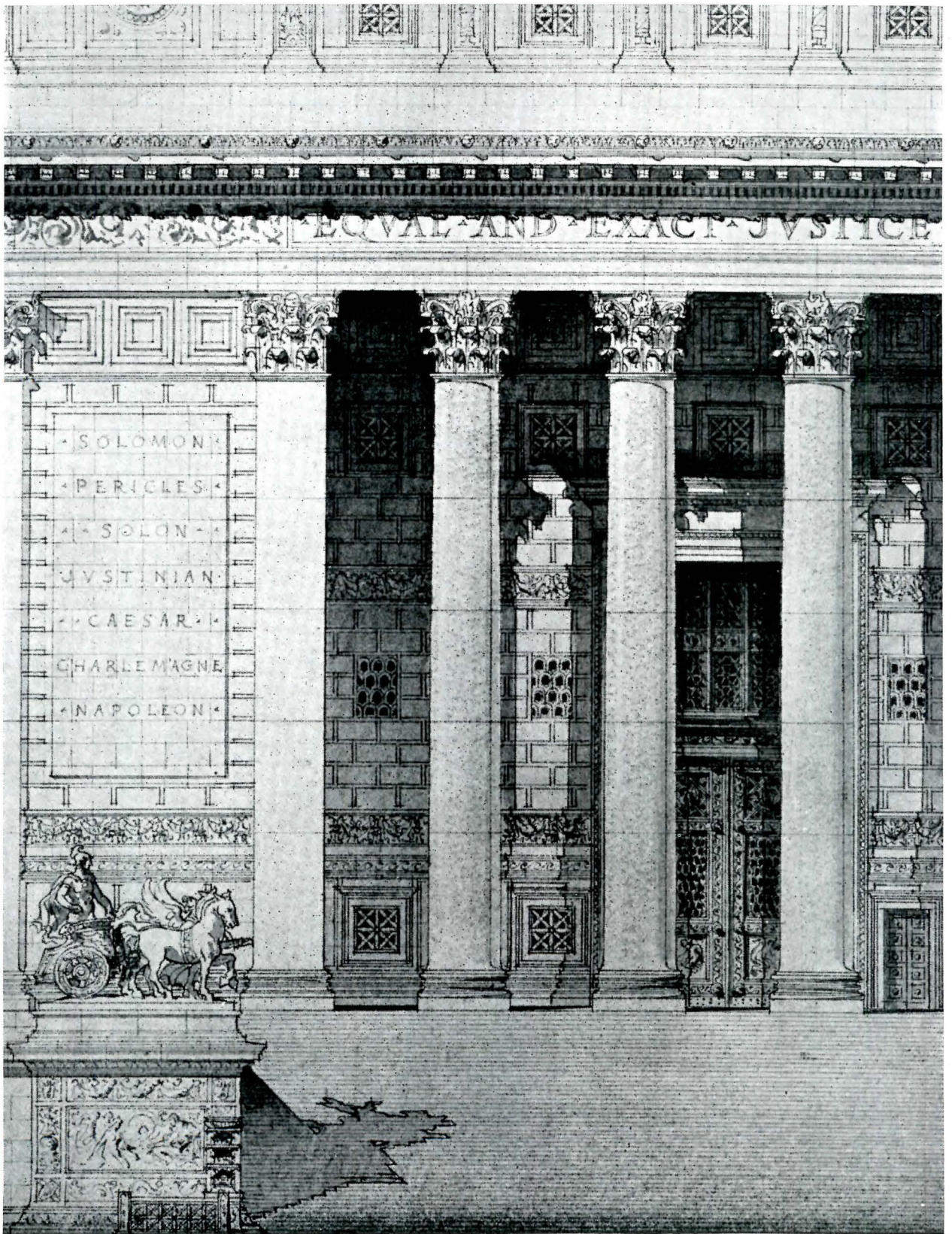
On another occasion he "took Mrs. Gilbert sight-seeing in Holland". But Mrs. Gilbert's story was



DETAIL OF ELEVATION AT $\frac{1}{8}$ " SCALE, COMPETITION DRAWING FOR NEW YORK COURT HOUSE

DRAWN BY THOMAS R. JOHNSON OF THE OFFICE OF CASS GILBERT

Cass Gilbert, Architect



DETAIL OF ELEVATION AT $\frac{1}{16}$ " SCALE, COMPETITION DRAWING FOR NEW YORK COURT HOUSE

DRAWN BY THOMAS R. JOHNSON OF THE OFFICE OF CASS GILBERT

Cass Gilbert, Architect



WATER COLOR SKETCH BY CASS GILBERT
HOTEL GUILLEAUME LE CONQUERANT, DIVES, FRANCE



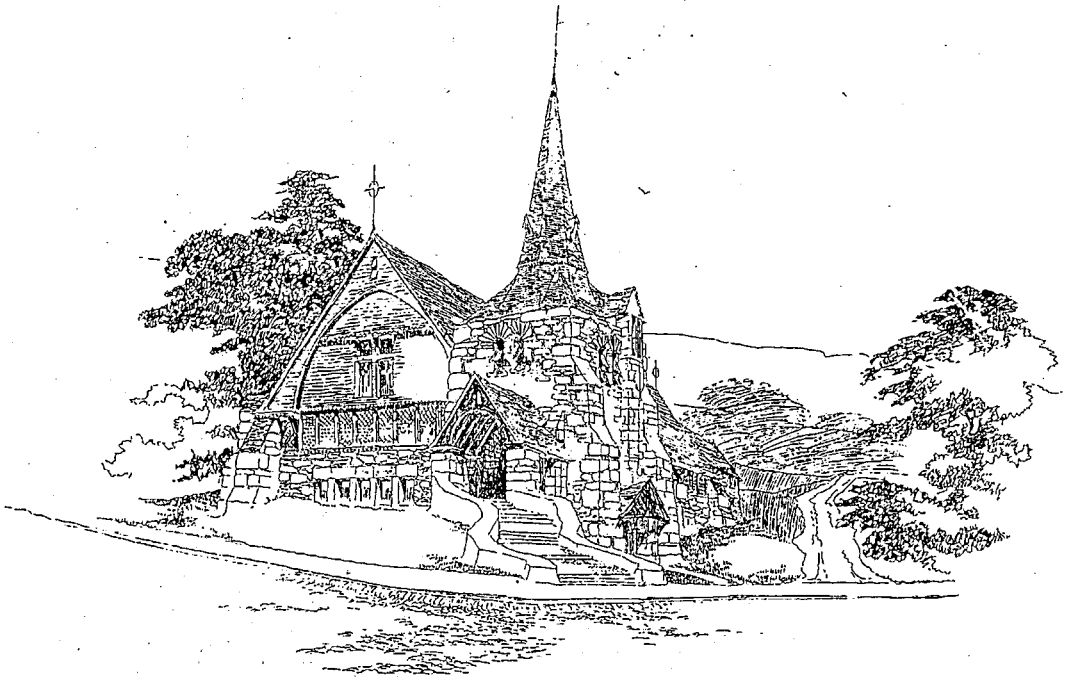
WATER COLOR SKETCH BY CASS GILBERT

TOWER AT ENKHUIZEN, HOLLAND

PENCIL POINTS

different. "We went into a little inn where a good view of an old gate or tower was had from a window rather high from the floor, and Mr. Gilbert started a water-color sketch". An inconvenience developed making it necessary to set the glass of water on the

floor. C. G. kept stooping down to put his brush in it, and after a while Mrs. Gilbert volunteered to hold the glass for him. "All right," he said, "I'll only be a few minutes." "But it was *hours*," said Mrs. Gilbert "and oh my! how my arm ached."



PEN DRAWING BY CASS GILBERT
SWEDENBORGIAN CHURCH, ST. PAUL, MINN.

PEN DRAWING, CHAPTER II

By Arthur L. Guptill

THE ESSENTIAL MATERIALS

THE MATERIALS NEEDED for pen drawing are few in number, simple, inexpensive, and easily obtained. Give a person two or three good pens and pen holders, a bottle of ink and a pen wiper, a few sheets of paper having a smooth, firm surface, a drawing board or some such support on which to place the paper, and a half-dozen thumbtacks with which to hold it there, a fairly soft pencil for constructing the drawing and a soft eraser for the later removal of the pencil lines and the cleaning of the sheet, a rather hard eraser or knife for the correction of pen lines, and he is well equipped for work of the usual sort.

The market is flooded with so great a variety of all such things that it seems necessary to offer some advice to the beginner to aid and restrict him in his selection. For the beginner, lacking guidance, is almost sure to purchase things of more diverse types and in larger quantities than is essential. One surely cannot become an artist by the simple expedient of collecting art supplies. If one buys but few things, instead, and learns to master them well, trying others only after this mastery has been attained, using greater and greater variety as added efficiency is gained,—comparing, rejecting, substituting,—he will eventually become partial to certain things especially suited to his own individuality. One should not, however, be too hasty or over-confident in his condemnation or rejection of materials;—one would not heap blame upon a musical instrument simply because he found himself unable to perform on it at the first attempt. Like such instruments, materials often have hidden qualities that it takes long practice to bring into evidence.

One cannot hope to do good work with any but the best materials. Those recommended are by no means the only excellent ones, but as they have stood the test of time and have been held in favor by many leading artists, we list them here without hesitation. If not available others can perhaps be found that will give equal, and possibly even greater, satisfaction. These as listed should prove sufficient for most problems. A few special things are described in later chapters, where their uses are also explained in some detail.

PENS. The choice of these is a matter of great importance, yet a matter concerning which artists themselves are so much at variance that it is small wonder that the student is at a loss to know where to turn.

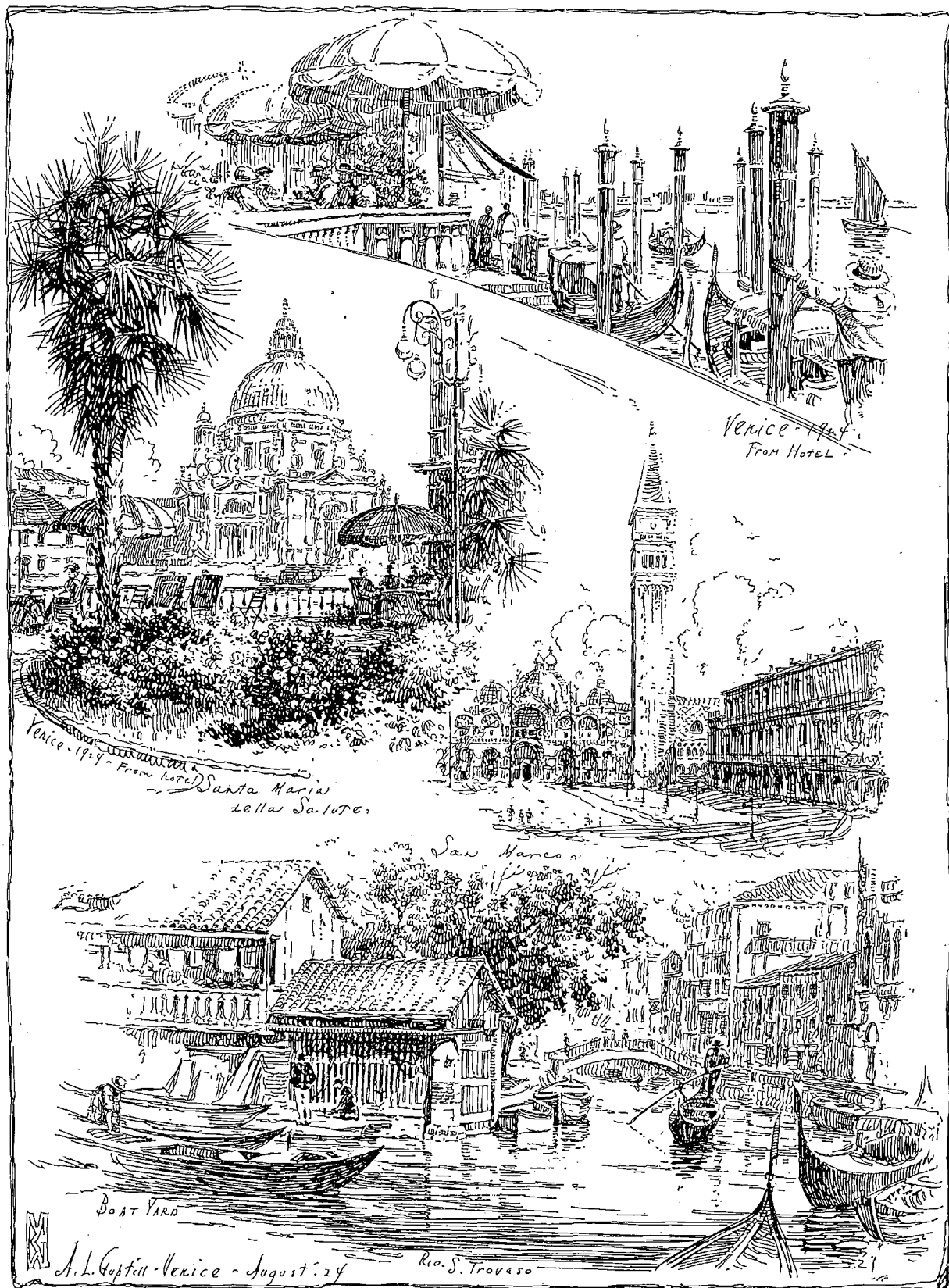
In the olden times there was no such bewildering variety as we have now. The word "pen" seems to have come down to us through the Latin "penna", meaning a feather or plume, and so originally referred to pens fashioned from feathers. These quill pens, and pens made from reeds, were used for

many centuries,—in fact from the earliest times of which we have definite record—until comparatively recent dates,—the former still being in common use even after the middle of the 19th century. Today, however, they are rare indeed, though Walter Crane in his *Line and Form*, recently published in England, says "...but though one occasionally meets with a good steel pen, I have found it too often fails one just when it is sufficiently worn to the right degree of flexibility. One returns to the quill, which can be cut to suit the particular requirements of one's work. For large, bold drawing the reed-pen has advantages, and a pleasant rich quality of line." In *Line*, another English book, by Edmund J. Sullivan, he tells us that "Reed pens, like the quill, have been almost entirely supplanted by the steel nib. The writer has small experience of them, but well remembers J. Pennell, that most expert technician, getting excited about them; and if an artist can become pleasurably excited about the handling of a tool, that tool is for the time being the best possible. That it is the calamus of the ancients lends it a special charm. A set of them as used by the Egyptians can be seen in a case at the British Museum,..." This gives us light on their antiquity. And Maginnis, in his well-known *Pen Drawing* has this to say, "Though somewhat out of fashion for general use, the quill of our fathers is favored by many illustrators. It is splendidly adapted for broad, vigorous rendering of foreground effects, and is almost dangerously easy to handle. Reed pens, which have somewhat similar virtues, are now little employed, and cannot be bought." The author quotes freely from these authorities since it has never been his privilege to use the reed pen and because his experience with the quill has been too limited to give his opinion any weight.

Whatever their value, both are now so scarce that a recent canvass of a number of leading supply houses failed to show any available. The writer was referred to one house for quills, and found them there, but these were all a gold nibbed, iridium pointed variety; certainly not the ancient type!

But of metal pens there is no end. These, too, are of early origin. Bronze pens were excavated at Pompeii, and we have other instances of their Roman use. These early pens copied the quill form, a form which we, today, find definitely suggested in our small "crow-quills" of steel, of which more will be said in a moment. Attempts were made to manufacture steel pens towards the close of the 18th century, but it was not until 1820 that Joseph Gillott in England made them practical, greatly improving their form, and by the introduction of machinery cheapening their price. Even

PENCIL POINTS



PEN-AND-INK SKETCHES BY ARTHUR L. GUPTILL

today Gillott pens still hold their place among the best made, and their fine and medium points seem to be in such general use among artists that we describe them first. One of the smallest of these, though not the smallest, is the "Crow-quill" (659), a most delicate point, making an extremely fine line unless pressure is applied, when it will yield a line of astonishing width for so small a pen. Also very fine is the Gillott lithographic pen (290), made for drawing on lithographic stone but popular for use on paper, and the Gillott mapping pen (291). This latter instrument is particularly facile for one so small, and is perhaps as well liked generally as any of the extremely fine ones. These three pens are relatively quite expensive, each point costing not far from ten cents; if not abused they will give a very fair length of service, but if repeatedly called into use for lines beyond their natural capacities they will soon fail. For the beginner such points are often dangerous, leading him into finicky ways. They are naturally better suited to small than to large work, and are at their best on smooth papers. The tiny Gillott tit quill and the almost equally small No. 1000 and No. 2000 are finer than are ever needed for the usual forms of pen drawing. It is well for larger drawings or for rougher surfaces or for any lines but the finest to turn to some such points as the Gillott 170, 303, or 404. These are not only better for all around work, particularly for the beginner, but are cheaper, ranging in the neighborhood of fifteen to twenty cents a dozen. The 170 is fine enough for almost any purpose, the 303 is a very good medium size, while the 404 will give as coarse a line as is usually needed. No. 1, about the size of the 303, is recommended by the makers for flourishing and ornamental pen work. When pens larger than the 404 are required it is as well to turn to any of the makes commonly on sale. Gregg recommended Esterbrook Bank pen, No. 14. For lettering of the type shown on most of the accompanying illustrations a ball or oval or dome pointed pen is good, and the same pen does for rather coarse lines of uniform width. For many types of decorative drawing wide stubs, such as are frequently used for lettering, are practical. These may be had in many sizes. Then there are the round pointed or "spoon-bill" pens, also primarily intended for lettering; these are suitable for some types of pen drawing, particularly work of a very large or bold nature where lines uniform throughout their length are needed.

These, then, are the pens most often used for drawing. There are special pens, to be sure, such as the "double line" pen, sometimes employed by bookkeepers for the ruling of two parallel lines with one stroke, and occasionally turned to by artists for novel effects; and the glass pen, giving a line of equal width throughout and permitting the making of a stroke in any direction. The fountain pen, too, is coming into greater use as a drawing instrument, though most of the waterproof inks do not work in it to advantage. Especially for sketch work where it is not convenient to have ink at hand

in bottle form the fountain pen is of value; the author for a long time carried one filled with a slightly diluted brown ink which gave interesting effects. Gold pens find favor with a few artists, too, but there is little chance that they will supplant the steel points for general use.

PEN HOLDERS. As it is not uncommon for several pens to be employed on a single drawing it is convenient to have several pen holders, one for each of them. The crow-quill pens, and some of the other tiny points, require special holders, which may be purchased with them. In one type the round barrel of the pen is pushed on to a stock of approximately the same diameter. A member of cork slides down tightly to a convenient position, covering a bit of the upper end of the metal barrel. When the pen is not in use this member is pushed still further down to completely cover and protect the delicate point.

For the other pens, the forms of holder in general use for writing are satisfactory; in their purchase the only necessary care is to see that they are sufficiently small in diameter to enter the neck of a bottle without becoming soiled with ink.

It is generally preferable to have the holders for the various pens of different colors, or individually marked by notches or in some such way, so that each may be easily identified at a glance. Thus a red holder might always contain a Gillott 303 pen, a brown one a 404, etc. One would soon become accustomed to this arrangement and it would save time when changing from one pen to another.

PEN WIPER. One should have a small chamois or felt, or some practical sort of wiper for his pens and should keep them clean. Avoid one of linty character with loose particles to catch in the nibs, causing blots.

INK. Ink, like pens, is of early origin. Evidence of its use is found on papyri and manuscripts dating back more than 4000 years. A large part of this early ink was colored. Today most of the ink used for drawing is black, and much of it is waterproof. There are many kinds on the market which are satisfactory. Of American inks, "Higgins'" is one of the standards; of those made in France "Bourgeois' Encre de Chine Liquide" is good, while "Winsor & Newton's" and "Rowney's" are among the best of those from England. Most of the American inks, including Higgins', are put up in conveniently shaped bottles, not easily tipped over, with practical stoppers, fitted with quills to aid in filling ruling pens. The waterproof ink is essential when drawings are to be tinted with color or wet in any way as by the acid bath used in washing off a silver print. For other purposes where it is not to be exposed to moisture the ordinary black drawing ink is considered by many to flow better than the waterproof. If one is making drawings which are to be reproduced he should avoid extremely glossy inks, as they are not popular with the photo-engraver. Of the many colored inks on the market something will be said in a later chapter.

PAPERS. Bristol board is one of the most commonly used surfaces for pen drawing, and the better grades offer many advantages for this work. First of all it is smooth, which allows the pen to move over it in any direction without danger of the points stubbing in rough places. Again, it will stand a fair amount of erasing without serious injury (though erasing does frequently make it somewhat unsightly, destroying the gloss); it is firm enough to prevent minor irregularities of the surface under it, such as thumbtack holes in the drawing board beneath, from affecting it to any considerable degree,—a great advantage over some thin papers, which can hardly be worked upon unless bristol or some other smooth board is placed under them. It stays quite flat, too, unless a great amount of ink is used when it sometimes shows a tendency to buckle, and is stiff enough so the finished drawings may be easily handled. As a rule both sides are alike so if one side is ruined the entire sheet is not wasted. It is produced in various weights, two or three ply being those customarily employed, the two being rather thin but doing well for practice work, and the three a good average thickness. And it is not all of exactly the same surface but comes in different finishes, some very glossy, some smooth but only slightly shiny (and this is best for most purposes), and some dull. Some, too, is rather rough, called kid-finished; this is not as good for most pen work as are the smoother grades. We have touched on the fact that eraser marks show rather plainly, and this is especially true on the smoother grades. Likewise water makes dull spots of an unpleasant contrasting nature; also the board bends to form unsightly places if it is rolled and pressed or otherwise misused. Therefore, if the appearance of the finished drawing is important, it is well to protect the surface as much as is possible. When you buy ask for a good make, one which is not too soft or absorbent, and then be sure that the sheets have not been bent or dented or otherwise damaged, and never allow bristol board to be rolled tightly, if at all, and if you carry it rolled under the arm protect it from crushing if you wish it to keep its smooth appearance. One cannot be too careful of it.

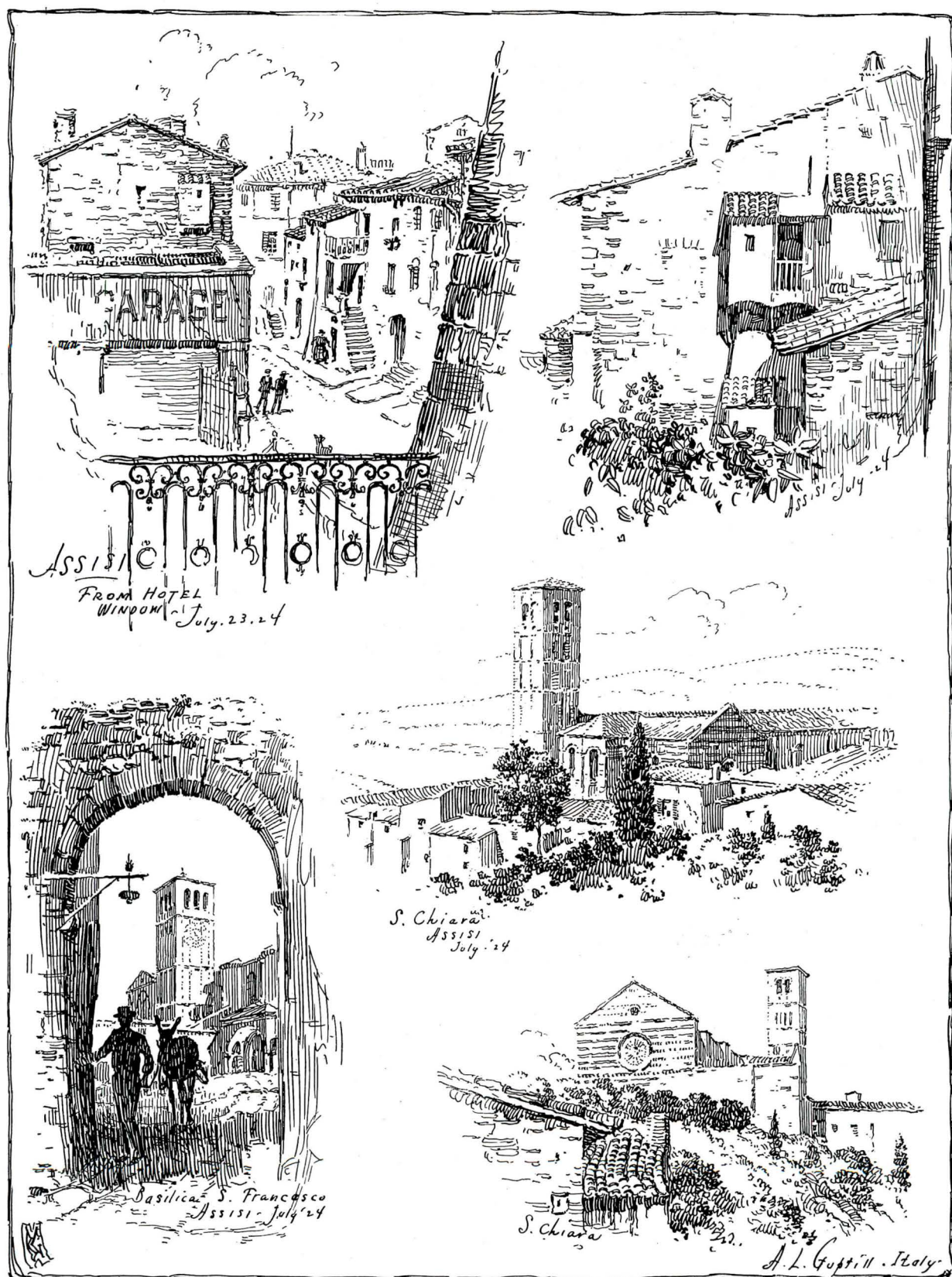
If one wishes something which is damaged less easily, which stands erasing to better advantage, and which has a surface of a more interesting nature, let him try Whatman's hot pressed paper. This can be purchased in a form already mounted (ask for Whatman's hot pressed, mounted) or can be bought in sheets at smaller expense. These sheets may be used just as they are or, as they have a tendency to buckle greater than that of bristolboard, they may be stretched onto a drawing board. One means of doing this is as follows: choose a board at least an inch or two larger all around than the paper, and lay the paper loosely on this. With a sponge wet the paper thoroughly on the upper side, leaving about an inch of dry edge or margin all around. Allow the water to stand several minutes until the paper has swollen and buckled into a hilly surface. Then sponge off the superfluous water, leaving the

paper just damp. As you complete this operation slightly dampen the previously dry margins; at once apply strong mucilage or glue to these margins; by the time this is on, the paper will have become fairly flat again, though still hilly. Next turn the paper upside down (it is best to have help with this), being careful not to get glue on the board anywhere under the sheet, and press the glued margins tightly to the board until they adhere all the way around. The paper will still be full of humps; as the edges are pressed down it can be drawn a bit smoother (do not pull it too hard for: if too tight it will break when dry) and shrinkage as it dries will do the rest. If you make sure that the glued edges are kept fast by rubbing them down once or twice with your knife handle or some other convenient object you will have, in a half-hour or less, a splendid surface of great strength: a surface showing injury or marks of erasing far less than bristol board. Of course one must not extend his drawing onto the glued margins, as it is almost impossible to remove them whole when the rest of the sheet is cut from the board. Usually they are allowed to remain until later when they are taken off at leisure by soaking them thoroughly with water until they are soft, when they may be washed or scraped off without trouble.

In addition to this Whatman's hot pressed paper there is another grade known as "cold pressed", somewhat rougher, as it is really a water color surface. Its roughness prevents pen work of the most perfect kind yet permits certain interesting effects, as all lines drawn upon it have a tendency to be irregular or broken. If pen drawings are to be tinted with color this is an especially good paper though the hot pressed paper stands washes well too. In respect to wash application both of these papers have an advantage over bristol board, which, with the exception of the kid finished grade, is not well suited to such work.

Besides the bristol boards and the Whatman's paper there are, of course, many other surfaces available which will take the pen well. Generally speaking such surfaces as are good for writing with a pen will do for drawing. The essential qualities to be sought are a fair degree of smoothness coupled with sufficient firmness to prevent the stubbing of the pen or the blotting of the ink and to allow the use of an eraser or knife for corrections without becoming absorbent or too unsightly in appearance. Some of the ordinary bond papers meet these specifications satisfactorily, especially those of the heavier weights and better grades.

The architect and his assistants frequently use tracing cloth for the making of pen drawings, first dusting it with prepared powder as for ruled work, and of course drawing on the dull side. The finished results may then be blueprinted, or prints in black and white, or brown and white, may be obtained, done by a similar process. Another advantage of this material is that its translucency allows it to be used over a previously constructed layout on which one may work as long as he wishes, the



PEN-AND-INK SKETCHES BY ARTHUR L. GUPTILL

tracing cloth drawing being simplified to a representation of the essentials. It is interesting to note, also, that the photo-engraver, when making reproductions, can work from a tracing cloth drawing as inexpensively and well as from one on paper.

Tracing papers of the stiffer grades are sometimes used in the same way, but whereas the cloth is strong and will stand almost any amount of erasing, the paper is easily torn or pricked through by the pen and can scarcely stand rubbing at all.

Various chalk boards such as are used for making "scratch drawings" (mainly in imitation of wood-cut effects) are available, as are "Ross Boards" of a somewhat similar nature. These are described in the chapter "Drawing for Reproduction".

Tinted papers and boards are sometimes used, too, and occasionally drawings are done in white ink on black or very dark paper. These are among the unusual types of work discussed further on.

DRAWING BOARD. Almost any smooth drawing board of convenient size will do. It is best to have one large enough to afford some support to the hand in addition to the space given over to the paper, as one cannot do his best work in cramped space. If the board is at all rough it is advisable to put a few extra sheets of paper beneath the drawing paper as a means of securing a smoother surface. If paper is to be stretched it is just as well not to use a new board if an older one is available as the stretching process, with its water and glue, may cause warping, slight raising of the grain of the wood, and a somewhat unsightly general appearance. Whether a board is old or new, that part of it beneath the "stretch" (as the stretched paper is called) should be washed beforehand to make sure it is clean, as otherwise stains may come through the paper while it is damp, and show on the surface.

THUMBTACKS. If paper is not stretched it is usually thumbtacked to the board, so one should have a dozen or so medium sized thumbtacks. They may be pressed into some convenient part of the drawing board when not in use.

PENCILS. As most drawings are laid out in pencil before they are inked a few pencils are needed. On smooth bristols medium or rather soft grades are good, such as HB or B or 2B; for rougher paper harder points like the F or H or 2H are better.

RULER. Whether or not a scale ruler or such instruments as a T-square and triangles are needed depends entirely on the nature of the work.

ERASERS. There should be some kind of a soft or medium eraser for removing the pencil construction lines and for cleaning the entire sheet after the pen work is done. Art gum is excellent for this latter purpose and is one of the few erasers which can be used on smooth bristols without destroying the gloss. If it is employed for the final cleaning of the sheet it will not lighten or gray the pen lines to the extent that many erasers do. This is important if a drawing is for reproduction. A harder eraser, perhaps one of the red or green ones is good for the more stubborn pencil lines and if employed patiently it will remove ink lines as well. The usual ink erasers are too hard and gritty for most paper surfaces and should be used only with the greatest caution, if at all. The chemical ink eradicators will not remove most of the drawing inks.

KNIFE. Many artists prefer a good sharp knife or razor blade to anything else when it comes to making corrections. A knife is also a great convenience for many other purposes in connection with work of this kind.

ERASING SHIELD. A thin metal erasing shield such as draftsmen use is often almost indispensable when erasures are necessary as it may be so placed on a drawing as to leave exposed to the action of the eraser only such portions of lines as are to be removed. If lines are unintentionally grayed by an eraser they should always be blackened again before reproduction is attempted, as gray lines sometimes show ragged edges or even fail to reproduce at all.

BRUSH OR CLOTH. The habit of dusting one's paper every few minutes is an excellent one, as it prevents the accumulation of bits of lint and the like which might get into the pen and cause blots. A soft brush or a cloth which is not of a linty nature will do for this.

BLOTTING PAPER. Some accidents are sure to happen; occasionally a bottle of ink is splashed or spilled, or a pen drips. Have a few blotters on hand for such an emergency.

BOTTLE HOLDERS. This danger from spilled ink is so real that some artists, in order to lessen it, use metal bottle holders which are on the market. Such a holder is not, however, absolutely essential.

WROUGHT IRON PRECEDENT, IV

By Gerald K. Geerlings

(EDITOR'S NOTE: The three preceding articles on wrought iron appeared in the June, July and September numbers. In the last installment the author began the consideration of the ornamental motifs which lend themselves naturally to the material, and in this issue completes that phase of the subject.)

IT WOULD SOUND like the proverbial fairy-tale to record that once upon a time there lived an architect who drew for his client a set of drawings, whereupon the latter said to him, "Go forth and hire me contractors who will build me this building as you have drawn it". It would seem like a tale within a fairy-tale if the same owner added, "Have you specified the ornamental iron work to be wrought? Excellent, my worthy knave, so be it!"

The modern architect rather expects to draw up two sets of plans. He puts forth his best efforts in the initial drawings but is fearful the while that they will serve only for the contractors' estimate and the owner's rejection. The second set consists of the architect's fallen hopes and his draftsmen's erasures, along with a generous sprinkling of makeshift substitutes in design and material.

Scarcely a single, humble "w. i." notation dares remain. The "w"s are all replaced by "c"s because the costs ran too high.

Yet this wrought iron weeding need not necessarily occur.

When it is demanded that all wrought iron designs disappear under a rubbing machine because of high costs, it is frequently because the motifs have been drawn for a cast material rather than a wrought. Quite naturally the estimate is unreasonably high. Practically all building materials are either cast or carved; iron alone is wrought. Thus in approaching a wrought problem for the first time it is only natural that the designer should make use of those forms with which he is accustomed to work, and merely label the result "wrought iron". The lack of appreciation of the nature of wrought iron is well illustrated by the fact that some offices specify that an alternate bid be taken for cast and wrought iron on the same set of details. A little bit like

staging a race between goldfish and canaries! While one does one thing naturally, the other is left gasping for air.

In any building where the high cost of wrought iron will exclude its ultimate use, it is good generalship to give thoughtful consideration to the design of each item. The estimate will undoubtedly be

lower if the designer visualizes the execution at the forge of what he draws on paper. He must not expect a blacksmith to achieve in iron what a carpenter could do in wood or a sculptor in stone. Previous paragraphs have dealt with the inaptitude of double-curved mouldings in wrought iron, but rather the propriety of employing dentils and the use of certain simple sections for rails and stiles. What follows will deal with the charm of wrought iron when its embellishments are also kept

in character and limited generally to chisel marks, grotesque heads, floral forms, *retroussée* work, and various textures.

At this juncture it may be appropriate to briefly mention some of the carved Spanish arabesques which the student of wrought iron will sooner or later remember or discover in Prentice's book. It may be that the Spanish craftsmen were gifted with great foresight. Certainly they securely installed, intrenched and barricaded themselves in the Hall of Fame behind the many triumphant *tours-de-force* they achieved in iron. They probably foresaw the payday soon would dawn when craftsmen of all abilities would be put on a commercial basis of so-many-grilles-an-hour in order to properly supply their families with plenty of Packards and radios. And so, taking all the time they needed to carve in iron as though it were wood, they produced what man had not attempted before or since. Perhaps the craftsmen who are responsible for the carved

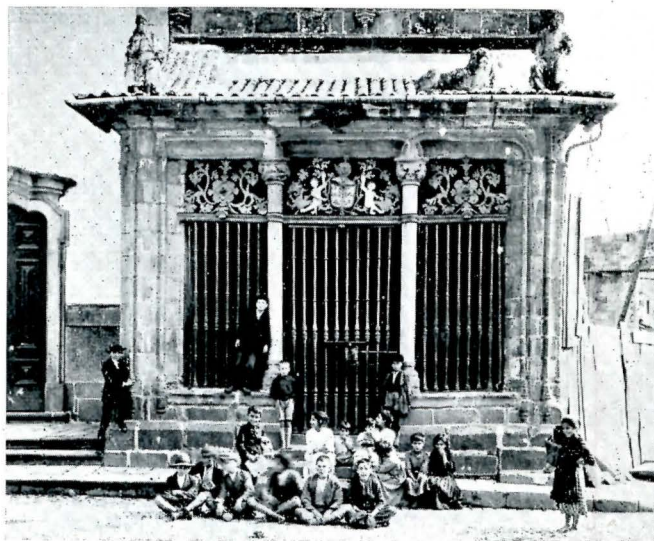


Photo by G. K. G.

BRAGA, PORTUGAL

A wrought iron grille with a bold and colorful retroussée panel. It would be out of key except for the exterior brilliance of the vermillion roof tile and the variegated church wall.



Photo by G. K. G.

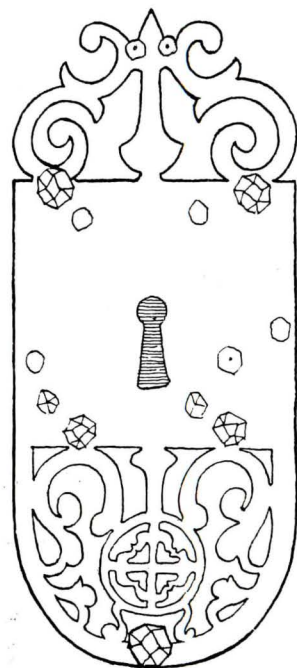


Photo by G. K. G.

FIGURE 1, DETAILED VIEWS OF THE MAIN EXTERIOR DOOR, CASA DEL CONDE DE TOLEDO
KEY ESCUTCHEON, KNOCKER, AND RETROUSSEE STUDS

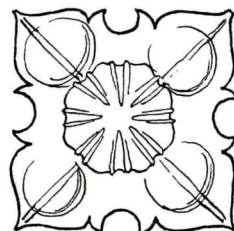
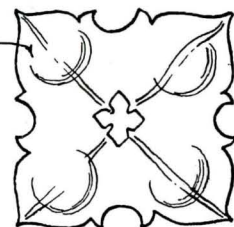
2 TYPES OF STUDS, $4\frac{1}{2}"$ □

RETOUSSÉE WORK
 $\frac{1}{16}"$ IN THICKNESS



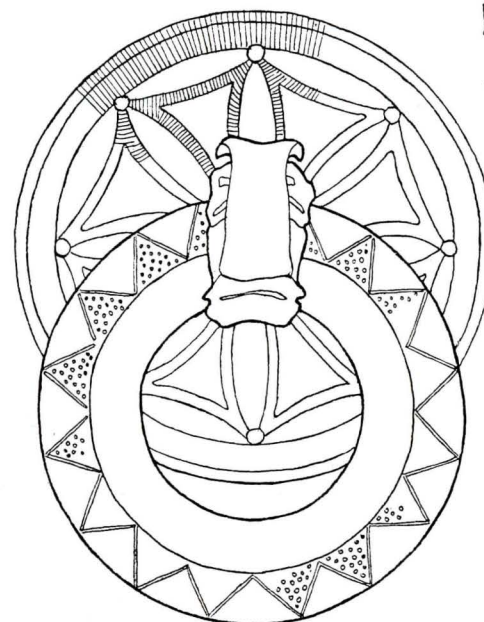
KEY-PLATE ~

PLATE $\frac{1}{8}"$ THICK
SCALE: $\frac{1}{4}" = 1"$



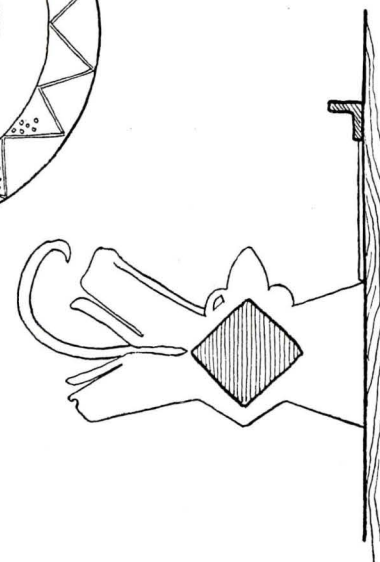
SECTION

DETAILS OF EXTERIOR DOOR ~
"CASA DEL CONDE
DE TOLEDO."
TOLEDO, SPAIN.



FRONT & SIDE
VIEWS OF
KNOCKER

SCALE: $\frac{3}{8}" = 1"$



B.F.G.

G.K.G.

FIGURE 2, DETAILS OF KEY ESCUTCHEON AND KNOCKER FROM THE CASA DEL CONDE DE TOLEDO

arabesques were disappointed in love and had in life no other interests than their work. Their labors may have been done in the heat of religious fervor. Be that as it may, there are hardly more than two craftsmen in the country at the present time who could reproduce the originals in the same manner as they were forged. The finished treasures would be rightly regarded as museum pieces. A single arabesque would take an indefinite length of time to execute and could not be contracted for with a time-penalty attached. In short, carved iron work as beautiful as the Spanish classics, would scarcely be adaptable in this age when craftsmen are limited in their abilities and funds are curtailed for ornamentation purposes. Our concern here is with the problem of the modern architect: what can he design to the best interests of client and building, which can be readily fashioned by the craftsman. Both time and expense govern the architectural tastes of the twentieth century business man, and if the cost of wrought iron runs beyond what the owner thinks a bronze design would cost him there is but little likelihood that he will consent to the use of the former. And after all, why not treat wrought iron as it delights in being humored? Then it is simple to forge, pleasing to see and easier to buy.

A wrought iron surface is automatically ornamented by the treatment it assimilates on the anvil. It suffers martyrdom while the hammering lasts but it comes out smiling with high lights and black spots in a free-for-all mosaic which no subtle design could accomplish. "Texture" must therefore be jotted down as surface ornament number one, but second to it and "very popular in all models" and nationalities of wrought iron work, come chisel marks. Fig. 4 indicates at "a" the most common chisel mark ornamentation, and following that, some of the many possibilities in other shaped chisels and arrangements. The designer may here go as far as he delights in studying combinations and groupings of marks made by straight, curved or circular chisels on the red hot iron. The pattern should not be too complicated because it must be remembered that the craftsman has no pencil or chalk mark to follow on the glowing metal. He is compelled to trust to his eye for spacing the surface incisions. He cannot be hindered with too many chisels in hand or too complicated a design in mind. The result, moreover, would be less satisfactory than a simple procession of zig-zags easily hammered.

Our American cities are suffering under a grim decorum forced upon us by brick, concrete and steel.

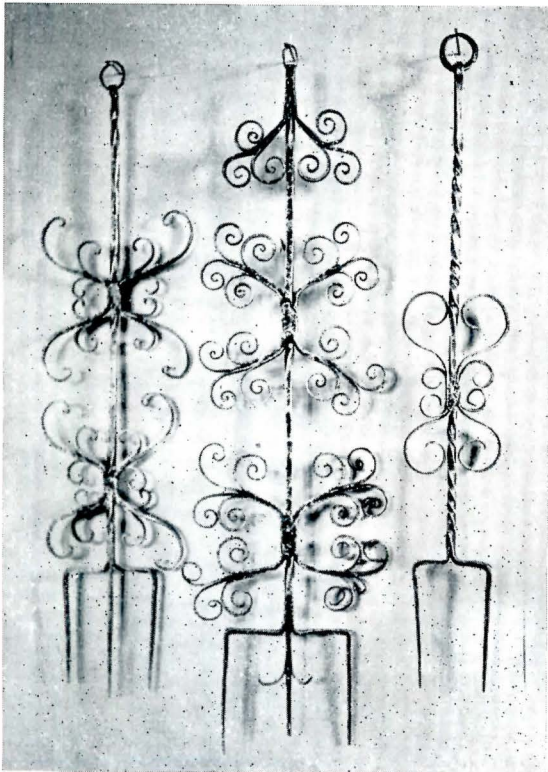


Photo by G. K. G.

THREE TYPES OF SPANISH HEARTH FORKS

The two at the sides are from Granada; the center one from Madrid. The high-lights are noteworthy. The handle of the fork on the right is rectangular in section, which accounts for the interesting twist.



Photo by G. K. G.

HEARTH FORKS FOUND AT GRANADA

Note the high-lights on the left and middle forks. The scrolls are made by splitting the parent bar which is square in section. The two ladles are brass.

WROUGHT IRON PRECEDENT

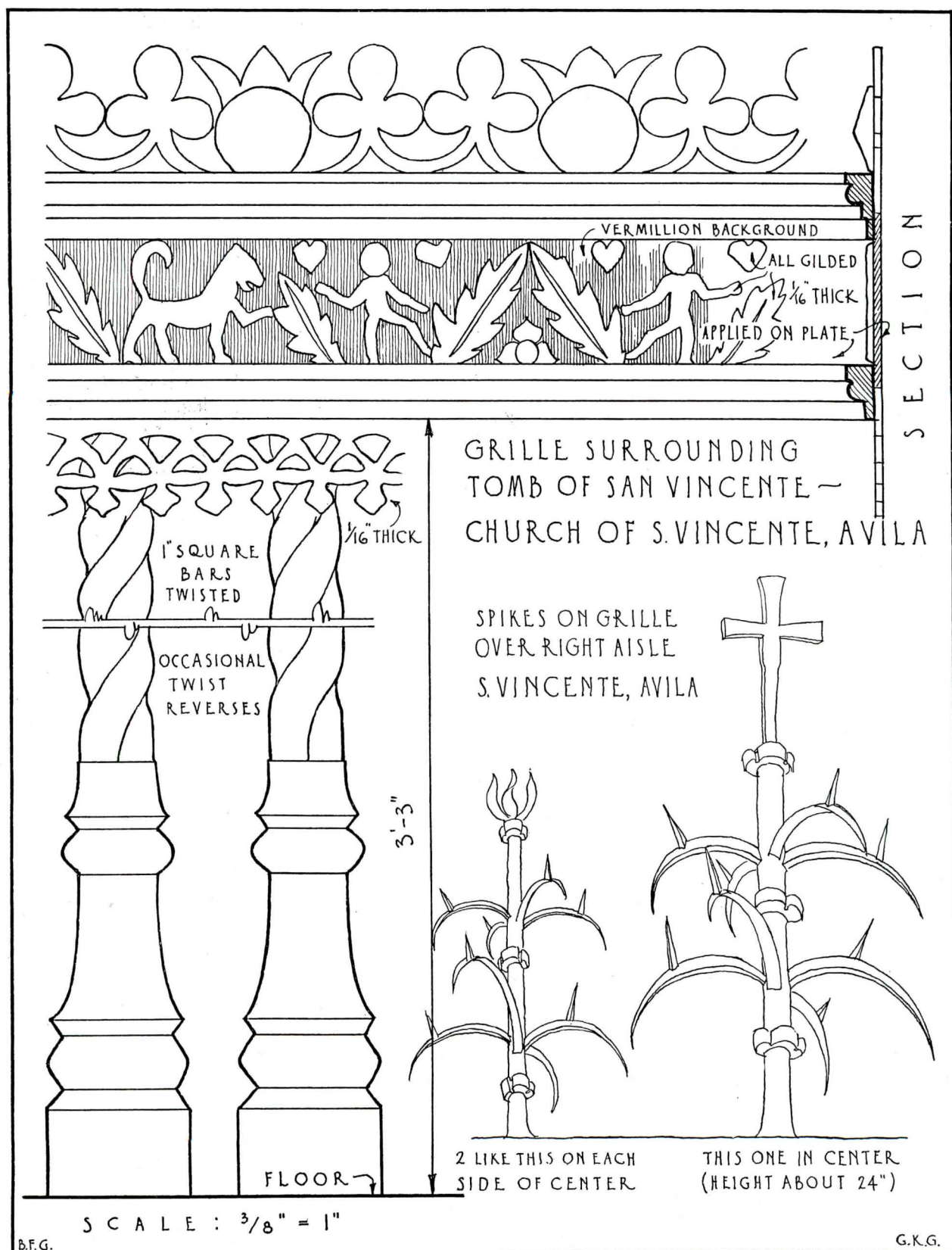


FIGURE 3, DETAILS OF GRILLE FROM CHURCH OF S. VINCENTE, AVILA

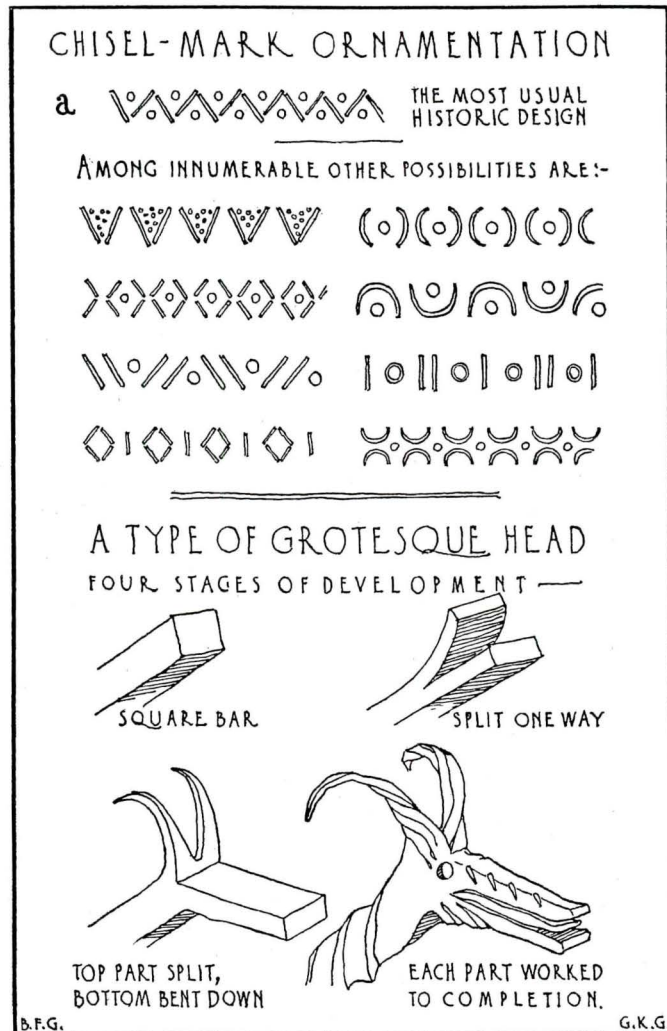
So forbidding must we appear that an eminent German on first seeing our lower Manhattan architecture exclaimed, "Geometry in stone!" Building materials and structural forms are governed by the exigencies of present day conditions and therefore cannot be radically altered, but in the embellishment of these forms—"geometry propositions"—there can be added the needed genial good humor and "comic relief". In all the ornamental material at the disposal of the architect none lends itself to frisking ways so well as wrought iron. This brings us to our next means of wrought iron ornamentation: grotesque heads.

In practically every grille or cresting there are certain to be loose ends, and what is a more delectable *coup-de-grace* than to hammer these into swallow-tailed fish or open-mouthed dragons? The illustration of the well-head at Bruck showed to what extent a craftsman with a sense of design and humor, or designing humor, may make fascinating creations from the commonplace. With what enlivening variety each panel is graced! Even in the more classic *chefs-d'oeuvre*, the cresting motifs, when not fiercely arrayed as spikes, are fantastic fruits, flowers, leaves or animal heads. It will not be considered an extravagance by the architect when he understands that a grotesque head as a termination for a spiral or cresting unit is easily wrought. At such parts the metal is not thick and therefore readily moulded. Even a thick bar is easily split at the end into three sections for a distance of an inch or two, in order to form a head of one section and two twisting horns of the two other parts (Fig. 4). To the sincere wrought iron craftsman, a specification for a series of these humorous heads as scroll terminations, etc. is the equivalent of a genial invitation to enjoy himself. If, however, he has no interest in his forge beyond its

monetary returns, he will be incapable of creating these ingenious grotesques. It is therefore of primary importance that the architect determine what types of craftsmen are estimating on his work, for in the end he will find that if the lowest bidding forge is a purely commercial enterprise, it cannot be expected to produce true wrought iron. The craftsman must revel in his work; each hammer blow must represent so much satisfaction in creating grace, harmony and humor, or his results are im-

poverished departures from the traditions of his guild.

A favorite means of ornamenting a running band or the elements of a floral cresting, is by the so-called "*retroussée*" work. Briefly, this consists of pounding out thinish plates or sheets of iron from the rear, resulting in the production of an embossed appearance (Figs. 1 and 2). The metal may vary from light-cardboard thickness to perhaps 1/16 of an inch. The design may or may not be pierced, generally not. The greater the thickness of the iron, the more urgent the need for heat in beating out the design from the back, while the thinner the metal, or the finer in scale the ornament, the more likely it is to be worked when cooling or cold. When the design is pierced it is often backed up by a



WROUGHT IRON PRECEDENT

in parti, is drawn in Fig. 3, from a grille in San Vincente, Avila. Both are clearly indicative of the spirit of wrought iron when used in this manner: there is a continuous variety and imagination at play, without an attempt to compete with bronze by employing a small, regular, repeating motif. An Eastern bank which opened recently, has a band of *retroussée* work running around a hundred feet or more of counter screen. Aside from the rather exhausting labor which advertises itself, the fact that each bay is meant to exactly duplicate its neighbor, makes one skeptical from across the room as to its identity. It seems misspent effort to ask an iron-worker to fashion all panels alike when it would be simpler for him to work from a scale drawing and vary the design as he progressed. At best he cannot compete with a casting for complacent accuracy.

Even a cursory review of several types of *retroussée* panels makes it evident that there is usually a certain Falstaffian, happy-go-lucky spirit present. In the Prato example (Fig. 5) the leaves in the frieze-panel sport a decided bravado in the irregularity of the leaflets. Scarcely two pretend to be

twins. In the grille surrounding the tomb of San Vincente, Avila (Fig. 3), the lions, their keepers and the separating leaves vary like so many humans. The iron-worker could hardly have made them otherwise. Had he been working from an architect's drawing he might have had every intention of forging each unit like every other one, but how displeasing if he had! If there are panels it is well to follow the cue of the famous Siena grille in the Palazzo della Signoria, where each has a different design intentionally: alike in character but varying in detail.

Since the *retroussée* panel is not to be exactly duplicated, the craftsman's task is lightened if the length be not too great. The average of the Italian grille panels approximates five feet. Adjacent panels are likely to vary and cause criticism, so that if there is to be a minimum of design done, the craftsman would probably prefer to make two designs for panels and alternate them, rather than to try to make only one type which would repeat exactly. With an interval between panels the irregularities which might offend purists would be diminished because

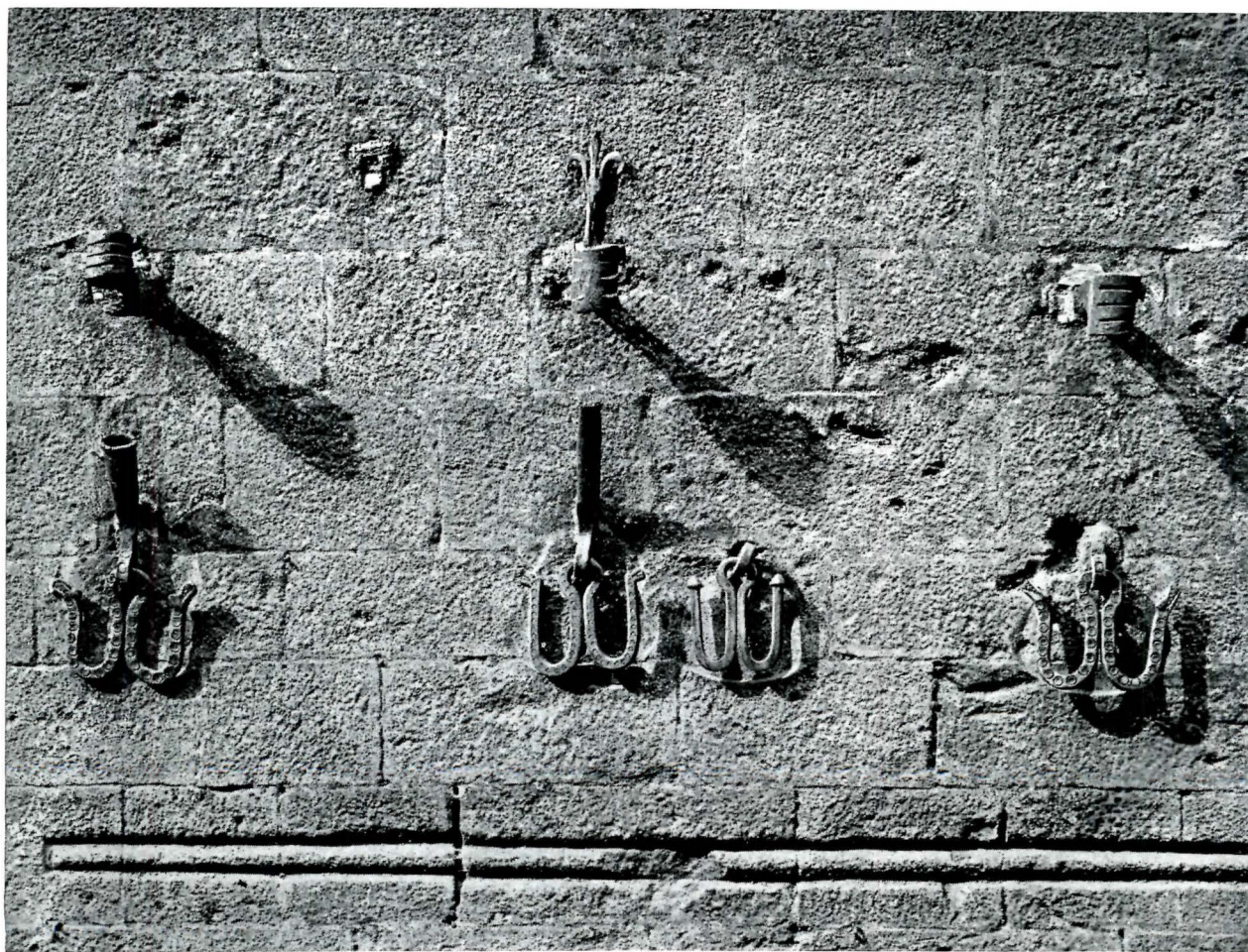


Photo by Alinari

VOLTERRA—WROUGHT IRON FLAG-POLE SOCKET ON THE PALAZZO DEI PRIORI

A variety of circular chisel-marks and simple terminations to simulate snake heads. The stone texture is also of interest.

of the greater difficulty in comparison. In height the Italian designs for the *retroussée* panels are often about the height of the repeating quatrefoil, and thus are seldom more than 10 inches. However, 10 inches in width makes an iron plate rather unwieldy when its length is considered as further complicating the problem. The success of the *retroussée* panel depends almost entirely upon the individuality of the craftsman executing it. The architect may have the scale—or even the full-size detail handsomely worked out, yet he cannot show on paper the exact elevation of every spot. By shading he can give some idea of what effect he had in mind, the degree of the modelling and the like, but all the little niceties and quirks which will make it an enjoyable ensemble, depend upon the interest, ability and personality of the man behind the hammer. There is an element of chance in it too, for all wrought iron work is somewhat like pastel or charcoal sketching—an unwitting stroke will sometimes strike the most charming note in the composition.

If the architect would make the craftsman feel

that he is attaching great importance to the execution of the iron work, he does well to make frequent trips to the forge, when that is possible, or else to send an able and sympathetic representative. At best, iron is difficult to realistically represent on paper, so that much can be done by directions and inspection at the forge. In such supervision it is assumed, of course, that the architect knows whereof he speaks; if not it is far better that he hold his peace and let the craftsman feel his interest but not his criticism.

A word only at this point about textures and finishes: there is no need for worry if certain surfaces are left without ornament of any kind. There should be plain bands to offset embellished ones. At the anvil there are a number of resources at the command of the workman, which by way of beating or brushing the red-hot surface will eliminate any undesirable monotony. Everything in moderation, of course, so that there should be no such overdoing of untouched surfaces as might appropriately be done in wood.

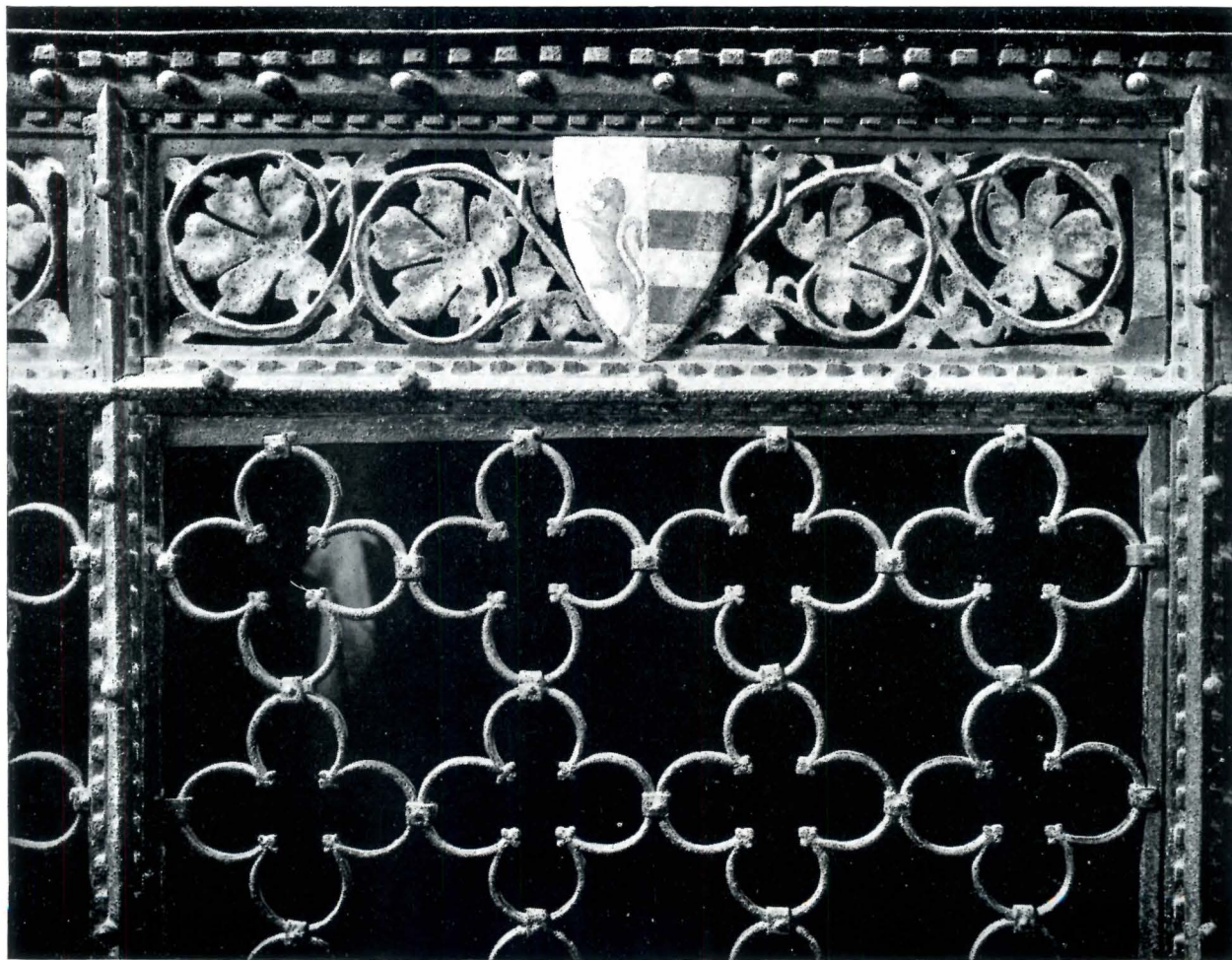


Photo by Alinari

FIGURE 5, PRATO—WROUGHT IRON GRILLE IN CATHEDRAL

There are four vertical sections to the grille, each having an upper and a lower division. All the upper divisions have 4 quatrefoils in width and height (31"), while the lower have 4 in width but 5 in height (39"). The stiles are 2½" wide. The crowning denticular rail is 4" high. The *retroussée* panel is 6" high; shield painted white and red; pierced leaves at side, gold.

PENCIL POINTS
SERIES
of
RENDERINGS
IN
COLOR



WATER COLOR BY CASS GILBERT

Size of Original, 11½" x 18"

Cathedral Cloister, Monreale

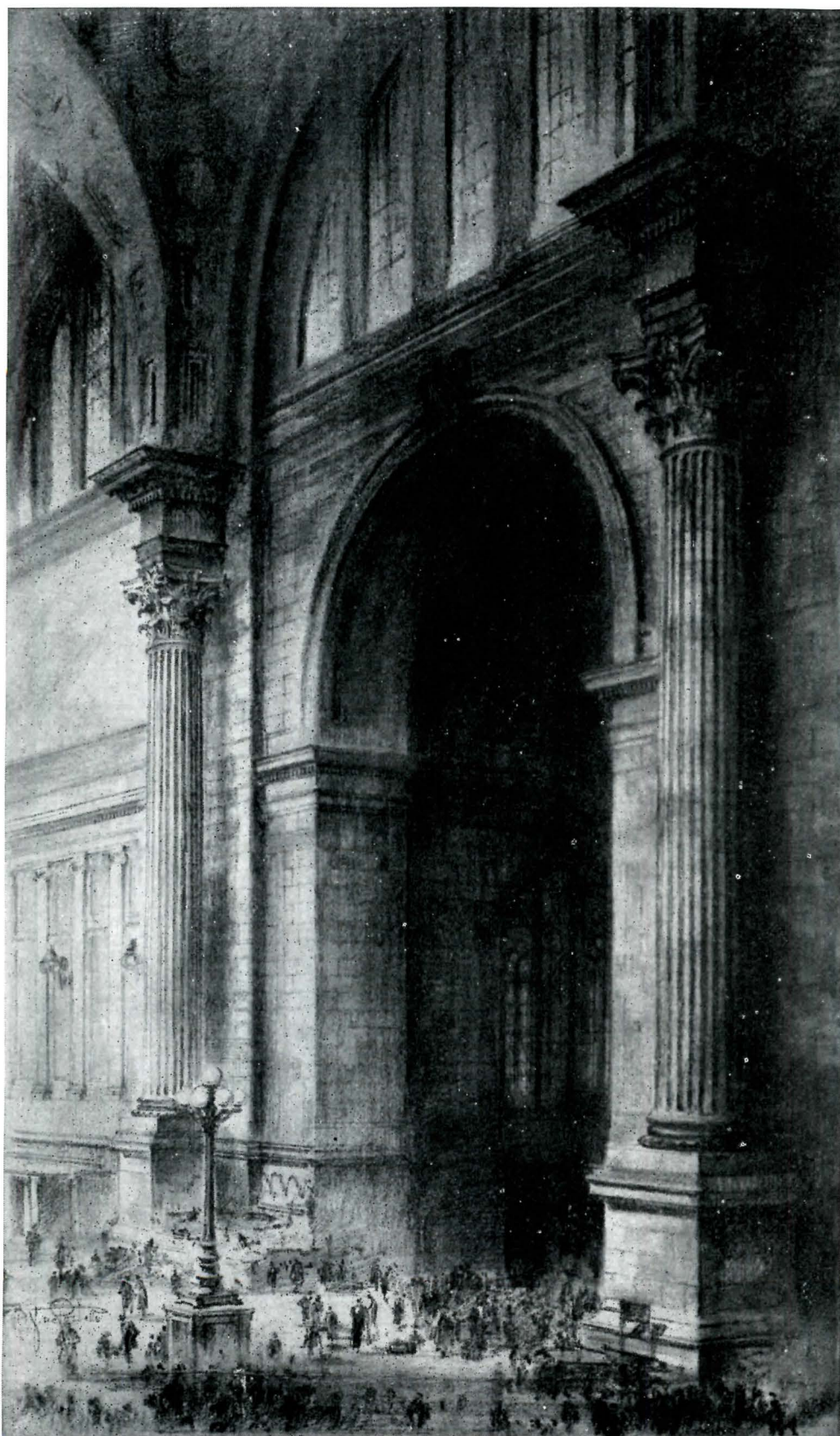


WATER COLOR BY CASS GILBERT

Size of Original, 13¼" x 19½"

Courtyard, Leicester Hospital, Warwick

PENCIL POINTS
SERIES
of
RENDERINGS
IN
COLOR



CRAYON AND PASTEL DRAWING BY THEODORE DE POSTELS
INTERIOR OF PENNSYLVANIA TERMINAL, NEW YORK

PLATE XXXIV

VOLUME VII

NUMBER 10

This drawing was made on cream colored tracing paper with crayon and pastel. It is a companion drawing to the color rendering of the exterior of the Pennsylvania Terminal reproduced in the August issue of this journal.



PEDIMENT GROUP BY GAETANO CECERE
FIGURE COMPOSITION FOR STAMBAUGH MEMORIAL AUDITORIUM

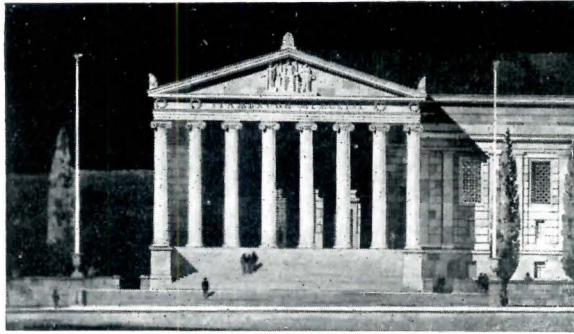
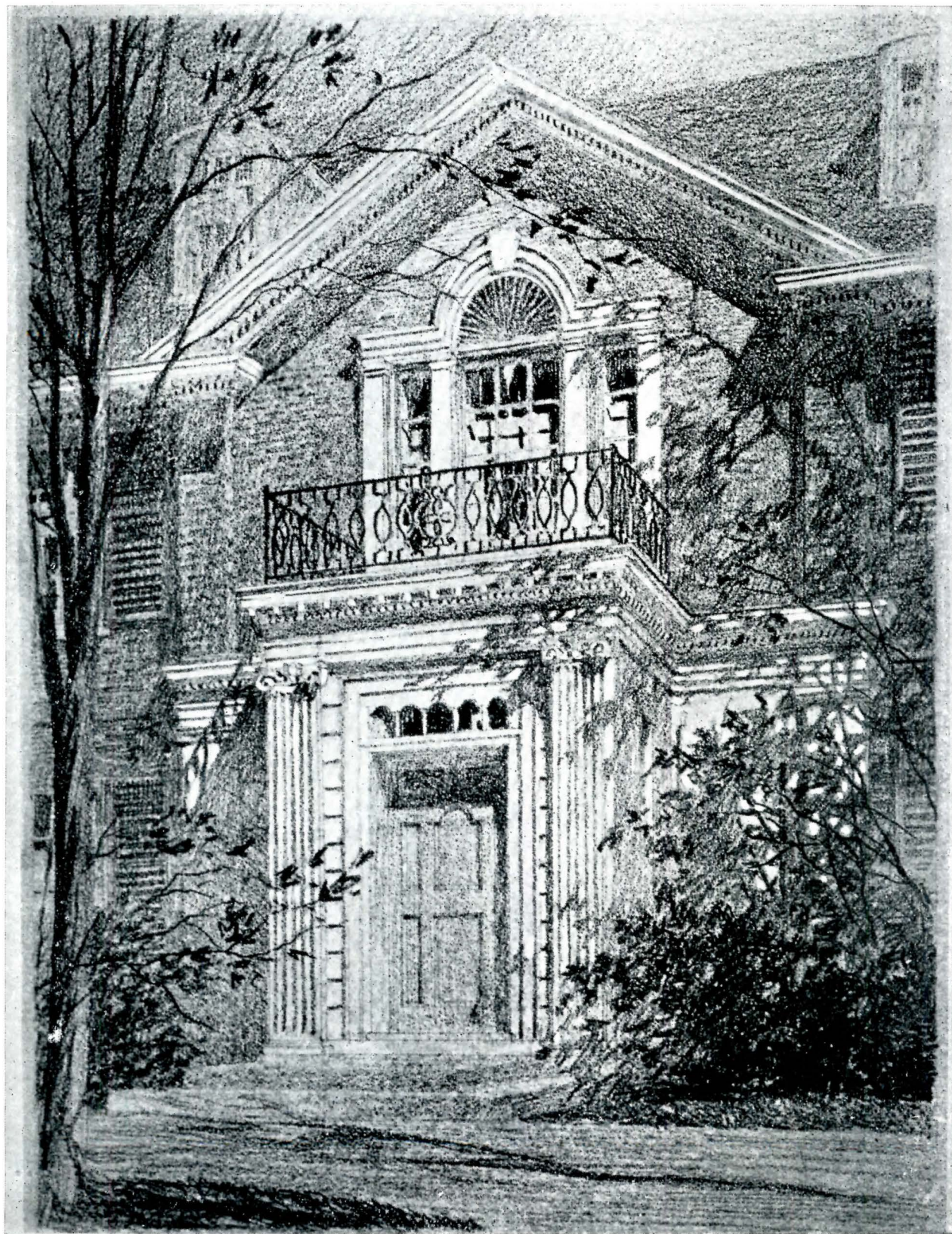


PLATE XXXV

VOLUME VII

NUMBER 10

This unusually composed pediment group by Gaetano Cecere is for the Stambaugh Memorial Auditorium at Youngstown, Ohio. The illustration above shows the group in place. The photograph reproduced on the other side of this sheet was made from the working model used on the job for carving the final version in limestone. The architects for the building were Helmle and Corbett of New York.



PENCIL RENDERING BY RICHARD M. POWERS

DOORWAY, HOUSE OF WALTER S. HAMMONS, ESQ., CUMBERLAND FORESIDE, MAINE

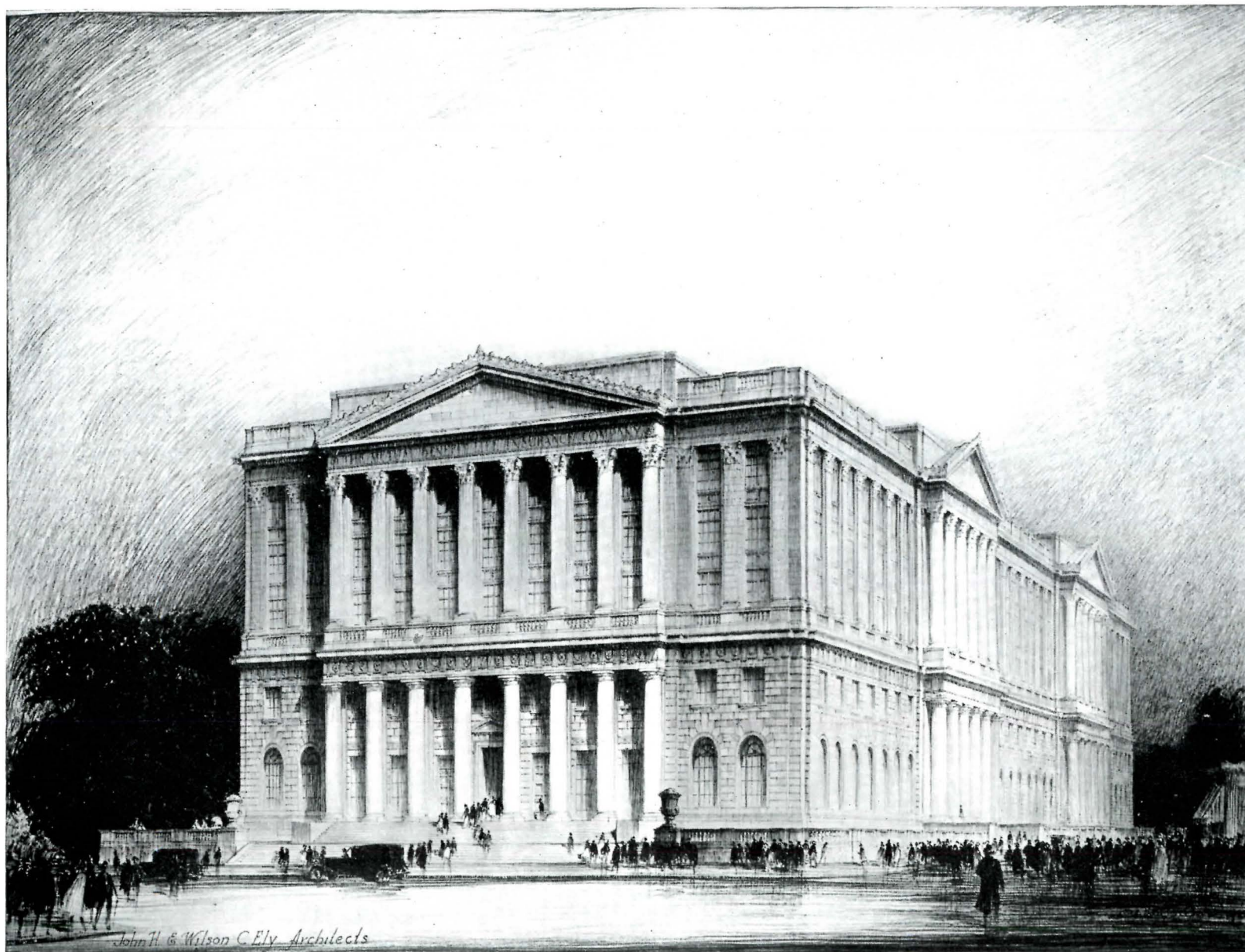
PENCIL POINTS

PLATE XXXVI

VOLUME VII

NUMBER 10

This plate shows another of the charming pencil studies made by Richard M. Powers, whose work was the subject of the leading article in the September issue of PENCIL POINTS. Little and Russell were the Architects for the house.



DRAWING BY CHESTER B. PRICE
MUTUAL BENEFIT LIFE INSURANCE COMPANY BUILDING, NEWARK, N. J.

PLATE XXXVII

VOLUME VII

NUMBER 10

This pencil drawing by Chester B. Price is about 26" long and is another example of this artist's exquisite manner of rendering architectural subjects at a comparatively small scale. John H. and Wilson C. Ely are the architects of the building.

THE RICKER MANUSCRIPT TRANSLATIONS

By Thomas E. O'Donnell

The following short summary of the translations made by Dr. N. Clifford Ricker of the University of Illinois will serve to introduce a series of articles, each devoted to a digest of one work. Each article will bring out the essential information set forth in the book and will be illustrated where possible by selected plates from the original publication. In this way our readers will at least make the acquaintance of some of the most notable writings on architecture which would otherwise be difficult or even impossible of access either by reason of their rarity or of their being written in foreign languages.—EDITOR.

ONE OF THE LARGEST COLLECTIONS of original manuscript translations of foreign books upon architectural subjects in this country, is that in possession of the Ricker Library of Architecture, at the University of Illinois.

The late Dr. N. Clifford Ricker, who for over forty years was head of the Department of Architecture, and for twenty-seven years of that time also served as Dean of the College of Engineering, during the latter years of his life devoted a considerable part of his time to the translation of valuable French and German treatises upon architecture and the allied arts. This work was begun by Dr. Ricker quite early in his teaching career, when he found it necessary to translate portions of foreign books on architecture, and preparing the work through some duplicating process so that it could be used as a text book by his students. These early translations were usually upon some practical phases of design, construction, history of architecture, heating and ventilation. His later and more important works were intended for the use of advanced and graduate students, faculty, and for library research. They were generally upon some phase of the history of architecture, theory of architecture, or upon the history of art generally, while a few were upon phases of advanced construction.

Many of these are of great value to the architect and designer, especially the four volumes on the *Theory of Architecture*, by Guadet; the *Rational Dictionary of French Architecture*, by Viollet-le-Duc, in eleven volumes; and also many of the volumes on the history of art and architecture by Durm, Hartman, Benoit, Lubke, Perrot and Chipiez, and others.

These manuscripts were all neatly typed by Dr. Ricker himself on special manuscript paper, and have been recently bound in handsome leather-backed bindings to make them uniform with the original volumes. They are now housed in the Ricker Library where they form a valuable part of what is one of the large architectural libraries of the country. The following is a complete list of the Ricker Manuscript Translations now on file there:

EARLY TRANSLATIONS

Made for and Used as Text by Students in Architecture, in the University of Illinois.

DIEHL, J. P.—*The Statics of Architectural and Engineering Structures*. Arched Construction. Vol. 1, Section 4 of the Handbook of Architecture. Darmstadt, 1883. Trans. by Dr. N. Clifford Ricker in 1885. University Blueprint, Urbana. Illustrated.

KEARSTEN, C.—*Reinforced Concrete Construction*. A Guide for Study and Practice. Berlin, 1915. Trans. by Dr. N. Clifford Ricker in 1916. University Blueprint, Champaign, Illinois. 2 vol. text bound in one. 1 vol. Illus. bound separately.

LUBKE, WILHELM.—*History of Architecture*. A part of Vol. 1, trans. by Dr. N. Clifford Ricker. No date. University Mimeograph Print, Urbana, Illinois. Bound in 2 vol.

REDTENBACHER, RUDOLPH.—*The Esthetics of Modern Architecture*. Berlin, 1883. Complete trans. by Dr. N. Clifford Ricker in 1884. University Blueprint. Illus. Urbana, Illinois.

REDTENBACHER, RUDOLPH.—*The Esthetics of Modern Architecture*. Berlin, 1883. An abridged trans. by Dr. N. Clifford Ricker in 1888. University Blueprint. Illus. Champaign, Illinois.

REDTENBACHER, RUDOLPH.—*Guide to the Study of Mediæval Architecture; Elementary Forms of German and French Romanesque and Gothic*. Berlin, . Trans. by Dr. N. Clifford Ricker in 1899. University Mimeograph. Illus. Urbana, Illinois.

MULLER-BRESLAU.—*Graphic Statics*. Vol. 1. From the German. Trans. of the first eighty-six pages, by Dr. N. Clifford Ricker in 1890. Original manuscript in handwriting. Urbana, Illinois.

PLANANT, PAUL.—*The Heating and Ventilation of Occupied Buildings*. Paris, 1880. Trans. by Dr. N. Clifford Ricker in 1885. University Blueprint from handwritten copy. Illus. Urbana, Illinois.

WAGNER, H., BUHLMAN, J., AND TIERSCH, A.—*Architectural Composition*. Berlin, . Second edition. Trans. by Dr. N. Clifford Ricker in 1900. University Mimeograph. Urbana, Illinois.

WHITTMANN, .—*Statics*. A handwritten copy or translation by Dr. N. Clifford Ricker of an early text on graphic statics. No date. University Blueprint. Illus. Urbana, Illinois.

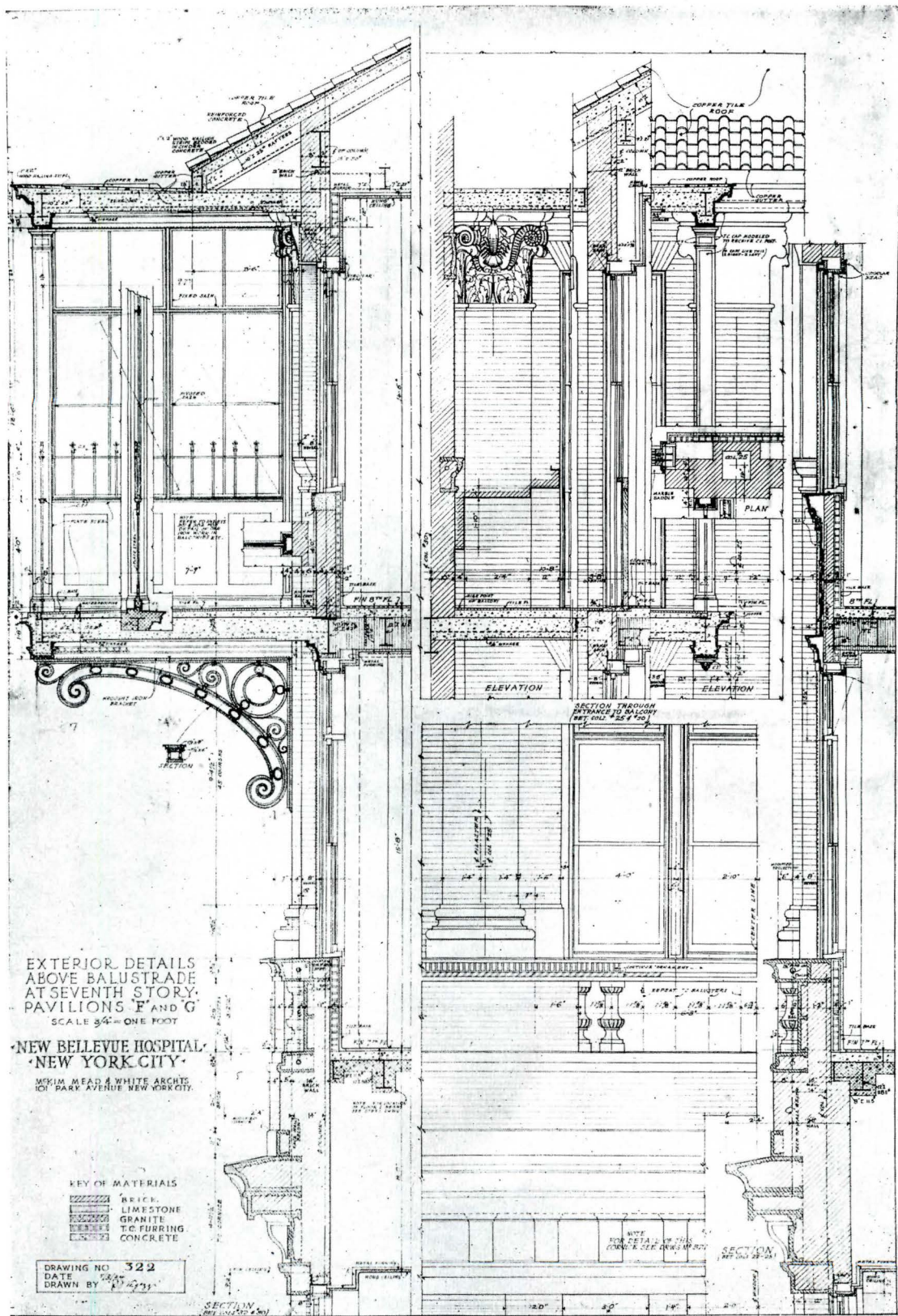
MAJOR TRANSLATIONS OF FRENCH AND GERMAN TREATISES ON ART

AND ARCHITECTURE

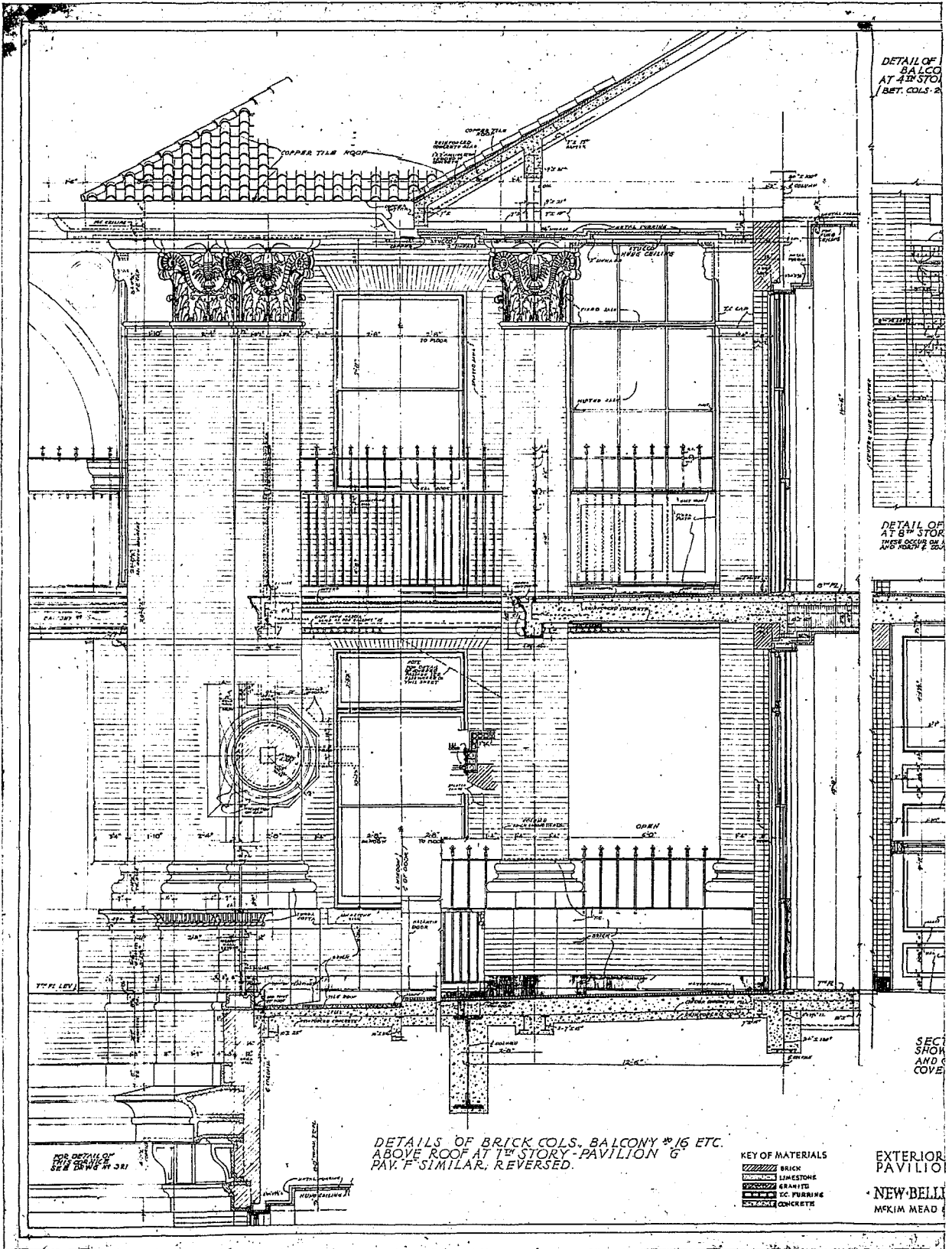
By Dr. N. Clifford Ricker.

BENOIT, FRANÇOIS.—*Manuals of the History of Art and Architecture. Mediæval and Modern*. Paris, 1912. Trans. by Dr. N. Clifford Ricker in 1913, 2 vols. Typed manuscript. Bound in 2 vols. Urbana, Illinois.

- DURM, JOSEF.—*Handbook of Architecture (Series). Part II. Architectural Styles*. Vol. 1. Grecian Architecture. Darmstadt, 1892. Second edition. Trans. by Dr. N. Clifford Ricker in 1903. Typed manuscript, bound. Urbana, Illinois.
- DURM, JOSEF.—*Handbook of Architecture (Series). Part II. Architectural Styles*. Vol. 1. Grecian Architecture. Leipzig, 1910. Third edition. Trans. by Dr. N. Clifford Ricker in 1911. Typed manuscript, bound, Urbana, Illinois.
- DURM, JOSEF.—*Handbook of Architecture (Series). Part II. Architectural Styles*. Vol. 2. Etruscan, Christian, Byzantine and Mohammedan. Stuttgart, 1905. Second edition. Trans. By Dr. N. Clifford Ricker in 1909. Typed manuscript, bound. Urbana, Illinois.
- DURM, JOSEF.—*Handbook of Architecture (Series). Part II. Architectural Styles*. Vol. 2. Roman architecture. Stuttgart, . Second edition. Trans. by Dr. N. Clifford Ricker in 1909. Typed manuscript, bound. Urbana, Illinois.
- DURM, JOSEF.—*Handbook of Architecture (Series). Part II. Architectural Styles*. Vol. 5. Italian Renaissance Architecture. Stuttgart, 1903. (Early edition). Trans. by Dr. N. Clifford Ricker in 1905. Typed manuscript, bound. Urbana, Illinois.
- DURM, JOSEF.—*Handbook of Architecture (Series). Part II. Architectural Styles*. Vol. 5-1. Renaissance Architecture in Italy. Leipzig, 1914. Second edition. Trans. by Dr. N. Clifford Ricker in 1916. Typed manuscript, bound. Urbana, Illinois.
- DURM, JOSEF.—*Handbook of Architecture (Series). Part II. Architectural Styles*. Vol. 5-2. Renaissance Architecture in Italy. Leipzig, 1914. Second edition. Trans. by Dr. N. Clifford Ricker in 1916. Typed manuscript, bound. Urbana, Illinois.
- GUADET, J.—*Elements and Theory of Architecture*. Paris, no date. 4 vols. Trans. by Dr. N. Clifford Ricker in 1916. Typed manuscript, bound in 4 vols. Urbana, Illinois.
- HARTMAN, K. O.—*Architecture in its Development from its Origins to the Present Time*. Leipzig, 1911. 3 vols. Trans. by Dr. N. Clifford Ricker in 1912. Typed manuscript, bound in 2 vols. Urbana, Illinois.
- HASAK, MAX.—*Handbook of Architecture (Series). Part II. Architectural Styles*. Vol. 4. Romanesque and Gothic Architecture. Division 3,—Church Architecture. Stuttgart, 1902. Trans. by Dr. N. Clifford Ricker in 1910. Typed manuscript, bound. Urbana, Illinois.
- HASAK, MAX.—*Handbook of Architecture (Series). Part II. Architectural Styles*. Vol. 4. Romanesque and Gothic Architecture. Division 4,—Details of Church Architecture. Stuttgart, 1903. Trans. by Dr. N. Clifford Ricker in 1910. Typed manuscript, bound. Urbana, Illinois.
- LUBKE, WILHELM.—*History of the Renaissance in France*. Stuttgart, 1885. Trans. by Dr. N. Clifford Ricker in 1921. Typed manuscript, bound. Urbana, Illinois.
- LUBKE, WILHELM.—*History of the Renaissance in Germany*. Stuttgart, 1882. 3 vols. Trans. by Dr. N. Clifford Ricker in 1922. Vols. 1 and 2—manuscript typed and bound. Vol. 3 left unfinished at time of his death. Urbana, Illinois.
- PERROT, GEORGES, AND CHAPIEZ, CHARLES.—*History of Art in Antiquity*. Paris. Vol. 7, 1898. Vol. 8, 1903. Vol. 9, 1911 and Vol. 10, 1914. Trans. by Dr. N. Clifford Ricker in 1919-20. Typed manuscript, bound in 4 vols. Urbana, Illinois.
- REDTENBACHER, RUDOLPH.—*The Architectonics of Modern Architecture; an Aid to the Solution of Architectural Problems*. Berlin, 1883. Trans. by Dr. N. Clifford Ricker in 1884. Typed manuscript, bound. Urbana, Illinois.
- STIEHL, OTTO.—*Handbook of Architecture (Series). Part II. Architectural Styles*. Vol. 4. Romanesque and Gothic. Division 2—House Architecture. Leipzig, 1908. Second edition. Trans. by Dr. N. Clifford Ricker in 1913. Typed manuscript, bound. Urbana, Illinois.
- UNGEWITTER, G.—*Manual of Gothic Construction*. Leipzig, 1890. 2 vols. Trans. by Dr. N. Clifford Ricker in 1920-21. Typed manuscript, bound in 2 vols. Urbana, Illinois.
- VIOLLET-LE-DUC, EUGENE EMANUEL. — *Rational Dictionary of French Architecture, from XI to XVI Centuries*. Paris, 11 vols. Trans. by Dr. N. Clifford Ricker in 1919. Typed manuscript, bound in 11 vols. Urbana, Illinois.
- VON BEZOLD, DR. GUSTAV.—*Handbook of Architecture (Series). Part II, Architectural Styles*. Vol. 7. Architecture of the Renaissance in Germany, Holland, Belgium, and Denmark. Leipzig, 1908. Trans. by Dr. N. Clifford Ricker in 1910. Typed manuscript, bound. Urbana, Illinois.
- VON GEYMULLER, BARON HEINRICH.—*Handbook of Architecture (Series). Part II, Architectural Styles*. Vol. 6-1. French Renaissance Architecture. Stuttgart, 1898. Trans. by Dr. N. Clifford Ricker in 1914. Typed manuscript, bound. Urbana, Illinois.
- VON GEYMULLER, BARON HEINRICH.—*Handbook of Architecture (Series). Part II, Architectural Styles*. Vol. 6-3. French Renaissance Architecture. Stuttgart, 1898. Trans. by Dr. N. Clifford Ricker in 1914. Typed manuscript, bound. Urbana, Illinois.
- VON ESSENWEIN, AUGUST.—*Handbook of Architecture. Part II, Architectural Styles*. Vol. 4. Romanesque and Gothic. Division 1,—Military Architecture. Darmstadt, 1889. Trans. by Dr. N. Clifford Ricker in 1918. Typed manuscript, bound. Urbana, Illinois.



DETAILS OF CONSTRUCTION — NEW BELLEVUE HOSPITAL, NEW YORK
MCKIM, MEAD & WHITE, ARCHITECTS



DETAILS OF CONSTRUCTION — NEW BELLEVUE HOSPITAL, NEW YORK
McKIM, MEAD & WHITE, ARCHITECTS



W H I T T L I N G S

AMERICAN ACADEMY IN ROME

FROM A LETTER recently received by C. Grant La Farge, Secretary, from Gorham P. Stevens, Director, we quote the following:

"Prof. Showerman's successful Summer School—over seventy students—came to an end on August 14, when 52 were given certificates. Forty-seven then went with him to Pompeii for a few days, a trip outside the program. Experience has shown him that the number should be limited to sixty, with discrimination in favor of experienced teachers. The enrollment represented 21 states, the District of Columbia, and Canada. There were 20 university teachers, 47 high school teachers and 1 normal school teacher, all in the classics.

"A young Philippino sculptor has registered. He is the holder of a fellowship from the United States Government (section of the Philippines).

"Former classical Fellow, Miss Marion Blake, registered with us for special work in connection with the thesis on Roman pavements which she wrote while here as a Fellow.

"My activity has been largely absorbed with problems concerning our various undeveloped properties; namely, the lot between the Main Building, the Villa Aurelia, and the Villa Chiaraviglio; lot No. 2; lot No. 5; and a system of watering lots No. 2 and No. 5. Some of my studies are for temporary fencing in of lots No. 2 and No. 5; others

for permanent improvements. I am planning to send over estimates and drawings for the various items.

"The gifts were, Lire 1000 for the Library from Prof. Shepherd Stevens; Lire 665 for the Library from the 4th Summer Session; and several books for the Library.

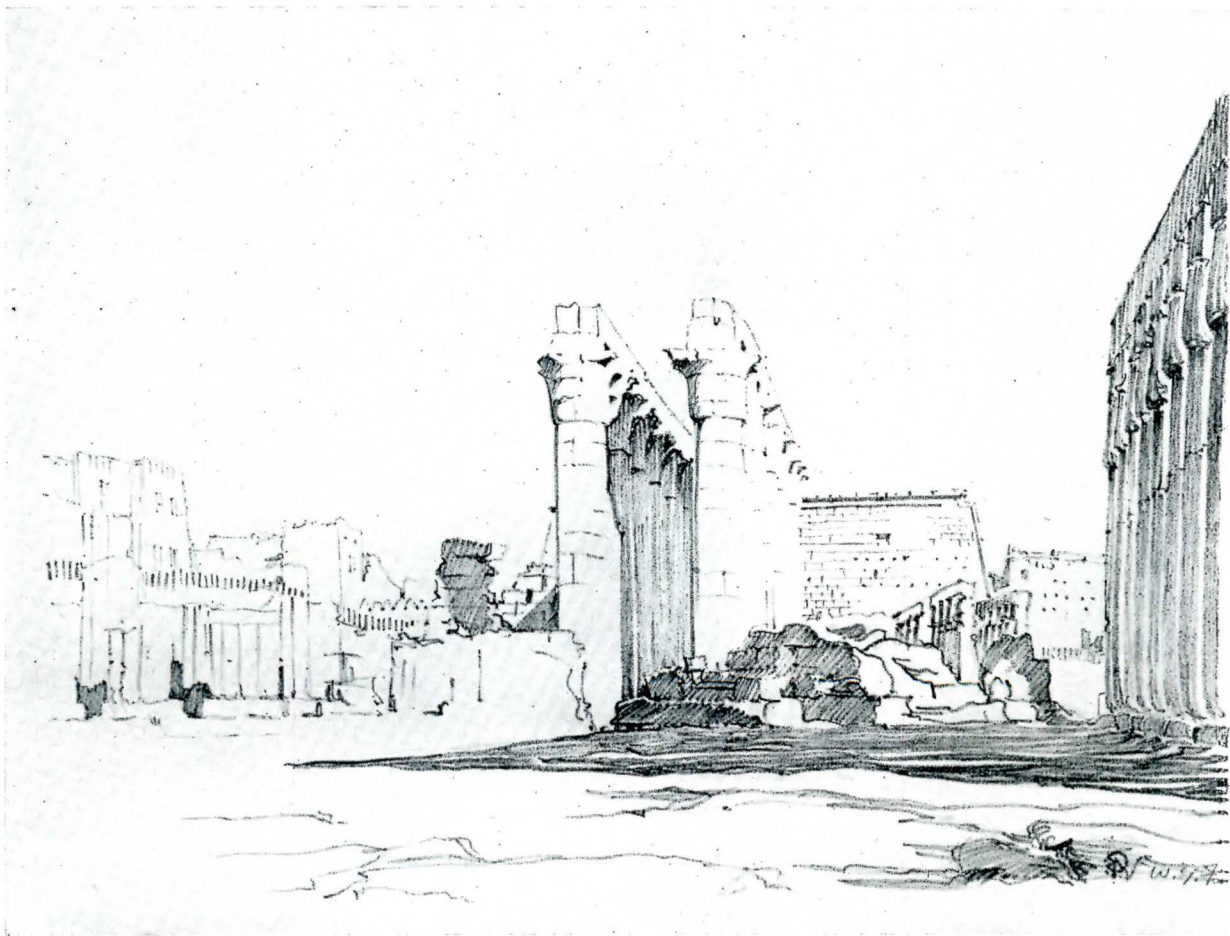
"Professor Kelsey (a Councilor of the Academy) and a number of his assistants are in town. They are planning research work at Mount Athos and also Mount Sinai. Professor Lake of Harvard is a member of the party. He is Professor of Ecclesiastical History at Harvard.

"The Saint Gaudens tablet has been put in place, marking the studio which he occupied for four years as a student."

PHOTOGRAPHS BY J. FRANK COPELAND

OUR READERS WILL be interested to know how Mr. Copeland makes the very interesting photographs which we have reproduced from time to time in PENCIL POINTS, and one of which appears as a frontispiece in this issue.

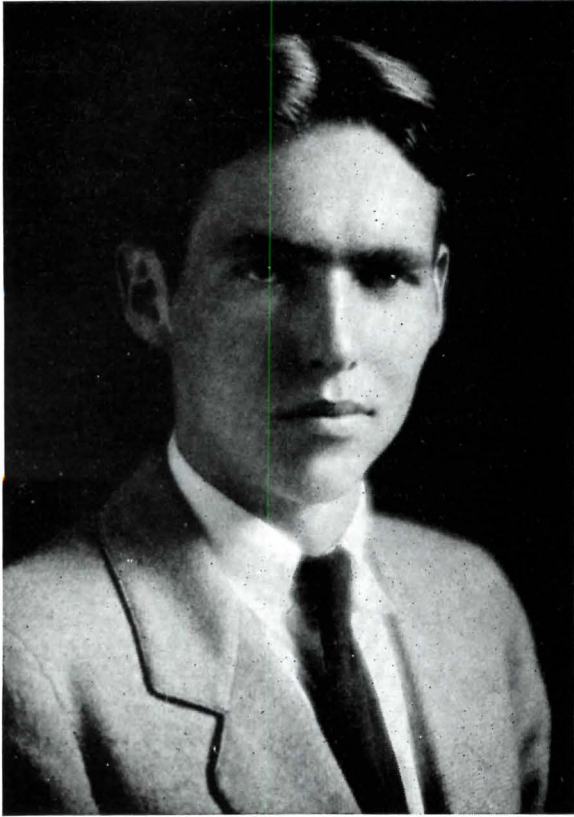
The photographs are made with a "3A Kodak", equipped with a Zeiss Anastigmat lens. A "K. 2" filter is used in most cases to obtain some degree of color correction. Our reproductions are made from print enlargements made with a "Verito" diffusing lens and printed on "vitava"—rapid black, (rough and glossy) paper and sometimes on "azo" No. 2. Mr. Copeland seldom uses a tripod for his camera but takes snapshots usually at one fifth or one tenth seconds to insure sufficient exposure when the color filter is used.



LITHOGRAPH BY W. G. FRENCH
Temple of Amon at Luxor, Egypt



FROM THE WATER COLOR BY NELSON C. CHASE
STATE STREET, BOSTON



DRAVER WILSON

THE BOSTON ARCHITECTURAL CLUB

THE BOSTON ARCHITECTURAL CLUB is pleased to announce, to those who are interested in its classes, that four of its students have won scholarships this year.

The most important was the winning of the Rotch Traveling Scholarship by Louis Skidmore, as already noted by PENCIL POINTS. Mr. Skidmore has worked at the Club since completing his course at the Massachusetts Institute of Technology, and was massier of the Atelier in 1925. He has been a great inspiration and help to the younger members of the classes. "Skid" is planning to go abroad in November to spend the two years of his scholarship in study and travel, and on his return intends to go into business in Chicago.

Edward D. Stone has again won the special student scholarship at Harvard, which he first won last year, on which occasion he was introduced to the readers of PENCIL POINTS.

The Princeton Architectural Scholarship, which was held last year by Edward F. Allodi of the Club, has been won in competition this year by George Elliston Brennan. Mr. Brennan was born in Gloucester, Mass., in 1904, and received his schooling at the Cambridge Public Schools. He has studied at the Club for the past five years, during which time he has been employed by Blackall, Clapp & Whittemore in Boston. Brennan has been at all times a most active and interested member of the Club, and has won several medals in Class A, and last year was sous-massier of the Atelier.

Draver Wilson of the Club has won a student's scholarship at Yale. This is the first time a member of the Club has studied at that school, in spite of the success and renown being gained there by Mr. Otto Faelton, an ex-member of the Club, many of whose student sketches still hang on the walls of the Atelier. Mr. Wilson was born in 1903, in Stillwater, Minn., where he went through the public school. He studied at the Massachusetts Institute of Technology for two years and then at the Club. Last year he went to Yale and has been awarded this scholarship for the general excellence of his year's work there.

The Club is naturally much pleased by the success of these men, and feels that it is very largely owing to the

leadership of Messrs. Haffner and Carlu, and their interest in the Club classes.

Stone, Brennan and Wilson are the sort of men who will gain a great deal by their work in the schools to which they are going, and will, in all probability, be contenders for the Rotch Scholarship of next year, while Skidmore is expected to be one of the most brilliant of the holders of the Scholarship.

THE STUDIO CLUB

THE STUDIO CLUB of The Architectural League of New York is about to start its fourth year of activity. Under the leadership of Birch Burdette Long and J. Scott Williams, members of the club will gather one or two nights a week to work on life-drawing, etching, and lithography. The club is equipped with lithographic and etching presses and paraphernalia and expects to enjoy the guidance of an expert printer of lithographs and etchings who will probably be in attendance one evening a week during the winter season. A lithograph by W. G. French, one of the members of the club, is reproduced on page 625.

During the past years, many experiments have been made in the various graphic mediums, resulting in some cases in the development of new techniques of manipulation and in the production of unusual effects. This experimentation will be continued.

There is no formal instruction offered but students learn much from each other during the year, as the progress made to date evidenced in the annual exhibitions of the club will testify. This season it is hoped that the growing interest in graphic processes will result in increased membership in the club, which is open to members of the League.

A CORRECTION

PARAGRAPH D of Article 6 in Mr. Beach's specifications for plumbing and Drainage on page 449 of the July issue of PENCIL POINTS should be revised to read:

(D) BRASS PIPE shall be semi-annealed, seamless-drawn tubing, iron-pipe sizes, of approved make. Fittings shall be cast, of same proportion of copper and alloy, and of extra-heavy, cast-iron steam pattern.



GEORGE E. BRENNAN

ADDRESSES WANTED

Anyone knowing the correct address of the following will confer a favor by sending them to this office, PENCIL POINTS PRESS, INC., 19 East 24th Street, New York City.

ALABAMA—Robert Blakey and Charles J. Snook, Jr., Auburn.

CALIFORNIA—P. A. Dunn and Harry Eckes, Hollywood; A. D. Baker, Miss Maria M. Berger, William G. Carrington, Emery Hirschman, Charles Holly, Earl A. Raftery and A. L. Rogelmair, Los Angeles; W. L. Harrison, Oakland; B. T. Syvertsen, Pasadena; C. A. Fletcher, Santa Barbara; J. H. Garrison, Watts.

COLORADO—W. H. Klamberg, Denver.

CONNECTICUT—R. G. Kennedy, Richard A. Kimball and A. Lord, New Haven; Waldron Faulkner, Washington; Arthur W. Varian, Wilton.

FLORIDA—Frederick C. Arnold and Jean A. Eddington, Fort Lauderdale; E. J. O'Callaghan, Hialeah; W. W. Evans and Miss Elsa M. Greiser, Jacksonville; M. C. W. Sundin, Lakeland; W. Baggesen, Thomas A. Beggs, Miller Bond, J. C. Cottle, W. A. Desport and Frederic Nickerson, Miami; Edgar Albright, Miami Beach; Irvin L. Clark, Orlando; Huel L. Crockett, West Palm Beach.

GEORGIA—J. C. Brown, C. Du Bose, Selmon Franklin and Robert Tate, Atlanta.

IDAHO—Marcus Bausch, Moscow.

ILLINOIS—W. W. Benn, E. M. Fuller, A. T. Gelinan and K. G. Reeves, Champaign; D. D. Ehresman, Fred Guy, Erwin J. Hatzfeld, Harry R. Ladehoff, Emil L. Larson, T. Rissman, Hillard R. Russell, Carl Shparago and John Walker, Chicago; Walter Ellison, Springfield; Francis D. Hurley, Urbana.

INDIANA—Harold L. Davis, Bedford.

KENTUCKY—Angelo Rich, Harrison.

MARYLAND—Everett L. Gonyou, Baltimore.

MASSACHUSETTS—F. W. Keith, Belmont; H. L. Newhouse, Jr., Boston; Jeremiah Schmidt, Cambridge.

MICHIGAN—John H. Barry, J. H. Kelsey, Robert T. Moore, J. S. Scheithe, Chester Asa Serrine and Russell Triquet, Ann Arbor; Philip J. Funke, R. G. Nairn and Julius Stropp, Detroit; A. D. Badour, St. Joseph.

MINNESOTA—Charles Schwartz, Minneapolis.

MISSOURI—Glenn F. Johnson, Cape Girardeau; Joseph L. Hurst, St. Louis.

NEW JERSEY—F. C. Bulkeley and Paul Haan, Newark; John Rudy Hoelzel, Salem.

NEW YORK—William J. Bovers and Paul L. DuBois, Jr., Brooklyn; Frank B. Heathman, Jr., Ithaca; G. Vance Temple, Jamaica, L. I.; Jean B. Patende, Mill Neck, L. I.; Thomas G. Coles, Harrison Gill, Richard W. Harr, Raymond Jordan, Miss Lillian Kennedy, Harry L. Miller, Jess Reed and Elias L. Ruiz, New York City; Robert H. Maguire, Pedro Mendez and W. N. Serhus, Syracuse.

NORTH CAROLINA—F. K. Dawson, Raleigh.

OHIO—Pierce Sperry and Charles K. Stewart, Columbus; Edward Kromer, Grandview; Edward E. Packer, Toledo.

OKLAHOMA—Cecil Doty, Stillwater.

OREGON—Edward S. Jewell, Corvallis; Kenneth Birkemeier, Grace Coey, Camille Harris, Emogene Richards, E. G. Slawson and A. Woods, Eugene; Hal F. Voight, Jr., Vernonia.

PENNSYLVANIA—William M. Burke, Drexel Hill; William F. Frank, Edwin A. Keeble, Thomas B. Rothenberger and Louis Toukonogy, Philadelphia; Lewis Fink, J. F. McWilliams, Jr. and Leo S. Milianoski, Pittsburgh.

SOUTH CAROLINA—G. T. Bryce, Clemson.

TEXAS—M. S. McDougal, College Station; H. A. Magnuson, Dallas; Wilford S. Bogue, Fort Worth.

WASHINGTON—D. W. Hilborn and Robert Warnick, Seattle.

WYOMING—Harry L. Nelson, Laramie.

CUBA—Mrs. D. M. Borrerode Lujan, Havana.

CHINA—Lan Fook Tai, Shanghai.

PERSONALS

JOHN B. MCCOOL, ARCHITECT, has opened an office at 49 Geary St., San Francisco, Cal.

HUGH G. JONES, ARCHITECT, has removed his office to 127 Stanley St., Montreal.

WYTHE, BLAINE & OLSON, ARCHITECTS, have removed their offices to 1755 Broadway, Oakland, Cal.

WILLIAM K. BARTGES, ARCHITECT, has removed his office to Mercantile Bank Building, Berkeley, Cal.

EDMUND T. STEWART, ARCHITECT, has removed his office to 226 La Fayette Arcade, Tampa, Fla.

ASHLEY & EVERS, ARCHITECTS, have removed their offices to 525 Market St., San Francisco, Cal.

ALBERT E. TAYLOR, ARCHITECT, has removed his offices to Vernon Road, Drexel Hill, Pa.

VALLIE P. SCALLAN has opened an office for the general practice of architecture at 402-4 City National Bank Bldg., Corpus Christi, Texas.

LORENZO HAMILTON, ARCHITECT, has removed his office to 22 Church St., Meriden, Conn.

C. W. DICKEY AND HART WOOD have formed a partnership under the firm name of Dickey & Wood, with offices at 405 Damon Building, Honolulu, T. H.

S. M. RICHARDS, ARCHITECT, has removed his address to 209 Market St., Freeport, Pa.

HAVILAND W. ALLEN, ARCHITECT, has removed his offices to 402 Dwight Building, Jackson, Mich.

JOHN RICHARD ROWE, has removed his studio to Room 1204, 232 Madison Avenue, New York.

THE NEW YORK ARCHITECTURAL CLUB, INC.

WE ARE BEGINNING to believe in miracles!

In last month's article for PENCIL POINTS we described the Club's furniture needs and suggested that someone act the part of the Good Samaritan and subscribe for a part of the furniture required. The idea has borne fruit; as several people have offered to pay for various articles, totaling several hundreds of dollars.

This proves that it was a brilliant idea, and anytime we get a brilliant idea it is a miracle, or we wouldn't know a miracle if we met one face to face. (For the benefit of the customers we might state that we are using an editorial "we". Native modesty prevents us from using the more egotistical "I". Besides a nice fat "we" is more generous, and also helps to pass the buck for responsibility upon occasion).

Since the last article appeared, considerable progress has been made toward obtaining the necessary furniture, and the next few weeks should see everything in place. However, do not let this discourage any other prospective Good Samaritans who may be benevolently inclined. We are going to try to induce the Board of Directors to provide metallic labels of a suitable and appropriate design to be fastened to the different pieces of furniture donated in appreciation of the donor.

At this time, we would like to remind all members regarding the small matter of dues. A general statement was sent out recently to all club members, describing the work done to date, as well as some of the financial responsibilities assumed by the club. These will have to be met regularly, and as the membership dues are practically the main source of revenue, we would like every member that has not as yet sent in his dues to date, to kindly cooperate with us by sending them in at once. This should be done before October 15th, as after that date all who have not paid will be scratched from the roll.

The Atelier

On Saturday, September 18th, about 35 members of the Atelier took the esquisse for the various classes at the Beaux-Arts Institute, and it certainly looks as if the new season is going to open with a big crash, with everyone anxious to get busy. The prospects look very bright indeed

for some more publications and mentions, and perhaps a prize or two.

The Life Class.

The first session in drawing from life was held on Tuesday, September 14th, with about 15 students, and the second on Friday, the 17th, with 20 present. This class will be held regularly every Tuesday and Friday from 8 to 10 P. M. The room will comfortably accommodate about 25 or 30 easels.

Baseball.

Our baseball protégés, under the modest title of "Architectural All-Star Baseball Team", had their annual set-to with the Sing-Sing Prison team. This is a very strong team, and has beaten some of the best amateur teams in the East. Our boys, with Long pitching and Keppler catching, held down the heavy sluggers to a score of 6-2 up to the sixth inning. In the second half of the sixth frame, fumbles in the infield started the tide the other way, and won the game for the prison team with a score of 6-8. Beside the battery, special credit is also due to Herrick at first base, and Anderson at short for some fine team work, as well as to Wahle in left field, Forester in center, and Quigley in right field.

Our old friend Patrick M. Lynch did the honors as Umpire, but it wasn't his fault that we lost. He is not to be confused with the well-known Judge Lynch, or the Patron Saint either. He happens to be the manager of the well-known and popular Central Blue Print Company of New York City. (How is that Paddy?)

Mr. Morris L. J. Scheffer, the manager of the team, was the most mournful spectacle imaginable after the game, but nobody can say that he didn't try to win, and we have all

the confidence in the world, that Pop Scheffer will beat that Sing-Sing team yet.

Bowling.

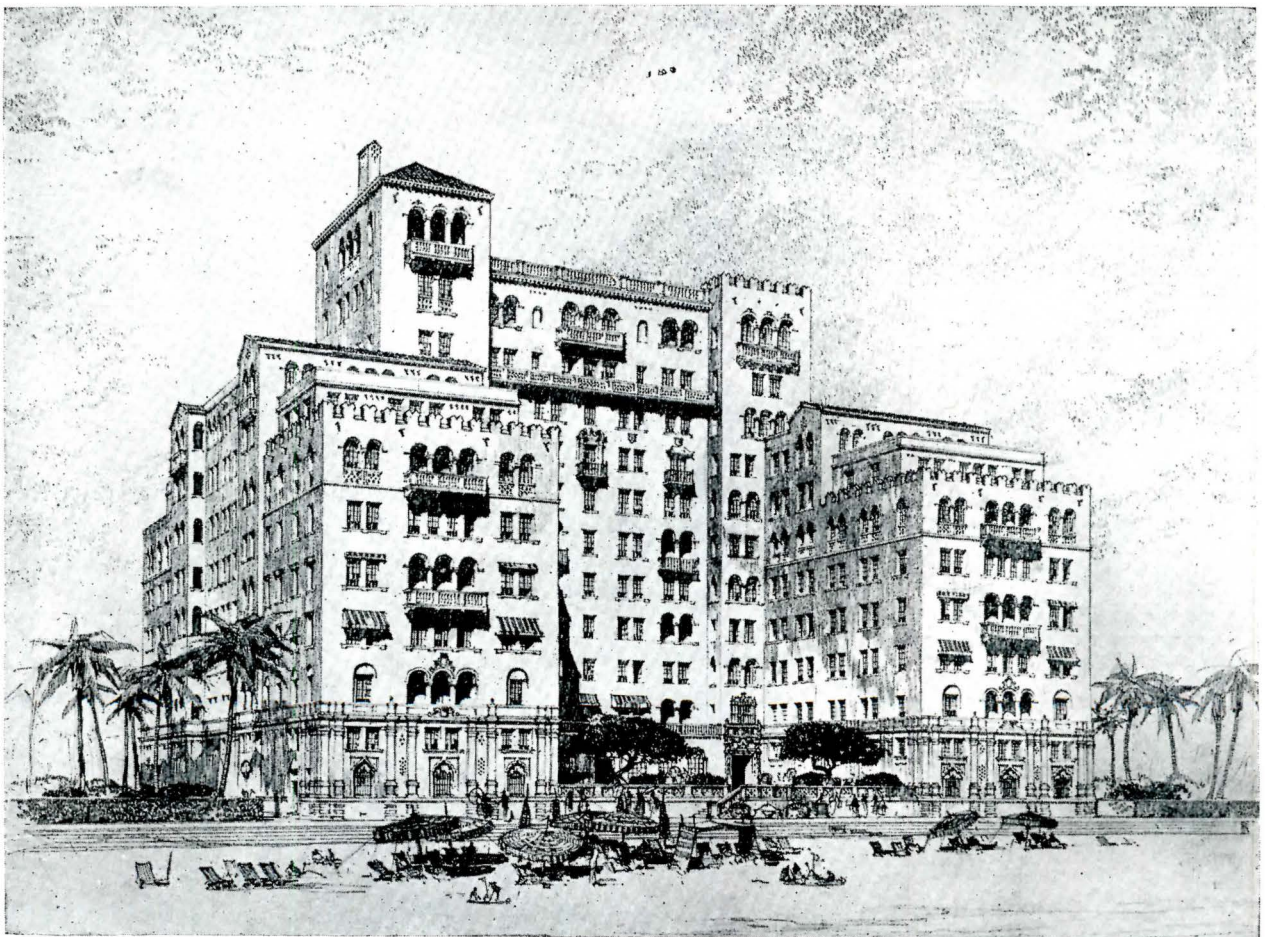
At this writing, the Architectural Bowling League is only a few days from the opening of the 1926-27 bowling season, and the usual preparatory activity is taking place.

An innovation will be tried out this season, in that three distinct tournaments will be bowled simultaneously. Our good friend Charlie Jaeger, of the Warren & Wetmore office, worked out a very pretty schedule, that seems to have the possibilities of working like a charm. We will have 16 offices in the line-up this season, and each office will bowl four games every second week, as there are only 8 alleys available. The first three games of the evening will be bowled as 5-man teams, and the last game will be split into a 3-man and a 2-man team tournament, thereby totaling three rounds for the 5-man teams, and one round each for the 3-man and 2-man teams. Charlie worked out five complete schedules, and he is to be congratulated with the fine success of the fifth one.

Several of last year's teams had to be dropped, and a new one was taken in. The new team is from the office of Mr. William Whitehill, and we take pleasure in welcoming it into the league.

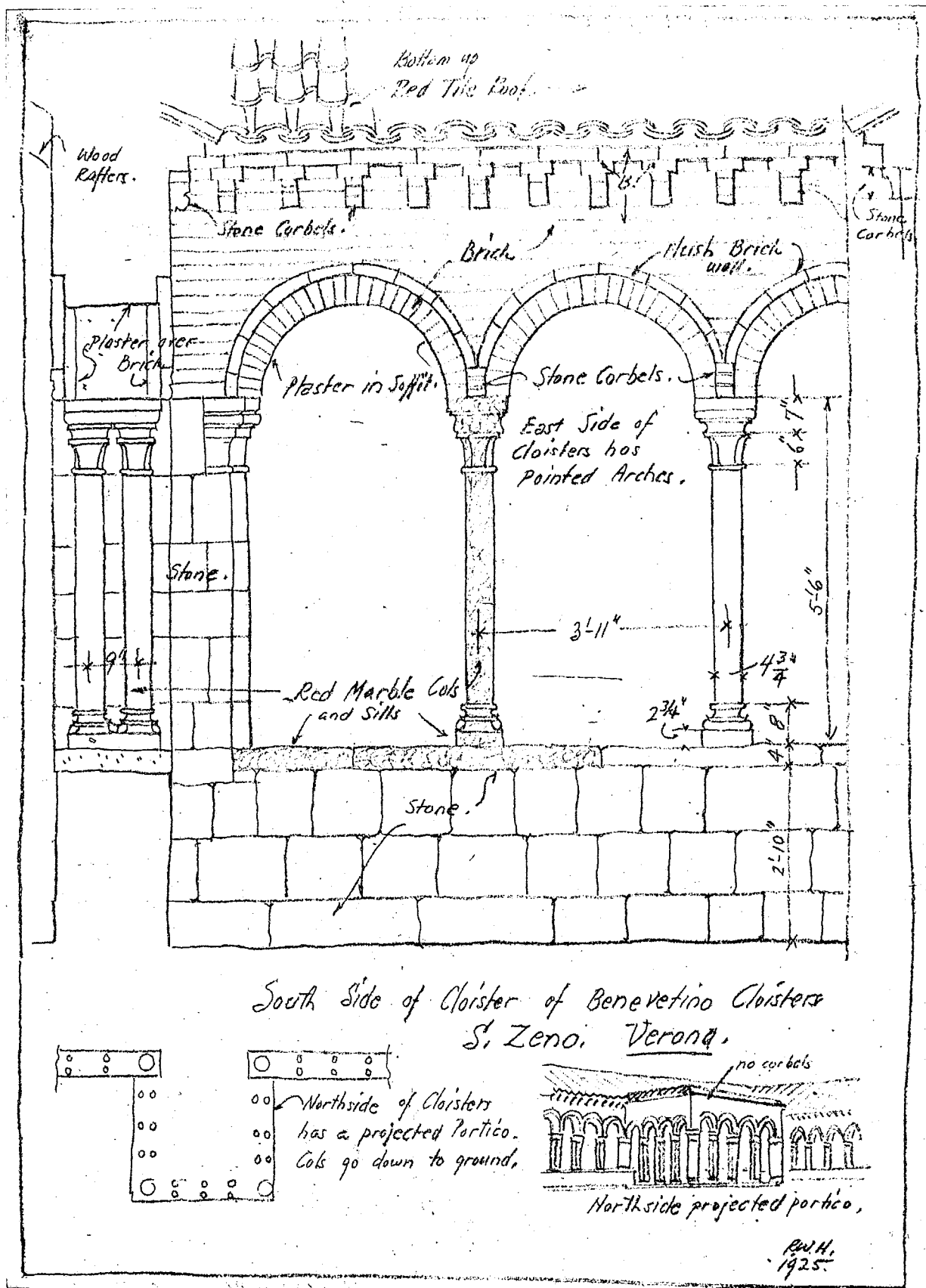
This year's line-up is as follows:

- | | |
|----------------------------|---------------------------------|
| 1. Schwartz & Gross | 9. William Whitehill |
| 2. Thos. W. Lamb | 10. McKenzie, Voorhees & Gmelin |
| 3. Peabody, Wilson & Brown | 11. Warren & Wetmore |
| 4. Holmes & Winslow | 12. Cass Gilbert |
| 5. J. E. R. Carpenter | 13. Alfred C. Bossom |
| 6. Jas. Gamble Rogers | 14. McKim, Mead & White |
| 7. William Gompert | 15. Starrett & Van Vleck |
| 8. Guilbert & Betelle | 16. Andrew J. Thomas |
- Henry Sasch, Secretary, care Cass Gilbert, 244 Madison Avenue, New York City.

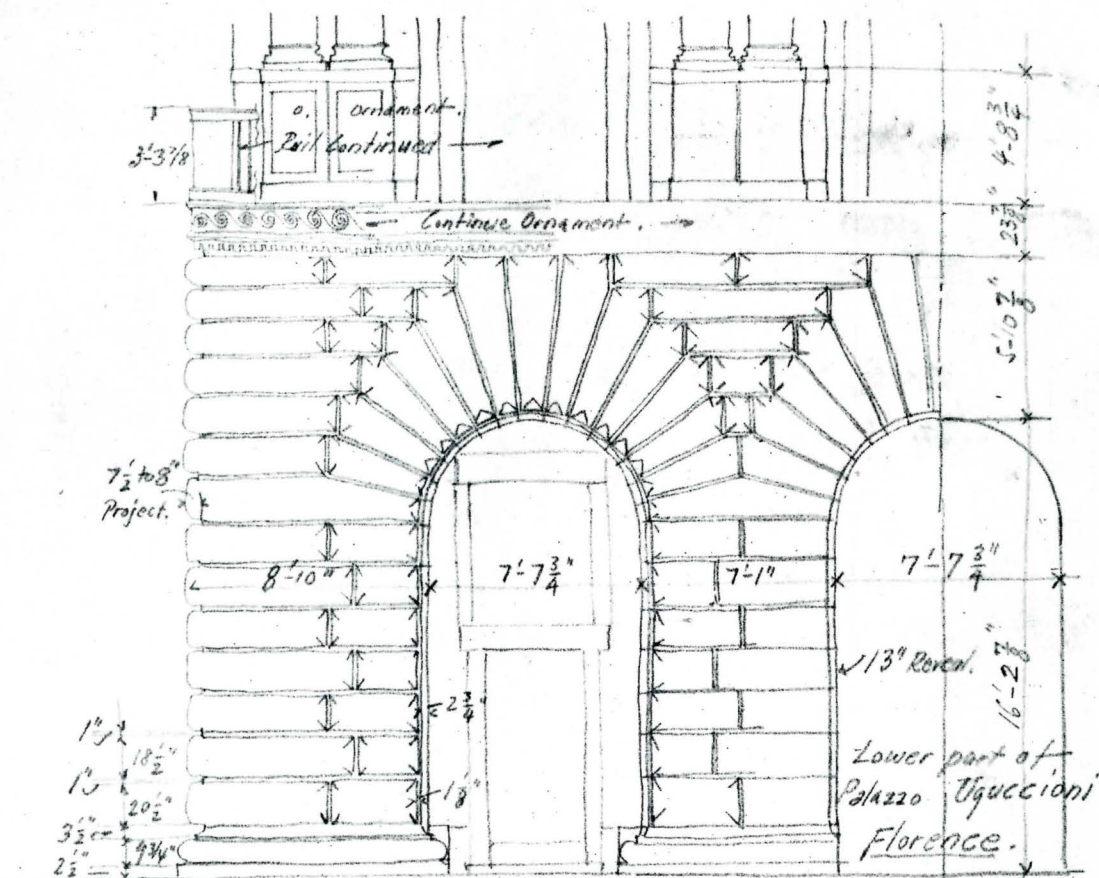


RENDERING BY LOUIS C. ROSENBERG

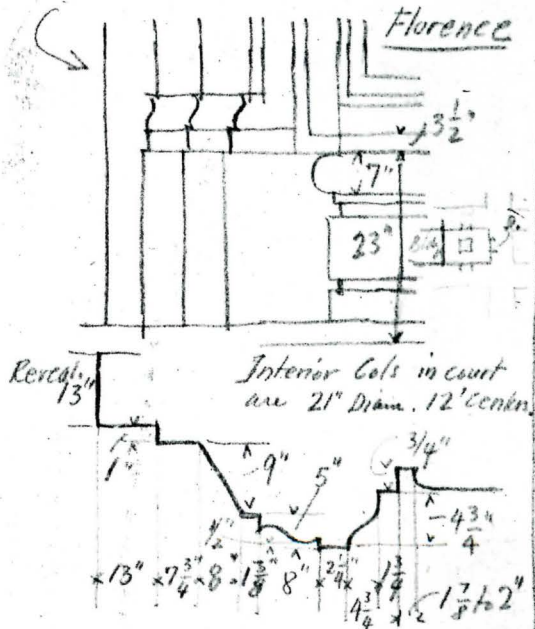
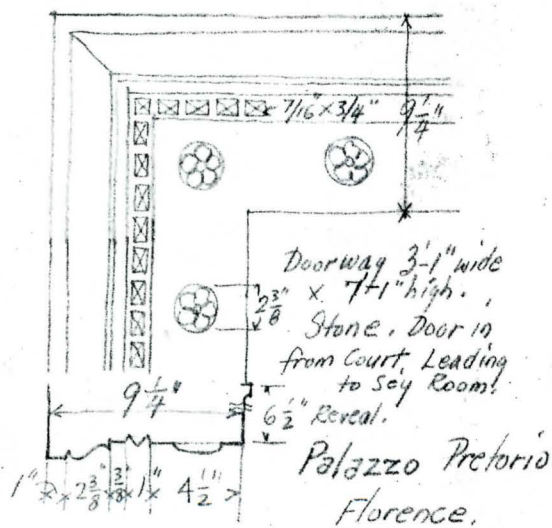
Proposed Apartment at Miami Beach for the Mahlstedt-Steen Securities Corp., Pliny Rogers, Architect



MEASURED DETAILS FROM THE NOTEBOOK OF ROBERT W. HUBEL, DETROIT, MICH.



Main Center Door Palazzo Strozzi, Florence



HERE AND THERE AND THIS AND THAT

CONDUCTED BY RWR

R. W. R. TAKES A MUCH-NEEDED VACATION

FOR A LONG TIME R. W. R. has been threatening to go away and leave us to do his work for him, and we've always dared him to do it. We knew we could manage his department *much better* than he did it himself. But somehow, now that our long awaited opportunity has come and we are actually put to it, we are not at all sure of ourselves. We beg the readers of this department to be lenient with us!

The prizes for the contests this month go to:

- Class One—Homer Pfeiffer
- Class Two
- Class Three—O. W. Trageser
- Class Four—Charles M. Stotz

I'm afraid we were too optimistic when we wrote *Class Two* in our copy. We are forced to leave the space next to this a blank, for not one single poet has been in need of our prize of ten dollars and there is no verse in this month's collection of material. Business is evidently picking up for the poets but—a word of warning—it won't last long and you writers had best prepare for some more of the rainy weather we had last month and send in your contributions for the November issue.

THE MAP of Mr. Stotz's European itinerary, reproduced on page 634, was the natural outcome of table cloth sketches and notes on the backs of envelopes, made in the process of describing places and routes to his friends interested in things European or architectural, and particularly for the benefit of those contemplating a similar trip. For the latter, a photostatic copy of the map with notes, made the most concise and usable answer to requests for advice on the choice of an architectural itinerary in Europe.

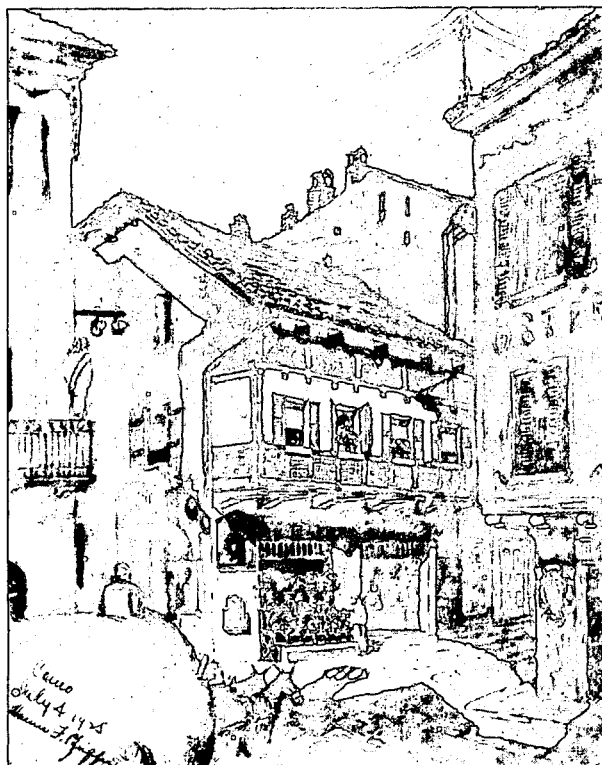
GOSSIP FROM THE CAFE DES DEUX MAGOTS

OUR VERY SPECIAL CORRESPONDENT for this department, Monsieur J. R. Rowe, has just returned from foreign shores—more specifically Paris and the Deux Magots! He reports that Clarence W. Hunt, of Le Brun fame in 1925, was seen at the Café and is now in America looking for a job. William Ferrari, his successor, is in Paris. Rudolph de Ghetto, after assisting Monsieur Labatut to win the first second *Grand Prix*, left for Italy to visit his uncle. Mr. F. C. Hirons was also in Paris, for a short stay on business and pleasure, a part of the business being to persuade Monsieur Damato to accept a professorship at Princeton. Monsieur Damato has just arrived in this country. Our correspondent is shortly to attend a dinner to be given in this gentleman's honor and has promised to send in a full account for the November issue. Monsieur Grapin, professor of architecture at Carnegie Tech, was also seen at above mentioned Café where our young man enjoyed a cup of coffee with him.

Mr. George Sturtevant, of Warren & Wetmore's office, after five months' earnest effort to get started, journeyed to Meaux one week-end and there did some very interesting work. We are trying to secure some of Mr. Sturtevant's sketches for publication.

Mr. Ernest A. Grunsfeld, Jr., the *practicing* architect of Chicago, and Mrs. Grunsfeld, passed through Paris occasionally while doing Europe in two weeks. Mr. Wallace K. Harrison, famous professor of architecture at Columbia, and Mrs. Harrison, were also in Paris on their honeymoon.

Mrs. Samuel Chamberlain was seen at the Bon Marché shopping while husband Sam, in Caudebec, was minding the baby with one hand, at the same time manipulating an etching needle with the other. Mr. Chamberlain has made ten



COMO



CAIRO

WATER COLOR SKETCHES BY HOMER F. PFEIFFER
(PRIZE—Class One—September Competition)

COPIES OF PENCIL POINTS

WANTED AND FOR SALE

Alvin L. Earle, 67 Inman St., Cambridge, Mass., wants January, February, March and April 1926.

W. Walden Fountain, 216 Elmwood Ave., Irvington, N. J., wants June, July, August and November 1920; January and February 1921. Also the following issues of the White Pine Series: Vol. 1. No. 3; Vol. 2. No. 4; Vol. 3. No. 2; Vol. 4. Numbers 2, 3, 4, 5, 6; Vol. 5. Numbers 1, 4, 5, 6.

Adrien Dufresne, Beauport, P. Q., Canada, wants February 1922 and June 1924.

J. L. Brookhauser, 1345 H. St., Lincoln, Nev., wants 1920 complete; 1921 complete; 1922, all issues except August; January, February, April, May, July and December, 1923.

A. L. Collins, 536 South Hope St., Los Angeles, Cal., wants copies from January to September 1925, inclusive.

Library Committee of the Palette & Chisel Club, 1012 No. Dearborn St., Chicago, Ill., wants copies for July and August 1924, and January and February 1925.

M. F. McGrath, Vice-President of the Indiana Limestone Company, Bedford, Indiana, wants a copy of the January 1922 issue.

PENCIL POINTS, 19 East 24th St., New York, has the following back issues for sale at 25c. each: June and July, 1921; August, 1922; October, 1923; April 1924; August, September, October, November and December, 1925; February and June 1926.

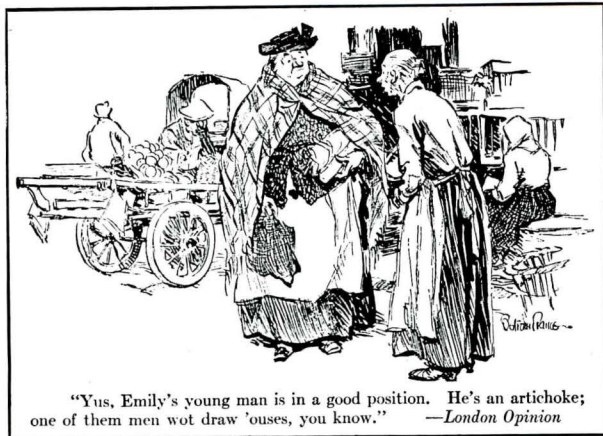
H. S. Deiser, 85 Water Street, Patterson, N. J., has all copies of Pencil Points, from the first issue in June 1920 up to and including May 1926, which he will sell for \$50.00. Will not sell partially.

BOGUS AGENT SENTENCED

IT WAS STATED at the London Sessions recently that Edgar Lane Matthews, 38, a traveller, who was brought up to answer five charges of obtaining money by false pretences, had carried out in the past few years hundreds of frauds in which he had robbed people all over the country.

Since 1922, it was said, he had been calling on various people claiming that he represented an American trade paper, which was anxious to increase its circulation. For this reason surplus copies had been printed, which, the prisoner said, he could supply to traders in England at reduced cost for a twelve months' order, or, in some cases, on payment of postage only. He received about £1 in each case.

Matthews pleaded guilty to 247 other similar cases, which were taken into consideration by Mr. H. W. W. Wilberforce, Deputy Chairman, who sentenced him to eighteen months' hard labor.



CONTRIBUTED BY MARY GREENE

etchings since June; evidently Mrs. Chamberlain doesn't shop often!

Harry K. Bieg, winner of the Paris Prize in 1924, has been studying at the Ecole and was planning to leave for Germany.

Lee Rombotis, Paris Prize winner in 1923, is deeply engrossed in books on Chinese and Japanese architecture.

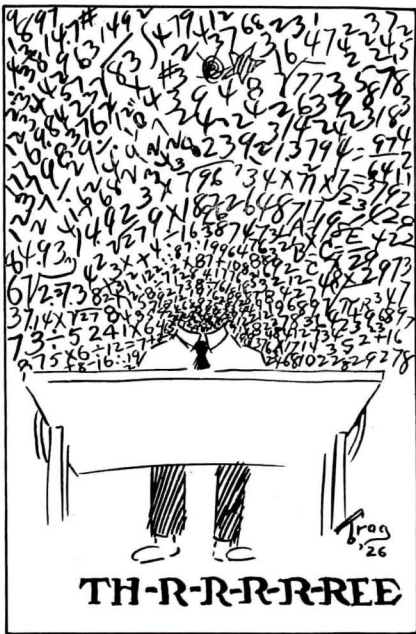
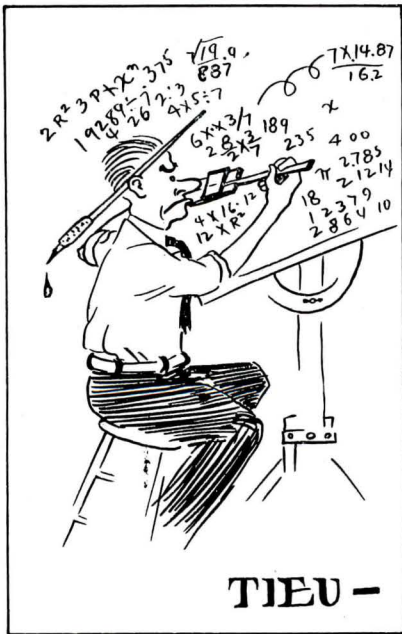
Around the corner from the Café, Howard Leigh has a six room Louis Seize apartment, in the midst of which he is very busy making lithographs of Sicily.

Mr. Harvey W. Corbett and family were seen one afternoon at tea time sitting in the Café, enjoying the view of Saint Germain des Pres.

From odd remarks dropped by our representative we have gathered the opinion that the Café des Deux Magots rivals Shephard's Hotel in Cairo, the Savoy Bar in London, Albrecht's in Rome, and Florian's in Venice, as a meeting place for peregrinating architects.

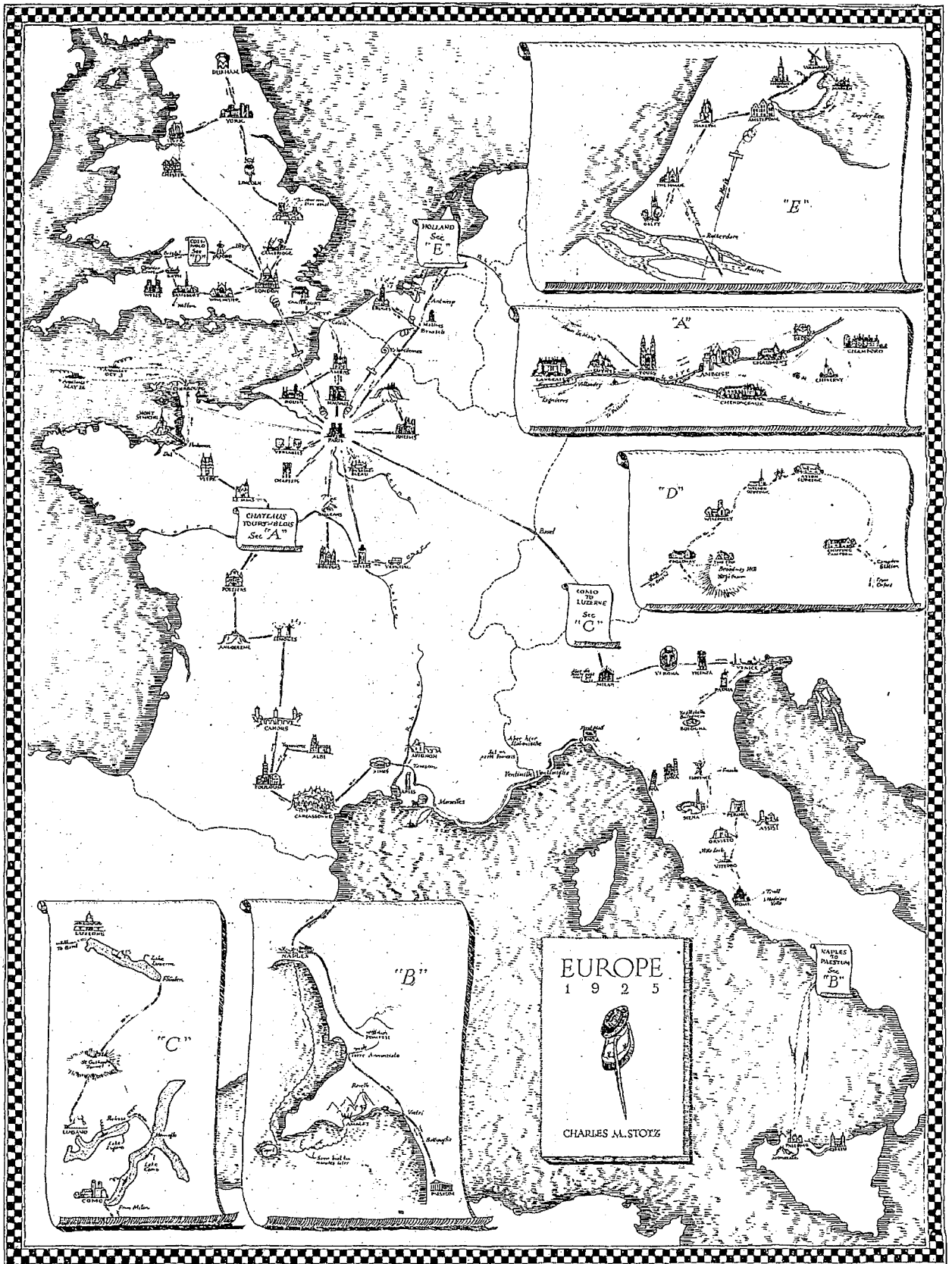
FOR SALE: Photographs (8" x 10") of French and Italian subjects, the collection of a deceased architect; may be seen at the office of PENCIL POINTS, 19 East 24th St., New York.

WANTED: Folio or set of "Expertservice" Sheets, formerly published by the Architectural Service Corp., Phila., Pa. Call Mr. Fleming, Pennsylvania 1369, New York City.



"JUST A FIGUREHEAD"—CARTOON BY O. W. TRAGESER, KALAMAZOO, MICH.

(PRIZE—Class Three—September Competition)



ILLUSTRATED MAP DRAWN BY CHARLES M. STOTZ, PITTSBURGH, PA.
(PRIZE—Class Four—September Competition)

AN INTRODUCTION TO THE LETTERS OF LISTERENUS TO ANTIACID

THE VALUABLE CORRESPONDENCE OF A ROMAN DRAFTSMAN TO HIS ATHENIAN FRIEND.

Found by Professor H. E. Knozall, M.Arch., Sc.D., Ph.D.

Foreword by President George A. Peach of Savannah University

Gentlemen and Architects: it is indeed a great pleasure to be able to introduce to you Professor H. E. Knozall, M.Arch.; Sc.D., Ph.D., and Dean of Architecture in the Jasper Scientific School of Savannah University.

Architects the world over have been waiting impatiently, no doubt, for the publication of these manuscripts which in my humble opinion are the greatest find from an historical and architectural standpoint in several decades, *pro bono publico*.

It will be remembered that only last February the channels of communication the world over flashed the startling news that our Professor Knozall, of whom Savannah University is justly proud, while touring Greece by the merest of accidents came across these valuable *chefs-d'oeuvre*s, but it is due entirely to his rare ability to readily read extinct Latin script that they were recognized as such by him and preserved for posterity.

Professor Knozall hopes that the publication of these epistles will help somewhat to defray the expenses of his late trip and it is due to this hope of financial reimbursement that you gentlemen of the architectural profession are now permitted a glimpse into the everyday, intimate life of an architect's office in Italy in the time of the Great Caesars. Of course, had Professor Knozall desired to do so he could have kept these missives to gloat over privately as one with *auri sacra fames* would do, but being a magnanimous soul, he at once sought out PENCIL POINTS — your drafting room journal — and asked them to publish these, with his adroit and translucent annotations, as rapidly as he is able to transcribe them. When this is completed he will put the originals permanently on public display at the Library Building of the University of Savannah. In closing, let me remind you that we and you are under inestimable obligations to Professor Knozall for his *magnum opus*.

IN EDITING THESE PAPERS I want it distinctly understood from the start, on my *parole d'honneur*, that I am doing so solely for the uplift and edification of the profession in particular and the *bono publico* in general. I will not stoop to those heinous literary crimes of padding and polishing in order to make them appear more presentable and complete, but I shall give them as they exist, *verbatim et literatim ab ovo usque ad mala*, with only such notes as, *me judice*, I deem absolutely indispensable for a clear and profound insight into the matter, lest some, by quick reading, miss the essentials or *summum bonum*.

The exact year in which these letters were written is not known, merely the days of the months being recorded by their author, either because of his youth or perhaps because of his insouciance, a fault so common along the callow juniors of all ages. But as Caesar is mentioned many, many times we are just as likely correct as not in supposing them written in the glorious days of the Great Gaius Julius, that man's man and warrior supreme who, in the midst of subduing Gaul, found time in which to divide it up into easily remembered parcels for us, besides also adjusting our fickle calendar. Oh! What an era to live in and what an Emperor to serve!

The fact, I think, that startles one most after a perusal of these epistles is the humanness and naturalness of life then as now. We find it is not a case of *tempora mutantur, et nos mutamur in illis*, but rather that their lives and customs practically paralleled ours of to-day. The manner and methods of "getting out" work in an architect's office then, while somewhat different, were just as difficult and laborious as now and this fact alone should stimulate and give encouragement to our Twentieth Century architects and their *semper paratus* assistants. The profession as a whole should take for its motto and keep ever before it this ancient phrase of antiquity: "*Bonus labor omnia vincit, et sic itur ad astra*."

The papers are in reality pieces of long epistles written *currente calamo* and sometimes very illegibly and illiterately by a youthful Roman draftsman who signs himself simply Listerenus. They are inscribed on very expensive, high grade Egyptian papyrus (otherwise they would not have survived in *saecula saeculorum*) which in all probability

was stolen by Listerenus when his noble employers, Ego, Tisticle & Pompus, were out of the office. This illustrious firm, *en passant*, though we have no records from any other source of them or of their emobling efforts and accomplishments were, according to this scribe, who writes as *magnus Apollo*, at that period the leading firm in Rome, standing high in the good graces of the Emperor and being *bono fide*

members of the Royal Society of Honorable Italian Architects, which was the great grandfather, as it were, of our own A.I.A.

We of to-day are prone to think of the so-called "sky scraper", as we know it, as a *ben trovato* of pure American genius in design and construction, but according to Listerenus (this very interesting letter will be published in the near future) their offices, unless I have made a grave error in my calculations, were on the sixteenth or seventeenth floor of at least a nineteen story building. This ancient Romanus Colossus, the Ionic Bank Building, probably the first of its kind, graced the south-east corner of Tiber Street and Appian Avenue. No vestige of it remains, however.

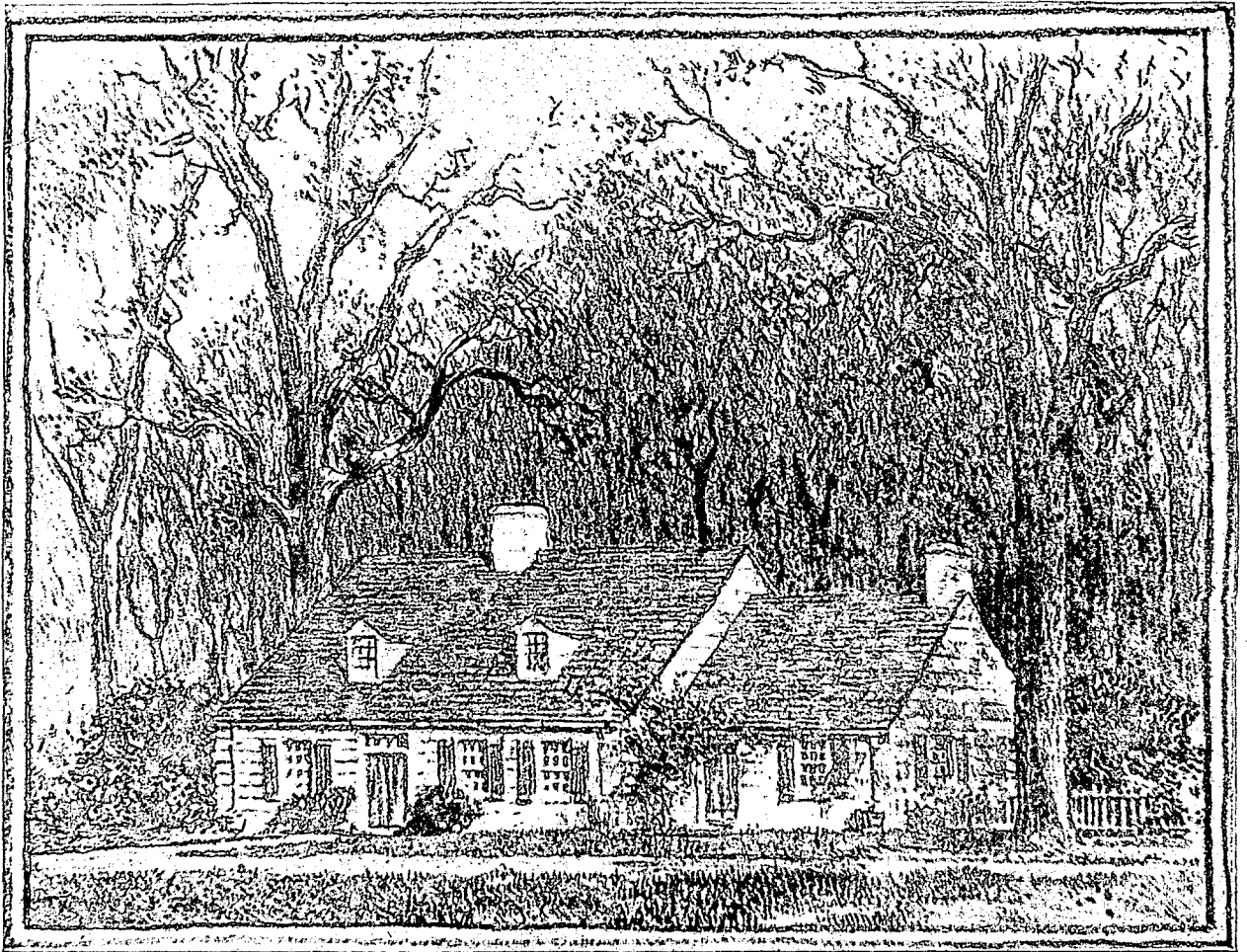
Listerenus seems, on the whole, to be a rawther likable chap of honest intent and with *cacoethes scribendi cum curiosa felicitas*. At times though, one cannot help but think him biased in his rash and uncomplimentary references to his esteemed and well thought of employers, and at such times we must read *cum grano salis*.

The friend to whom all of his correspondence is addressed, one Phillippe Antiacid, appears to be also a fellow struggler after fame, with a "Venus", and in the employ of an Athenian Architect by the name of Kolinus. It is indeed a great pity that the letters of Antiacid to Listerenus have not as yet been found, for to have his account of the work proposed and in progress in Athens *hoc tempore* would be wonderfully *à propos* and illuminating. I have not as yet given up hope of finding these letters of Antiacid. If I am financially able to do so I shall return to Rome next summer and camp *in loco citato* in the hope that even greater success will this time crown my earnest and untiring efforts. I know you men of the profession, *uno animo*, wish me luck in this unselfish venture and will await with interest the inevitable results.

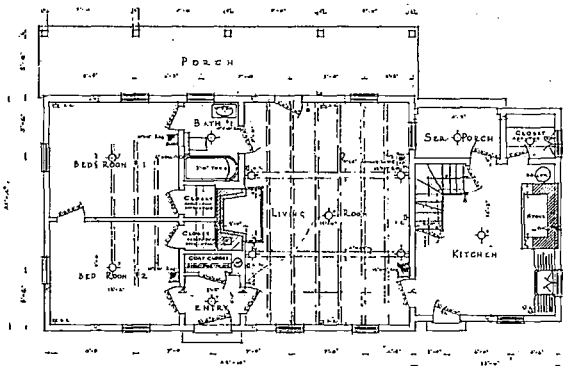


UNTOUCHED PHOTOGRAPH OF PROFESSOR H. E. KNOZALL

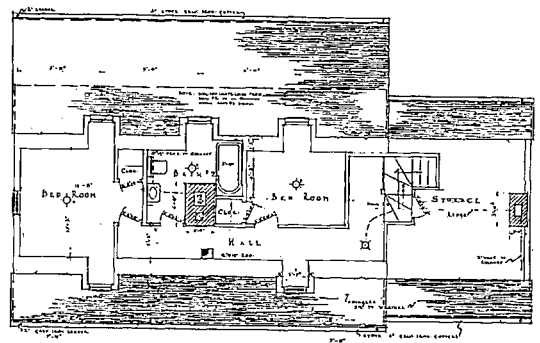
Taken in Athens, 1926, by Understone & Understone



RENDERING BY W. A. TREANOR



FIRST FLOOR PLAN



SECOND FLOOR PLAN

COTTAGE FOR RUDOLPH ISELIN, ESQ., RONKONKOMA, L. I.

Treanor & Fatio, Architects

THE SPECIFICATION DESK

A Department for the Specification Writer

MAKING THE SPECIFICATIONS USEFUL.

By John O. Merrill

A SPECIFICATION IS PRIMARILY an instrument of service. An instrument according to Webster is a "thing *used* in performing an action." A specification is written to be used in the action of constructing a building, and it is a success or a failure in so far as it is usable for this purpose. An analysis of how and by whom it is used is valuable in devising ways of increasing its usefulness.

The finished specification first falls into the hands of the contractor's estimator. Now everyone knows that an estimator is the busiest person in the world. He is always busy and he is always working with an approaching zero hour at which time his job must be done or all of his effort is wasted. Why not try to give him the facts that he wants in such a manner that he will not be forced to read through page after page of literary effort, picking up here and there a small crumb of information? The estimator is primarily interested in quantity and quality of materials. In general the drawings should give him the former and the specifications the latter. One section of the specifications of each branch of the work should be devoted to materials. Give the information required as briefly as possible, but make it complete and definite. Arrange it in such a way that it stands out on the page. Make use of schedules of materials where practicable. This avoids long paragraphs with numerous items divided by punctuation marks, which the stenographer will eliminate anyway. All of this to the end that the estimator may bless you and not curse you.

The process of estimating is further complicated by the universal practice of letting sub-contracts. This makes it essential that the specification be carefully divided according to trades. The general contractor will ordinarily separate it and send the proper divisions to the various sub-bidders. It is up to the architect to make sure that each branch specification contains all of the work to be done by that particular trade and nothing more. If he puts an item in the wrong branch it is very likely to be omitted altogether in the general bid, resulting in grief for all concerned.

After the construction work is actually started the specification is used in many ways,—in ordering material, in the production of various shop-fabricated materials, and on the job. It is often very illuminating for the specification writer to visit a job and ask the foreman for the specifications. The latter will scratch his head and, after

giving the matter some thought, will unearth your document from the bottom of a nail keg. Specifications, as far as their use on the job is concerned, may be divided into two classes,—those that are kept alive and in constant use on the foreman's desk and those that are decently buried in the nail kegs. It is natural that the drawings

are used to a larger degree than the specifications in the actual work on the job. In general the materials have been ordered from the contractor's office and need only be checked to make sure that they are right. The disposition and arrangement of the materials are taken care of by the drawings. There is usually, however, a portion of the specification covering workmanship and installation of materials, which is necessary and useful if properly presented. In this connection the specification writer should make it a general rule to specify *results to be obtained* rather than methods to be used. This rule, like all others, has its exceptions, but it seems reasonable to assume that the contractor, if he is competent, is in many cases best qualified to decide just how to obtain the desired result. If he is not competent, the best specification ever written backed up by the closest supervision will not make him do good work. This practical human element also applies to the individual workman. It is a waste of effort to write a lengthy treatise telling Bill Jones just how to lay bricks when Bill has been laying them in the same way for twenty years. Tell him that you want a first-class wall and he will do his best to make it so.

The legal aspects of the specification must be given careful consideration. It is an integral part of a written contract and to be usable as a legal document must contain complete and definite provisions covering all contingencies that may arise during the execution of the contract. Many architects use the printed general conditions but these must be carefully studied and often altered and expanded to meet particular conditions.

The proper relation between specifications and working drawings must be well understood. These two instruments of service are complementary and they must interlock but not overlap. Certain elements of the building can best be shown on the drawings while other elements can best be covered by written description. The result to be achieved is a coordinated and accurate instrument for transforming the architect's idea into a reality.



JOHN O. MERRILL

Mr. Merrill is a member of the firm of Granger & Bollenbacher, of Chicago. He was graduated from the Massachusetts Institute of Technology in Architectural Engineering in 1921, is a member of the A. I. A. and the Architects' Club of Chicago.

SPECIFICATIONS: HOW WE WRITE THEM

By Merton G. Kingsley, of the Office of Abram Garfield

THERE IS SO MUCH THAT might be said about specifications, and so many different angles from which the subject may be discussed that it is necessary to select one particular phase of the work for an article such as this. I will describe our method of producing specifications and will go into considerable detail as to the way in which we do this. This will probably be more interesting to the beginners than to the seasoned veterans of the craft.

We blue print all of our specifications, and have done so with much success for the past six years. This method has several advantages over other methods of duplication, depending, of course, on the number of copies required. The advantages are greatest for work which requires at least eight and not over thirty copies. Most of our jobs fall between these extremes. For the few jobs outside of these extremes we use the same method for the sake of uniformity. It might be well to point out some of the advantages of this method.

Every copy is an exact duplicate of the original. The same is true of mimeographing and other methods of duplicating, but these methods are not practicable unless at least thirty copies are required. For work which requires less than 8 copies the typewritten carbon copy method is very practicable, but not over eight readable copies can be made on reasonably tough paper and if more copies are required, each succeeding batch has to be re-checked with the original and it is almost impossible to make an exact reproduction of the original set. Errors have to be corrected on every copy with a greatly increased hazard of more errors.

With the blueprint method corrections are easily made and easily checked. There is only one original copy. When this has received its final corrections and final checking it is ready to print, and no more checking is necessary.

If there are minor errors or changes to be made and time does not permit re-typing, the corrections may be made directly by the checker with a pencil; words or letters not wanted may be blacked over; additional words may be printed in. This is not general practice and is used on minor corrections or in emergencies only.

This method readily accommodates small sketches. Sometimes a small sketch alongside the description is a very graphic way of explaining some points. The information is all in one place. One has to use judgment as to how far this practice should be carried. In the rough draft I note how much space to allow for each sketch, then on the original I draw in the sketch, usually with an HB pencil.

I use a great many schedules, as many as possible, two of these are shown on the opposite page. The horizontal lines are made on the typewriter, the vertical lines are drawn with a pencil.

The originals are typed on onion skin paper, the kind we use is very thin and very tough. This is inserted in the typewriter in the usual manner, but with a carbon paper behind it with the carbon side against the back of the white paper. This backs up each letter with a deposit of carbon and the prints from these originals are very strong. We have the prints made on extra thin blue print paper to decrease the bulk of the completed document. We use 8½ x 11 paper and bind it at the left side. This conforms to the A.I.A. General Conditions and Contract Documents. It also makes a document easier to handle than the longer legal size paper bound at the top. These blue printed specifications probably stand more abuse on the job than any other kind.

The specifications are divided into "parts". Part I, General Conditions and General Work; Part II, Excavating; Backfilling; Grading; Part III, Masonry Work, and so on. Each "part" is divided into Sections, which commence about as follows: Section 1, Contents of Part II; Section 2, Scope of Part II; Section 3, General Description of the Work, and so on. Each section is divided into paragraphs which are identified by small letters (a), (b), (c), etc. Each page bears an identification number such as 6-642-4 meaning Part VI, Job No. 642, page 4. Thus it is possible to refer easily and accurately to any particular item in the specifications.

The specifications are compiled in loose leaf books. Each book is equipped with a set of rather stiff leaves which separate the several "parts" of the specification. These separators have index tabs and are numbered from 0 to 20. The tabs are numbered on both sides for convenience in rapid reference forwards or backwards when the book is lying open. In this book the information is assembled and edited. Some of this matter consists of pages or even whole "parts" from former specifications or from our "master specifications". Entirely new matter is written by hand on thin yellow paper. Sometimes on these sheets are pasted paragraphs clipped from former specifications. Then again the written matter will be only an outline, with references to a few paragraphs from one specification and one or two from another, then an entirely new paragraph and so on, as best suits the job. The compiling of a specification for residential work is rather simple. The "master specification" is blue printed and put in the book. With a yellow pencil I start in to check it through, placing a cross beside paragraphs not wanted, a check mark beside paragraphs wanted, and the change of words here and there. Any new items are written in pencil on the back of the blue print pages.

If time permits the entire specification is compiled before being turned over to the typist. Usually time does not permit this and the several "parts" one at a time go to the typist as soon as each is completed. Then the typed specification is checked and assembled in the loose leaf book, and the original manuscript is filed for reference until the completed specifications have been issued. The specification is now ready for its final changes and checking. As the drawings near completion the addition or elimination of materials means similar changes in the specifications. Sometimes only a page here and there has to be re-typed. Occasionally a specification has to be entirely re-typed. One page out of three is about the usual run. It is surprising how much of the material is all right at the first typing.

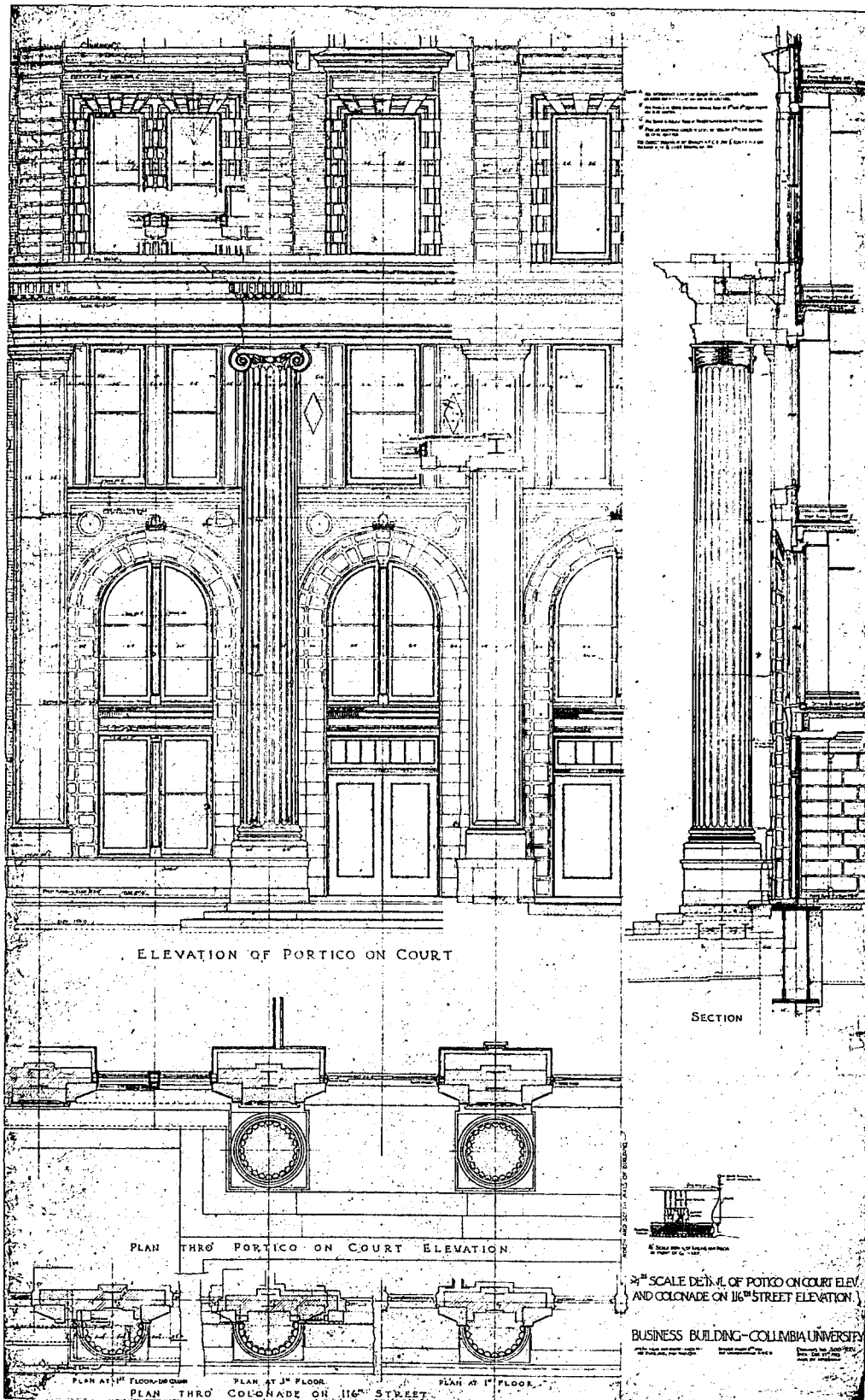
In order to systematize the collecting of the necessary information I make a schedule of all rooms, then in columns opposite the same I list the following items: floor material, base, other trim, wainscot, walls, ceilings, finish on trim, finish on walls. When several men are working on one job it is necessary to have one source of definite information.

On this schedule the information is assembled for the use of any one who requires it. Of course the schedule is subject to change from time to time as unforeseen conditions arise as the job develops. The draftsman who letters on all the room names and notes of finishes makes good use of the finally accepted schedule. This assists in the correlation between drawings and specifications. The specifications describe each one of the several materials and finishes, the drawings designate in which rooms they are to be used.

The blank schedules reproduced were designed for residential work. They give a very graphic picture of the whole building in a very condensed form. For other buildings I usually rule off a schedule to fit the building, and for a very simple building the schedule is not necessary. These schedules expedite the work a great deal. Specifications cannot be written until decisions have been made. The schedule shows at a glance what has been decided upon and what has not. The items which are open are carefully followed up so as to expedite the decision.

Other information and notes which do not need to go on the schedule are jotted down on slips of paper about 4" square and locked into the loose leaf book at the point where they apply. Valuable notes and information should not be left laying around on scraps of paper.

I make it a point to follow up all of the jobs as they progress through the office from the preliminary sketches to the working drawings. In this way I absorb a lot of information, as well as help to decide upon some of the materials and details. When a job is going through I try to keep right along with the drafting room and the specifications are usually finished at the same time the drawings are finished. The instructions to bidders, and bid blanks if necessary, may follow a day later.



DETAILS OF CONSTRUCTION—BUSINESS BUILDING, COLUMBIA UNIVERSITY
McKIM, MEAD & WHITE, ARCHITECTS

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.

Honey Homes.—Handsome booklet illustrating and describing ROCBOND, the exterior stucco. Profusely illustrated, showing typical stonework finishes and eight illustrations in color of the surface effects secured with ROCBOND European Colortone Finish. Also contains instruction as to how ROCBOND Stucco should be applied. 24 pp. 8 1/4 x 12. The Rocbond Co., Van Wert, Ohio.

Published by the same firm, ROCBOND FLOORING for Hospitals, factories, hotels, stores, schools, etc. Illustrated in color. Also ROCBOND Exterior Stucco in Florida and ROCBOND Exterior Stucco Standard Specifications.

Bayley-Springfield Steel Windows.—Catalog containing complete information on Universal Types of B-S Steel Windows. Profusely illustrated. Contains standard sections, cross sections, tables, vent and frame full size sections, standard units, installation and mullion details, curved heads, specifications. 84 pp. 8 1/2 x 11. A. I. A. File No. 16e. The William Bayley Co., Springfield, Ohio.

Herrick, The Aristocrat of Refrigerators.—Booklet illustrating and describing this type of refrigerator for many different types of buildings. Tables of dimensions. 71 pp. 6 x 9. Herrick Refrigerator Co., Waterloo, Iowa.

Ray Rotary Fuel Oil Burners.—Catalog H illustrates and describes this type of oil burner for high pressure installations, stationary and Marine boilers. Tables, sectional drawings, etc. 16 pp. 8 x 11. W. S. Ray Mfg. Co., Inc., San Francisco, Calif.

Published by the same firm, Catalog 'L' showing line of Ray Rotary Fuel Oil Burners for low pressure boilers, furnaces and special industrial uses.

Hand-Power Elevators.—Pamphlet illustrating and describing Kiesling Ball Bearing Freight and Passenger Elevators. Tables. 9 x 10 1/2. John W. Kiesling & Sons, Inc., 1797 Atlantic Ave., Brooklyn, N. Y.

Published by the same firm, D & E Dumbwaiters, and Models K-L Sidewalk Elevators.

Studies in Lime.—Handsome Brochure, looseleaf form, illustrating and describing "Tiger Finish". Many beautiful color plates, lathing details, specifications. A reference and guide for architects and builders. A. I. A. File No. 21-A-1. 8 1/2 x 11. 50 pp. Kelley Island Lime & Transport Co., Leader Bldg., Cleveland, Ohio.

The Incinerite.—Pamphlet illustrating and describing built-in Incinerites. Incinerites for every purpose—everywhere. E. C. Stearns & Co., Syracuse, N. Y.

The Ohio No. 25 Gas Water Heater.—Pamphlet illustrating and describing this type of water heater. Specifications. The Ohio Heater Co., Columbus, Ohio.

Published by the same firm, The Ohio Kerosene Water Heater.

Shapes of Clay.—Publication for architects. The August issue shows some beautiful and interesting studies in which Cordova roof tile and medium Berkeley pan tile has played an important part. Interesting article on the manufacture of roof and floor tile. 8 1/2 x 11. 15 pp. Gladding, McBean & Co., 660 Market St., San Francisco, Calif.

Peerless Built-In Furniture.—Pamphlet illustrating and describing the Peerless line of built-in furniture. Built-In Fixture Co., 2608 San Pablo Ave., Berkeley, Calif.

Kliegl Theatrical Decorative and Spectacular Lighting.—Catalog M illustrates and describes complete line of lighting specialties and lighting effects for stages, etc. Catalog includes stage equipment, exit signals, aisle and step lights, dimmers, switchboards and other special lighting apparatus. 128 pp. 7 3/4 x 10 1/2. Kliegl Bros. 321 West 50th St., New York.

Gold Seal Treadlite Tile—A Bonded Floor.—Booklet illustrating and describing this type of floor. Contains seven plates showing recent important installations in separate pocket. 12 pp. 6 x 9. Bonded Floors Co., 1421 Chestnut St., Philadelphia, Pa.

Gold Seal Marble-ized Tile—A Bonded Floor.—Booklet illustrating and describing this type of floor. Contains small scale reproductions of Gold Seal Marble-ized Tile in colors, also ten plates of recent important installations and three color plates in separate pocket. 12 pp. 6 x 9. Bonded Floors Co., 1421 Chestnut St., Philadelphia, Pa.

Yeoman Automatic Electric Junior Drainage Pump.—Leaflet No. B331. A. I. A. Classification No. 29-c-1. Bulletin illustrating and describing this type of drainage pump. Yeomans Brothers Co., 1433 Dayton St., Chicago, Ill.

Published by the same firm, Yeomans Type "HVO" Open Impeller Centrifugal Pumps, Bulletin No. S-120, A.I.A. Classification No. 29-d-5, and Yeomans Type "HVS" Horizontal Centrifugal Pumps for General Service.

Truscon Permanent Building Products.—Revised catalog containing carefully compiled data and information. Profusely illustrated, tables, sections, types and sizes, construction features. Convenient handbook for architects and builders. 27 pp. 9 x 11. Truscon Steel Co., Youngstown, Ohio.

Water Heater Manual.—Contains complete condensed detailed information for the drafting room and specification writer on automatic hot water storage systems, indirect and steam water heaters, copper range boilers, galvanized range boilers, hot water storage tank for residences, apartments, schools, public buildings, offices, factories, etc. 9 1/2 x 12. Riverside Boiler Works, Inc., Cambridge, Mass.

Zapon Architectural Specifications.—Besides the specifications this booklet contains complete information as to the value of ZAPON "OBS" Lacquers and Lacquer Enamels for architectural finishing purposes. File No. 25-E-14. 9 1/2 x 11 1/4. 26 pp. The Zapon Co., 247 Park Ave., New York City.

Coldak Electric Refrigeration.—Pamphlet illustrating and describing this type of electric refrigerator. Specifications. 15 pp. 5 3/4 x 6 1/2. Coldak Corp., 8 West 40th St., New York.

Published by the same firm, Coldak System of Multiple Refrigeration for apartment buildings, factories, delicatessens, meat markets, stores, etc.

The Gospel of Fresh Air.—10th Edition. Covers subject of ventilation and ventilators for all types of buildings. Specification information and much technical data. A. I. A. File No. 12-k-1. 8 x 11. The Swartwout Co., Cleveland, Ohio.

Stucco, Interior Plastering—Grafitto.—Handsome Brochure, just off the press, containing many beautiful illustrations showing the application of Portland Cement Stucco. Six color plates. Cross Sections. Tables of quantities. Specifications. Notes on design and a wealth of important and helpful data is contained in this beautiful book. A. I. A. File No. 21-D-1. 8 1/2 x 11. 36 pp. Atlas Portland Cement Co., 25 Broadway, New York.

Published by the same firm, Atlas White Portland Cement for Mortar, A.I.A. File No. 3-L, "Atlas White Portland Cement for Terrazzo", A.I.A. File No. 22-E-1, "Atlas White Portland Cement for Swimming Pools", A.I.A. File No. 35-F-2, "Atlas White Portland Cement for Ornamental Cast Work", "Atlas White Portland Cement for Railroad, Highway and Municipal Uses" and "Atlas White Portland Cement for Ornamental Cast Work." All just off the press.

The Thorp Reference Book of Fireproof Doors.—Contains the latest and best in Fire Proof Door Construction and its application to modern conditions. Profusely illustrated, contains elevations and detail drawings, specifications, list of recent installations, etc. 8 1/2 x 11. 95 pp. Thorp Fire Proof Door Co., 1600 Central Ave., Minneapolis, Minn.

Napoleon Gray.—Handsome Brochure on the subject of Napoleon Gray Marble, setting forth its adaptability and qualities. Many interesting illustrations. Stiff Cover. 61 pp. 6x9. Tompkins-Kiel Marble Co., 505 Fifth Ave., New York.

North Western Expanded Metal Products.—Sample book containing samples of metal lath for various uses with tables of weights and sizes and full information regarding same. Also contains specifications and detail drawings, elevations, cross sections, all in a durable binder in handy looseleaf form. A. I. A. File No. 20-b-1. North Western Expanded Metal Co., 407 S. Dearborn St., Chicago, Ill.

Display Stage Lighting.—Pamphlet on this subject illustrating and describing lighting systems for display purposes. Display Stage Lighting Co., 334 West 44th St., New York City.

Enfield Pastel Tiles.—Booklet illustrating and describing this type of tile for use in residences, colleges, public buildings, country houses, bath rooms, etc. Profusely illustrated. Specifications, tables of stock sizes. A. I. A. File No. 23-a. 8 x 11. 40 pp. Enfield Pottery & Tile Works, Inc., Enfield, Pa.

Published by the same firm, "Tile Panels".

Elevator Door Closer (Double Cushioning for Manual Operation) and Rotary Electric Interlock.—Pamphlet just off the press illustrating and describing this type of door closer. Specifications, details, and much useful information for the architect. A. I. A. File No. 33-G-1. 12 pp. 8 1/2 x 11. Elevator Supplies Co., 1515 Willow Ave., Hoboken, N. Y.

Duplex.—Handbook containing important and useful data on the use of Duplex joist hangers, wall hangers and post caps. Profusely illustrated, tables of dimensions, detail drawings, result of tests, etc. 8 x 11. 60 pp. The Duplex Hanger Co., Inc., Cleveland, Ohio.

Ornamental Street Lighting.—Design Book No. 100 (2nd Edition). Beautiful catalog profusely illustrated with many notable examples of street lights. Detail drawings, dimensions, 7 x 11. 127 pp. The King Co., Chicago, Ill.

J. & L. Junior.—Handbook on the Junior Beam, just off the press. Contains working tables and other data

in the application of the new Junior Beam to all uses in construction, especially for floors and roofs in office buildings, hotels, hospitals, schools, apartments, farm buildings, garages and other large structures, as well as dwelling houses. Profusely illustrated. 55 pp. $8\frac{1}{2}$ x 11. (Ask for Bulletin No. 2) Jones & Laughlin Steel Corp., Pittsburgh, Pa.

Multi-Vane Turbine Ventilator.—Pamphlet on the new and improved type of Multi-Vane Turbine Ventilator. Allen Air-Turbine Ventilator Co., 14th & Howard Sts., Detroit, Mich.

Bulletin No. S9 and Data Sheet No. 45.—Garage data. A. I. A. File No. 35-M-3 Ramp Buildings Corp., 21 East 40th St., New York.

GF Fireproofing Handbook.—8th Edition. As its name implies this work covers a wide range of fireproofing materials, their uses and application. Specifications, detail drawings, tables, types of construction, etc. 72 pp. $8\frac{1}{2}$ x 11. General Fireproofing Building Products Co., Youngstown, Ohio. Dept. LJ.

Variable Voltage Control System for Gearless Traction Elevators.—Pamphlet illustrating and describing this type of Control System. Also data on motor generators for use with this Control System. General Electric Co., Schenectady, N. Y.

Doorways.—The September issue shows an attractive picture of a typical Virginian Doorway and contains much practical information as well. Richards-Wilcox Co., Aurora, Ill.

Architectural Designs in Acme Brick.—A series of photogravures showing architectural designs rendered in Acme brick. Illustrations show the various types of buildings erected in the southwest in recent years. 11 x $8\frac{1}{2}$. Sent free to architects applying on their office stationery. Acme Brick Co., Fort Worth, Texas.

Flooring, Specifications and Grading Rules.—Valuable document covering end matched long leaf hollow pine flooring. Including concise specifications and grading rules. Also illustrations of prominent buildings designed by well known architects in which this material has been successfully used. 16 pp. 4 x 9 . Jackson Lumber Co., Lockhart, Ala.

Kreolite News.—Monthly Publication on the subject of wood blocks for floors for industrial plants, bridges and other floors built to withstand heavy duty. $8\frac{1}{2}$ x 11. 12 pp. The Jennison-Wright Co., Toledo, Ohio.

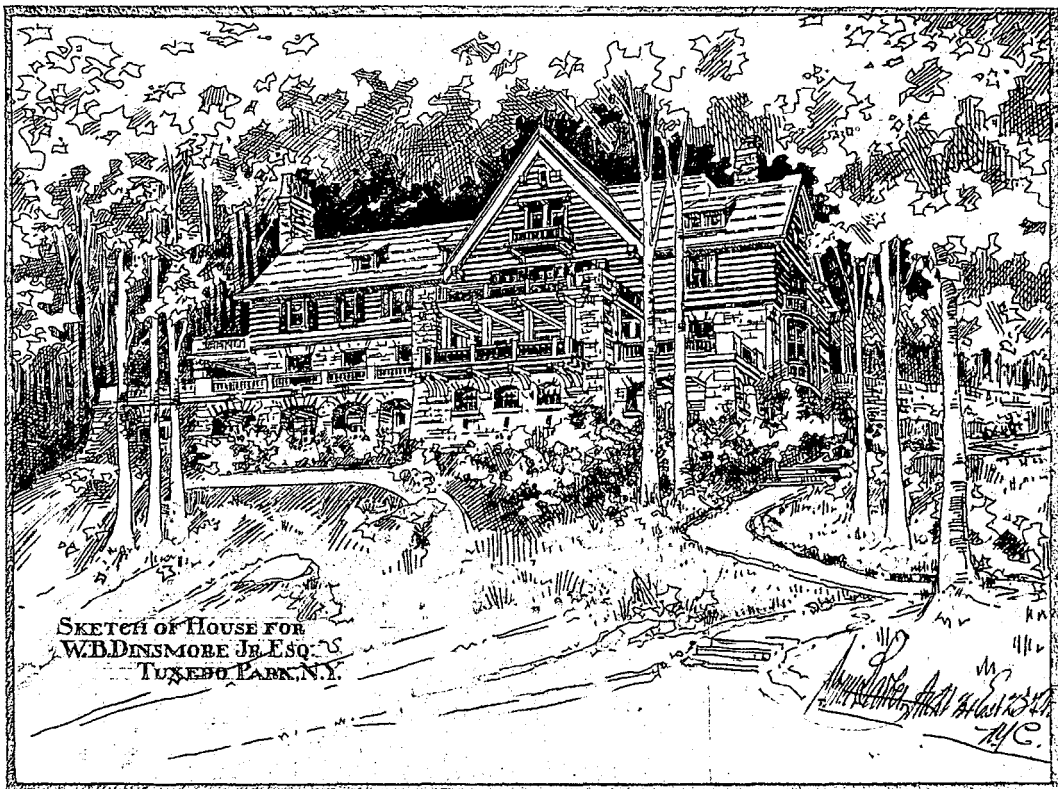
Portfolio of Specification Data.—Covers floor treatments, dampproofing and waterproofing, interior and exterior painting and technical paints for all uses. Complete specifications of all products and data concerning their application. Standard filing size. L. Sonneborn Sons, Inc., 114 5th Ave., New York City.

Weisteel Compartments.—Catalog No. 11 describing compartments of all types. Blue prints showing construction and method of erection. Specifications, including hardware. A useful book to all in any way interested in industrial buildings, public buildings, schools, hospitals, etc. 32 pp. $8\frac{1}{2}$ x 11. Henry Weis Mfg. Co., Atchison, Kansas.

The Low Cost of Dignity and Beauty.—A publication on the subject of windows with special reference to the advantages of plate glass. Tables of comparative costs and other important data, together with a large number of attractive illustrations are included. Specifications and complete information for the drafting room. 36 pp. $8\frac{1}{2}$ x 11. Plate Glass Mfrs. of America, First National Bank Bldg., Pittsburgh, Pa.

Cabranette Porcelain Kitchen Units for the Condensed Kitchen.—Attractive booklet illustrating and describing this space-saving appliance. Contains roughing-in data and plan layouts, dimensions and setting diagrams. $8\frac{1}{2}$ x $11\frac{1}{2}$. Cabranette Corporation, (Dept. P) 308 No. Michigan Ave., Chicago, Ill.

California Redwood, Its Uses, Appearance, Characteristics and Physical and Mechanical Properties.—Manual in loose-leaf form in substantial binder containing the most accurate, impartial and authentic information about all commercially important woods. Also laboratory tables, statistics, etc. A very interesting and valuable document. $8\frac{1}{2}$ x 11. California Redwood Association, 24 California St., San Francisco, Calif.



SKETCH OF HOUSE FOR W. B. DINSMORE, JR. ESQ., TUXEDO PARK, N. Y.

Donn Barber, Architect

PENCIL POINTS

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

KENNETH REID & E. L. CLEAVER *Published by* THE PENCIL POINTS PRESS, INC.
Ralph Reinhold, *President*, Edward G. Nellis, *Vice-Pres.*, W. V. Montgomery, *Secretary*



New Service Features

THE SPIRIT OF PENCIL POINTS is, and always has been, one of friendliness. We regard our readers not so much as a number of individuals who pay us a certain number of dollars each year for twelve copies of the paper, but as a group (which has now grown to be an army) having similar interests and having certain requirements which we are trying in every way possible to recognize and meet.

Whenever we see an opportunity to increase our usefulness to those who pay us the compliment of subscribing for and reading PENCIL POINTS, we want to do it, and this is to announce a few little innovations which we plan to put into operation with our January issue and which we hope will prove to be valuable.

THE MART will be the name of a new department in which 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. In this department we will also print, free of charge, notices from readers desiring to buy or sell copies of back issues of PENCIL POINTS.

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 promptly be answered by letter. All such inquiries should be addressed to QUERIES AND ANSWERS Department.

Just a word about our FREE EMPLOYMENT SERVICE, which has proved to be such a very popular feature. 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. Those seeking positions are invited to call to inspect this bulletin board at any time between the hours of nine and five. Notices submitted for publication in this department must reach us before the fifteenth of each month if they are to be inserted in the next issue. Address all communications EMPLOYMENT DEPARTMENT, Care Pencil Points, 19 E. 24th Street, New York.

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. Such notices should reach us before the fifteenth for insertion in the forthcoming issue.

MANUSCRIPTS. We are constantly on the lookout for good books which will be of interest to our field. Such manuscripts should be submitted to W. V. Montgomery, Secretary, Pencil Points Press, Inc., 19 E. 24th Street, New York.

ARCHITECTURAL CLUBS. There are, in many cities, organizations embracing within their memberships both architects and draftsmen, which are doing valuable work both in promoting the interests of architecture at large and the happiness of their members. We believe that more such clubs should be organized and shall be glad to supply information to all interested on such subjects as constitutions, by-laws, and methods of procedure.

Some of our readers may think of other things we can do around here to promote the general architectural welfare. Let no such man be bashful. We are always glad to receive suggestions and to act upon them if, after careful consideration, they seem to hold elements of value to a considerable proportion of our readers. We cannot, of course, follow every suggestion made but at least each one will be considered on its merits, and all are most welcome.

Contents

The Relationship Between Architect and Draftsman	
By Charles D. Maginnis	645
A Draftsman Turned Etcher—	
Louis Conrad Rosenberg	
By Kenneth Reid	649
The Draftsman's Christmas Card	
	662
The Ricker Manuscript Translations, I—Guadet's "Elements and Theory of Architecture"	
By Thomas E. O'Donnell	665
A Building on the Board	668
Renderings in Color	Insert
Plates	677-684
Whittlings	685
Here & There & This & That	
Conducted by R. W. R.	695
The Specification Desk	703

PENCIL POINTS—Yearly subscription, payable in advance \$3.00 to the U. S. A., Insular Possessions, Cuba and Mexico. Single copies, 35 cents. Foreign subscriptions in the Postal Union, \$1.00 additional for postage; Canadian subscriptions, 50 cents additional. Remittances by International or American Express Money Order or by Draft on a bank in the U. S. Payable in United States Funds. Subscribers are requested to state profession or occupation. TO SUBSCRIBERS: Instructions for change of address should reach the publishers before the twentieth of the month to assure delivery of the forthcoming issue. Please give both old and new address. TO CONTRIBUTORS: We are always glad to receive and examine manuscripts, drawings, etc. We will use due care while the material is in our hands, but we cannot hold ourselves responsible for damages. Publication office, Stamford, Connecticut; Editorial and Advertising Offices and Subscription Department, 19 East 24th Street, New York, N. Y. RAY D. FINEL, Advertising Manager. Chicago Office, 1050 Straus Building. Copyright, 1926, by The Pencil Points Press, Inc., Trade Mark Registered. All rights reserved.