THERE is the time as never before, for every reader of Pencil Points to be right up on his toes. Why? Because things are going to be forced upon us, whether we like it or not, more furiously than they have ever happened before. We are not a sure enough prophet to be able to say whether the big building program, which we all know will soon be started in this country, will manifest itself unmistakable in September or even in October, but it is going to come before very long and when it does come it will keep us all very busy for a long time.

Now is the time to get ready for what is before us. Draftsmen specification writers and all those who have to do with the actual production of buildings should set their houses in order so that they may be saved later on when the telephone is ringing and a million and one things have to be done to get the jobs through the office. Working information should be given together. Files of material useful in preparing plans, specifications, etc., should all be indexed and arranged so as to be handy. Files of the most important pieces of printed matter issued by reliable manufacturers should be completed and brought up to date. In short, everything in the way of data and information that will make your services more valuable should be got together now. If you are an architect conducting an office of your own you can readily continue the program which will work to your advantage when the business begins to come in.

The editors of this paper are convinced of the fundamental soundness of the building industry in this country, of its early return to a very active condition and of the enormous part which will be played by the readers of Pencil Points in the building program of the next few years. We have planned to make this paper not only a source of inspiration by continuing the publication of the most masterful draftsmen and the other features with which you are already familiar, but also, in order to carry our work even further, we will include more articles such as that by Mr. Charles H. Nichols on “The Proportioning of Riser and Treads” published in August, articles that will be of assistance in solving some of the knotty practical problems met with in the drafting room. We intend to take to heart ourselves the title of this editorial and will bend every effort in the direction of making Pencil Points the liveliest visitor that comes to you during the month.

Could Pencil Points, so far as you are concerned, be better and if so, where? Are you getting too much of any one class of material and if so, what? Would you like to see any subjects treated so far which we have not reached, and what are they? Have you any article which you think would be interesting and valuable to the rest of our readers and if so why, send it in for consideration?

“On your toes!” we think means more right now than it ever has before. We have gone, through a long period of building stagnation and some may be inclined to be discouraged, but the man who hangs on at a time like this and gets ready in every sense of the word for different things and better things is the man who will take the greatest part and receive the greatest rewards during the next few years.

WHAT BOOKS DO YOU WANT?

THE publishers of Pencil Points have in preparation a series of books which will be prepared and published especially for the readers of this journal. The titles and other particulars of the first books of the Pencil Points series will be announced shortly and the first book will come from the press about January 1, 1922.

In order that we may not overlook any important subject in developing our program, we ask your co-operation in making this list complete. What books do you want? What subjects would you like to see treated in the contemplated series? Do not confine yourself to the mere titles of books, but let us have as complete a proposal as you can, with a range of contents, manner of treatment, etc.

The publishers will send a check for $10.00 for every suggestion for a book, in addition to one already arranged for, which is approved by the editors and adopted for publication. Any one may send in one suggestion for a book, or a hundred. In any case where two or more persons suggest the same book the prize will go to the one whose suggestion was mailed first as shown by the post mark. Let us hear from you.

a summer hotel, on the other hand, we would find people dressed for bathing, boating, riding, tennis, golf, and other sports, or leisurely enjoying themselves dressed in appropriate summer clothes. Needless to say, fashions should be up-to-date in such a scene, but in all means avoid the unnatural people often found in the conventional “fashion drawings.” Be especially careful not to have the figures too straight and stiff, this is a very common fault. Use care also not to make foreground figures so large or important that they dwarf the architecture or lead the eye from it. Occasionally people so near as to be exceptionally prominent and slightly smaller than they would actually be, though such liberties should never be taken unless one has sufficient reason to justify the bias, advantage, and a figure beside the building pictured should always be of correct size or a wrong impression of scale will be given. Too many figures spotted around carelessly will destroy balance, so in composing, plan for the eye to be lead gradually

Decorative Treatment

We have mentioned in previous articles that all pencil drawings are somewhat conventional in treatment, the objects being rendered more according to rule or precedent than by attempting to duplicate nature or fact. Nature shows us color, for instance, which in black-and-white drawings can be suggested only in a somewhat meager manner, and she makes no use of outline, so firmly established by convention in pencil representation. She gives us also the brilliant color which she can so easily and obviously impossible to adequately portray it on paper, so here too we resort to convention for its suggestion. There are certain conventions, then, that are forced upon us because of our inability to suc-(Continued on page 36)
THE SYMBOLISM IN ST. THOMAS'S

THAT the carvings in St. Thomas's are interesting and have significance is a fact that it seems the New York public has just learned through items in a number of newspapers during the past few days. Since a bit of sensationalism helps a newspaper story immensely, that element has not been left out.

As a matter of fact, St. Thomas's is rich in carvings that reflect the spirit and life of the times in which they were made—something for which there is ample precedent in the old Gothic churches and cathedrals. If the minor details of a church of today are to be anything more than dead copies of historic examples or meaningless inventions, there seems to be no other course than to draw upon the life of the day for subject matter and to give fresh renderings of Biblical stories, and portraits of prominent figures in the history of the Church.

Many of the carvings in this church were made during the war, or at about that time, and they naturally show portraits of the men who were taking a prominent part in the events of the day, as well as groups typifying the conditions and more important incidents of the times. Thus we find statesmen and generals, the Salvation Army lassie, with a pan of doughnuts; capital, labor and the consumer all bound together and struggling to the discomfort of all, especially of the consumer; also the victory of prohibition.

The illustrations published in connection with this article, excepting those on page 12, are from photographs of the models, and some of them show the architect's criticisms. For instance, the prohibition design shows a note instructing the modeller to substitute a lemon for the bunch of grapes on the side nearest the figure typifying prohibition. The architect's drawing sent to the modeller bears this note, "Dionysus" is not to be ugly nor is Prohibition to be cattish. We are not taking sides with either."

"More ribs," is the architect's comment on the grotesque at the right in one of the photographs illustrated on page 10, though this note does not show here.

One of the illustrations shows the figure of a jester who, if we remember the old legend correctly, assumed difficult postures as a form of penance.

Dignitaries of the Church, prophets and saints are present in bewildering numbers. The illustration at the bottom of page 10 shows one of the many excellent representations of Biblical incidents. The loose-jointed bulk of the giant is especially well rendered and the whole treatment is spirited as well as decorative.

In the illustration at the top of page 10 the bunch of keys, the ac-

(Continued on p. 38)
PENCIL POINTS

For figures in a series of mould bands, Chancel of St. Thomas's Church, New York City. Reproductions of full-size drawings sent to the modeller by the architect, Bertram Grosvenor Goodhue, Architect.

PENCIL POINTS

The Salutation Army and The Baptism of the Eunuch, illustrations.
DETAIL OF PORTICO OF THE PANTHEON AT ROME

FROM H. D'ESPOUY'S "FRAGMENTS D'ARCHITECTURE ANTIQUE"
On the other side of this sheet is shown a portion of the entablature of the portico of the Pantheon, Rome. The portico is octastyle. It extends sixty-two feet beyond the main portion of the building, which is circular. The pediment of the portico is like that back of it on the wall of the building.
ANTIQUE CAPITAL
FROM H. D'ESPOUY'S "FRAGMENTS D'ARCHITECTURE ANTIQUE"
An interesting rendering by Bigot of an antique capital is reproduced on the opposite side of this sheet from a plate in H. D’Espouy’s “Fragments d’Architecture Antique.”
STUDIES OF HANDS BY TABER SEARS, FOR CHANCEL DECORATION IN THE FIRST PRESBYTERIAN CHURCH, NEW YORK CITY
The beautiful studies of hands reproduced on the other side of this sheet are from drawings from life by Taber Sears for a mural decoration in the First Presbyterian Church, Fifth Avenue and 12th Street, New York City. Among Mr. Sears' notable mural paintings are "The Spirit of Niagara," Buffalo Historical Society; "New York Among the Nations," in the New York City Hall, and paintings in Grace Church Choir School, New York; Trinity Church, Buffalo, N. Y., and the First Presbyterian Church, New York.
SKETCH BY LOUIS KURTZ FOR HOUSE AT KINGSPORT, TENN.

ELECTUS D. LITCHFIELD & ROGERS, ARCHITECTS
Figure 80.

Figure 85.

Figure 81.

Figure 84.

light rays. With the sun assumed in the customary position, reflected light from the sky will be strongest along the diagonal of a cube, but in the opposite sense (up, back, to the right) to direct light rays. The reflecting sky may be considered as a hollow hemisphere, and the portions nearer the sun will supply the strongest rays while the rays of lower power will come from the portions more remote. This has a first effect of reinforcing the effects of direct light.

The ground is extremely important as a source of reflected light: its principal rays produce an effect comparable to the footlights of a stage. From Figure 80 it will be seen that OP is the normal direction of reflected rays illuminating the façade, and that any element of the façade (edges of mouldings, etc.) perpendicular to OP will receive the maximum intensity of the reflected rays, and also that the illumination from this source will decrease with the height of the building, the brightest portions being nearest the ground.

Three sources of reflected light rays have been considered: the general atmosphere, the sky considered as a hollow hemisphere, and the ground. Simplification of rendering leads to the combining of these in one direction, which has been selected as that marked B in Figure 81. It is the direction that has been assumed in most of the recent renderings where, for instance, the counter shadows of dentils or modillions are cast at 45 degrees from right to left. This convention is not much older than the middle of the Nineteenth Century. Previous to that time backshadows were cast indifferently to the right, as in Plate XXXIII in this issue, which is a restoration of the cornice of the portico of the Pantheon at Rome, by Daumet; or to the left, as in Figure 29 in April issue, the detail of frieze from the temple of the Sun, Rome, by Esquié; or from below up, as in Figure 28, April issue, also by Daumet, a detail from the Temple of Concord, Rome. It is best to adopt the direction of reflected light indicated in B, Figure 81, as it is now so general, but we must not forget its purely conventional character.

In casting counter shadows it must be remembered that reflected rays from the sky or from surrounding objects interfere with the rays from the ground and that the outline of the counter shadows soon becomes blurred, and vanishes in the general shadow tone. The rendering by Esquié
PENCIL POINTS

shown in Figure 29 (April) illustrates this principle very clearly.

Shadows of all kinds are rendered by graded tones because of the effects of reflected light. A long vertical shadow, such as that cast by a column, is lighter in the lower than in the upper part, which is farther away from the ground acting as a source of reflected light.

Many shadows, direct as well as reflected ones, on the small-scale drawings and the smaller ones on the details, are most conveniently put in with the ruling pen, mixing the proper tone with the brush, which is then used to fill the pen. In the same way a free-hand pen may be used to put in back shadows and accents on sculptural reliefs or architectural ornament. This use of the freehand pen and ruling pen may be seen in Figures 82 and 83, details of a competition elevation drawing.

All plane surfaces are limited by edges; these are never perfectly sharp, but have a section similar to a, Figure 84. Therefore these edges will receive either a greater or a less amount of light than the surface M. In the case of a rectangular surface such as a quoin, Figure 84-b, the two edges AB, BC are illuminated as planes at 45 degrees, while the edges CD, DA are similar to surfaces in shadow. It is the usual practice in drawings at small scale to treat all vertical surfaces like this quoin, but to neglect the rendering of CD and DA, while keeping a high light on the edges AB and BC, which are very bright in contrast with surrounding values. How this may be applied to a small-scale rendering is shown in Figure 82. Note how a high light has been left on the left hand edge and the top edge (unless it is in shadow) of all the vertical surfaces. This has been a common practice in rendering details at large scale, or in the foreground, as in Figure 83. It is of just as much use in small-scale drawings if properly handled. Similarly, in rendering within shadows, just as reflected light will cause counter shadows, so will it cause lighted edges on the lower and right hand projecting edges, as shown in the rendering at the right of Plate XIII, April PENCIL POINTS.

In all rendering there are three big divisions of tone—the highlights, left almost colorless, or rubbed

(Continued on page 44)

Figure 90. Detail of Temple of Antoninus and Faustina, Rome.

Figure 91.
The necessity for so fashioning our designs that they will be well suited to the material in which they are to be embodied has been referred to several times in earlier parts of this article. Prerequisite to this is a thorough understanding of the material. A comparison and study of the surface effects appropriate to the more common of these should, I think, be the next step in this discussion.

The characteristics of building materials may be grouped roughly under two main heads, the characteristics that relate to their structural qualities and those that influence or determine their appearance. Discussion of the first group is pertinent here only where the structural peculiarities affect the design of detail. That an important quality of steel is its tensile strength while stone acts principally and brick always in compression, that steel supports our larger buildings, while stone, terra-cotta, or brick clothes and protects the steel are facts generally understood. Most of this can be profitably left to the engineers. The vistas opened up by the second group of considerations are wide enough to fully engage our attention.

There is no material whose fashioning has not been, in many cases, a travesty; iron refined into the form of bronze or wrought into shapes that should have been cast, stone carved like wood and wood like stone. We have in general failed to avail ourselves of the opportunity afforded by terra cotta. The Persians, the Greeks and the Italians made clay tile to be used architecturally as a covering or dress to beautify and sometimes to protect the rough supporting structure. With the recent development of the use of steel as the skeleton of the largest buildings, the use of terra-cotta has increased tremendously, for it is well adapted to serve as an outer dress for buildings of modern construction. But with us the design of this beautiful material has been in most cases a direct derivative from stone, with which it has little in common except that it can become its more or less perfect imitator. A chief quality of good stone design is the suggestion of its inherent supporting qualities. Terra-cotta columns, piers, entablatures, arches, even rusticated walls, have been fashioned and repeated endlessly. Sometimes when great care was used and the detail placed at some distance from the eye, the different pieces of modelled clay could be lined up so that they could not be distinguished from stone. Modern methods of manufacturers have enlarged these possibilities of imitation, but slight imperfections reveal a most beautiful quality, that can be turned to good account in terra cotta. Few of us prefer a perfectly uniform, absolutely flat-toned, wall of smooth...
brick to an irregular vibrant wall of bricks that have a rough texture, laid with broad rough joints. Terra cotta, which warps naturally in burning, may well be made to satisfy in like manner. It cannot do this where the essence of the design lies in the cold regular lines which are among the chief beauties of classic stone buildings.

The representative of an important terra cotta company told me lately that Stanford White used to make them distort the pieces of clay during manufacture so that they would not resemble stone. Stanford White's work in terra cotta is the best of the period, indeed nothing better has been done since, although there are later buildings that are more characteristic of the material than his, they are not as good architecture. Where his work falls short, it seems to me, is in the kind of detail that he tried to adapt to terra cotta. Although fine in scale it had the spirit of stone, delicate Italian stone, but it was not a tile dress for a sub-structure. Examine the photograph of the Herald Building, New York, of which McKim, Mead & White were the architects, shown on this page. The pilasters are covered with small filagree ornament that is appropriately proportioned to the modeller's art. It is also quite within the limits of marble. There is even more delicate carved stone in Italy than that on the Palazzo del Consiglio of Verona. And although the small elements of the detail may be good terra cotta ornament, I maintain, that the expression of structural strength in the pilasters, arches, column caps, entablatures and cornices is false. It is essentially stone detail and would be excellent only if the material could sustain weight. The parts of the design that really have the appearance of a covering and that, therefore, I think most characteristic of terra cotta are the flat surfaces of the arch spandrals, but these, as it happens are made of square cast stone or cement quarries.

In a book published in the interests of terra cotta are pictures of two small theatres that show especially suitable terra cotta work. In one, the whole building is evidently surfaced with a modelled material and the walls and other supporting members are covered either with tile shapes or such detail that the impression of a covering is always present.

In the Century Club, another of the beautiful buildings by the firm of which Mr. White was a member, the stamped treatment of the wall courses is appropri-
natural and reasonable, there is no danger of its becoming artificial. On page 27 is a view of a portion of a residence of which Charles I. Berg was the architect. It is an excellent illustration because of its undeniable charm. The contrast of texture between the stone and the brick that shows on the right, the adzed beams and the roughly plastered-on finish of the stucco, the uneven laying of the heavy slate, all are in keeping; even to the old iron ring, stuck in askew on one side of the doorway, the old fashioned flowers and the vines that frame and clothe it. Because it is lovely I dislike to suggest that it is not reasonable. But it must have cost a lot of money to get adzing done as badly as that; it is so studiedly bad. The irregular stone work looks a bit studied too; hardly the result of inability; rather of over-ability. Another possible point for discussion is the arched wood lintel. Of course the answer to an objection is that the curve is only decorative. In this case I agree, although it is decoration derived from the structural form of another material. When, however, a stone lintel is cut in a curve on the underside which leaves insufficient strength just where the bending moment is greatest, that is decoration I have not yet been able to condone.

I said, a few paragraphs back, that simplicity of craftsmanship should go hand-in-hand with the reincarnation of the old. It does not follow that rough finish alone will reproduce the old manner, nor does it follow that the touch of the skillful craftsman’s hand is valuable only to copy the past.
A beautiful, rough texture is beautiful because of the variety and vibration that it affords. A perfectly smooth trowelled cement surface might exclude the water from a wall better than a thrown, or a gravel, or a grit finish of harmoniously contrasting colors; but it would prove far less interesting to look at. So a warm, vibrant texture is valuable in itself, giving life to large unbroken spaces and the craftsman may work to the end of securing such a surface without the vain hope of imitating decay.

On the other hand, do not forget that the smooth, light-gray wall surface of a Louis XVI salon, graded per chance by the varying illumination, is desirable because it offers a contrast to the vibrating light and shade of the white mouldings and ornamentation. The principle it exemplifies is of wide application. Texture, as I understand the word, may mean a smooth as well as a rough finish, though I grant that when the term is used comparatively, it suggests a degree of roughness.

Much care has been bestowed by some architects upon the texture of their buildings even though there be others unaware that such a thing exists. It is detail just as much as are mouldings and sculptured ornament. But it is a kind of detail about which very little has been written. Some years ago, I had to decide on the size and finish of some rusticated stone courses: In New York there were at hand a number of examples, good and bad, but there was no study on this really very important subject, nothing recorded, and I had to go about the city with a rule and measure the courses of buildings, their projection, the space between the rustications, etc., and make notes of the finish that accentuated the different effects.

One day some of us had a discussion about the stone of which St. Thomas's on Fifth Avenue is built. An enthusiast applauded the great variety of

(Continued on page 37)
Perspective Drawing, Figure 41. See Text on Page 33.
Perspective Drawing, Figure 42. See Text on Page 33.
THE object of the diagram Figure 41 is to show how to determine certain geometric figures in perspective as projected from a geometric plane either above or below the picture plane. These geometric forms may be the block outline of a nucleus of a building, a column, a detail, or a unit of any description. The point of interest is to be able to locate with precision these block-forms in the picture, with the exact relation between themselves and the picture plane, and between one another. The same method of elimination is applied with the distance point reduced to $D \div 3$, thus avoiding the unnecessary spread of operations outside the picture plane. In a subsequent issue the method of eliminating the geometric forms or plans outside the picture will be shown, but in order to make that demonstration intelligible, it will be necessary at this stage to give the complete operation as it takes place in its full development. First trace an oblong $7 \times 4 \frac{1}{2}$ inches, this being a convenient size for the diagram. One-third of the way up from the bottom trace a horizontal representing the horizon line, then a vertical through the centre of the diagram, representing the central axis. The depth of the picture is found at the intersection of a straight line traced from the vision point $V$, and a straight line from the two lower intersection points of circle and diagonal respectively, the distance point $D \div 3$ most convenient for use, and from the points of intersection of these arcs with the ground line, trace a vertical line to the top of picture plane or line $XZ$, then trace a straight line to the distance point $D \div 3$. At this intersection of these last mentioned lines, and those conducted to the vision point $V$ from the foot of each vertical previously raised from the points in the geometric plane, on the ground line, we shall find the perspective of each point respectively. To illustrate see Figure 41, in lower left hand corner, taking the triangle $A$, $B$, $C$. Verticals are first erected from points $A$, $B$, and $C$ respectively until they intersect the ground line. Thence a straight line is traced from these intersections to the central or vision point $V$. Centering at the aforesaid intersections on the ground line with an arc equal to $1/3$ the distance of these points respectively from the ground line, we rotate this arc in the opposite direction to the distance point $D \div 3$ we wish to use, and uniting the point of intersections of this arc on the ground line with the distance point $D \div 3$ we shall find at the intersection of this line and the line traced from the foot of the vertical previously raised from the points in the geometric plane on the ground line will be the perspective of each point respectively. For example, $A'$, $B'$, and $C'$ are the perspectives respectively of $A$, $B$, and $C$ in the geometric plane. This operation repeated above the picture plane as shown in Figure 41, will serve to check our operations and also show a fuller development in the perspective of these forms at the top of the picture, because of the horizon line being placed $2/3$ of the way down from the top.

The other forms shown to the right are constructed in the same way and their perspective is also obtained in the same fashion. An accurate delineation of these forms as shown in Figure 41 is advisable for the student to make, solving each problem carefully for himself in order that he may grasp readily the more advanced operations which are to follow. In Figure 42, exactly the same method is followed and should also be worked out by the student very carefully. This figure may serve especially in later issues in laying out colonnades, etc. It may be necessary to explain at this point the method of finding the depth of the successive squares in the picture in which the other figures, such as the octagonal or pentagonal shape is inscribed. (See Figure 42.) For example, in the upper left-hand corner of Figure 42 we find first the circle, then to the right an octagon inscribed in a circle, and so on, each enclosed within a square. The perspective of the square is obtained in the usual manner, by using the distance point $D \div 3$, the depth of the square in perspective being found at the intersection of a straight line traced from the left of the vertical $XY$ (Figure 42, upper left-hand corner) to the vision point $V$, and a straight line conducted from the intersection of an arc of circle equal to $1/3$ (one-third) the distance $XY$, on line $XZ$ to the distance point $D \div 3$. For the perspective of the circle and octagon, these having been first drawn geometrically above and below the picture plane, or in what is known as the geometric plane, including the vertical and horizontal axis and diagonals, erect a vertical from the two lower intersections $MN$ of circle and diagonals respectively, to the top of picture plane or line $XZ$, then straight lines to the vision point $V$ from these points $M''N''$ on line $XZ$. These lines will intersect the diagonals traced in the perspective square in four places, and these together with the four additional (Continued on page 44)
PICNIC OF THE PITTSBURGH ARCHITECTURAL CLUB.

The first picnic held this year by the Pittsburgh Architectural Club was carried through on an interesting program. It was a stag affair, held on the grounds of the South Hills Country Club. Henry Hunt, chairman of the picnic committee had the event in charge. Arthur E. Anderson designed an effective announcement, blueprints of which were sent to club members. We can do no better, and might easily do worse, than to quote the account of the affair which was printed under the title "Picnicking in Arcady," in the last issue of the club's monthly "The Charette," so here it is:

"How naive a toy is a top in the hands of a child.

"Round, red, and revolish.

"How naively does it roll, and like the locust they prey upon our greenness, adorned with the flavor of the bounding main to suave the harsh purport of their recle.

"Great was the entertainment committee, may their shadows lengthen thereafter.

"Tents, tables, all the conveniences of life most snappily indicated.

"Pleasant was the gathering, luxuriously conveyed to sylvan dells, in many automobiles, and several fords.

"The great were there, The Chapter was there, The Club was there, we were there. And ah! the meetings of the Ancient and Innumerable order of the Zymologists. Note a certain air of conscious competence in anecdotes. Last year apologies and modest hope subdued the voice, now rings proud certainty, heralded by confidenceervicted by Braggadocio. These be unswotted matters.

"After vulgar Hunger had been ousted from the belly, trooped the faithful to the games. Here was the only shadow of a glorious day. We have always esteemed Tom Pringle highly as an honorable man. Nor more.

"The cook-fight, what a brutal game. A ring being formed two men are loosed at each other, bound, think of it, in the twentieth century of this gentle era. The editor and Tom Pringle took the ring together. We felt, let the veil be drawn.

"But revenge is sweet, or sweet perhaps on such a day. Tom Pringle was driven ignominious from the ring by that earnest Irishman Boyd, who struck with victory hot upon him after evicting Wallace Smith from the ring by dint of hearty grunting.

"The sack race! What a boost for embrocations. Thus it is done. Get a sack, or group of sacks, and take them into the air, to keep it first, and at a signal try your best to jump out of it, this will accelerate your momentum, to speak technically, until you are able with a last despairing leap to land firmly and bowingly on your stomach. Then go and get some few gallons of armica and retire for the day.

"How descriptive is the noble English tongue. Heats. Respectfully. The first heat discovered Pringle and McRann gracefully draped on the sword in advance of the field. They yielded their places courteously to Schoeneman and Hergenroder and in the final agony the former is smooth beneath the impressive tracts of Schoeneman and Pringle in the order named. Then, as if enough perspiration was not crying aloud from the saturated soil we must have a foot race. Eighty yards. This is the roster of imbecility. First heat Smith and Caldwell, second Bowers and Aussen, finals Smith and Aussen. But we mention the wheelbarrow race with shame. How can man, the noblest of created things, stoop to such depths, to his hand to be exact. And with his latter anatomy elevated, like as never since the palmy days of childhood, grasped by another of his ilk and trundled drunkenly to ignominious victory, Hergenroder-Aussen, Morris-Brasfield so they were exhibited.

"But now the noble fanfare of the trumpets!

"Sir Leslie Bowers hight of Jack, meets Sir Tom de Pringle, the daft Scot. Sir Bowers holds between his iron thighs the noble destrier McMullen (out of Woods Run by Accident), Sir Pringle pringles on the spine of Schoeneman who curves a wheelbarrow. (Note—Prizes were awarded but as these are present and in the forms and kinds prescribed in the secret ritual of the Club we are not privileged to mention more than the fact.)

"Great indeed was the entertainment committee, may their shadows lengthen thereafter.

"Tents, tables, all the conveniences of life most snappily indicated.

"Pleasant was the gathering, luxuriously conveyed to sylvan dells, in many automobiles, and several fords.

"The great were there, The Chapter was there, The Club was there, we were there. And ah! the meetings of the Ancient and Innumerable order of the Zymologists. Note a certain air of conscious competence in anecdotes. Last year apologies and modest hope subdued the voice, now rings proud certainty, heralded by confidence serviced by Braggadocio. These be unswotted matters.

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"The cook-fight, what a brutal game. A ring being formed two men are loosed at each other, bound, think of it, in the twentieth century of this gentle era. The editor and Tom Pringle took the ring together. We felt, let the veil be drawn.

"But revenge is sweet, or sweet perhaps on such a day. Tom Pringle was driven ignominious from the ring by that earnest Irishman Boyd, who struck with victory hot upon him after evicting Wallace Smith from the ring by dint of hearty grunting.\]
PERSONALS

HAROLD E. HALL, registered architect, formerly of Westwood, N. J., is now connected with the Hester Decorating Co., New York City.

PARIS PRIZE AWARDED

THE Paris Prize has been awarded by the Society of Beaux-Arts Architects to Lloyd Morgan, as the result of the competition which closed August 16, at the headquarters of The Beaux-Arts Institute of Design.

The funds for the scholarship were donated this year by Mrs. Lewis B. Preston. Mr. Morgan is from the Atelier Hirons, New York. In addition to receiving the Paris Prize Mr. Morgan was given a First Medal. Mr. J. G. Schuhmann, Jr., Columbia University, was placed second and awarded a First Medal. A. E. Westover, Jr., was placed third and given a Second Medal. H. S. Adkinson was placed fourth and awarded a Second Medal. R. A. Fisher, placed fifth and awarded a Second Medal.

PROGRAM

The Annual Committee on the Paris Prize proposes as subject of this Competition:

"An Exhibition Center"

A rich municipality in developing its city plan proposes to give great importance to a center for exhibitions and assemblies. It is convinced that not merely local but international prominence will be given to the city which provided, in a magnificent manner not hitherto realized in America, facilities for great political, religious, or industrial conventions and assemblies and exhibitions of all kinds.

Therefore, at a point where important avenues and streets converge, a circle with a radius of 750 feet has been drawn and the ground within its circumference left free for the placing of the contemplated construction. It is proposed to erect here a building or a group of communicating buildings which may be used as a unit or separately.

The requirements are:

1. A Great Hall to be used for industrial exhibitions, horse shows, athletic meets, horticultural exhibitions, etc. The clear floor area in this should be not less than 50,000 sq. ft., around which should be disposed exhibition galleries which may be converted into seating space when required.

2. An Art Gallery adapted to annual exhibitions of national and international scope and loan exhibitions of different kinds, such as paintings, sculpture, architecture, furniture. Certain of these galleries should be lighted from windows in the wall, others from overhead. The floor area of this should be in the neighborhood of 30,000 sq. ft. disposed on one or more floors.

3. An Auditorium with a seating capacity of 10,000 for public meetings, concerts, etc.

4. An Enclosed Space available in connection with these units where, in the open air, concerts could be held and sculptural and horticultural exhibits shown in connection with those held underground.

5. A Restaurant, installed somewhere in the group, to serve visitors during the time of exhibitions or assemblies.

The facilities for entrance, circulation, and exit should be carefully considered in connection with these buildings as they will necessarily vary according to the functions of the different elements included. At times the whole group will be used for a single purpose, at other times there will be separate or simultaneous use of the different units.
It is not only in the selection of these details, however, but it is in their arrangement as well that the picturesque is sought, for the spacing of objects is of utmost importance, in fact all those parts—often depends more on what looks interesting and attractive than on what would be practical. The search for the picturesque in nature is not confined to trees and shrubs, but is found in the architecture for trees and shrubs of all sorts are utilized, distorted into any shape and arranged in any way that pleases the fancy of the artist. Flowers of unusual species grow in curiously fashioned pots or are grouped in beds of fanciful design while clouds are piled in the sky in a manner wholly without precedent in nature. The technique is as varied, too as the selection, all sorts and kinds of lines being used in every possible way. One should not gain the impression from all this, however, that these things are jumbled together in a haphazard manner, for quite the opposite is true—the greatest pains being usually taken that the completed whole shall be a beautiful and interesting design, rendered in an attractive manner, and although in much of this work the imagination is given free play, it is by no means permitted to run riot.

Many of these decorative renderings are done in pen-and-ink or wash or some medium other than pencil, but as in nearly every case careful pencil preparation is required, regardless of the medium used for completing the final drawing, the subject seems more essential than does a truthful delineation of the architecture itself and its surroundings, and it is this type with which we are especially concerned just now.

Rendering of this sort is used for so great a variety of purposes and is handled in so many different ways that no work here is more than an attempt to show the making of magazine covers, the designing of title borders or lettered inscription or something of that sort. In this connection we urge him to collect and study many examples by different artists, copying such drawing or portions of drawings as make a strong appeal.

Among the uses of such drawings may be mentioned the illustration of types of advertising matter, in which drawings of buildings, or parts of buildings are required for the making of magazine covers, the designing of title pages, or the illustration of certain classes of books and art periodicals. As the artist approaches the purchase or disposal of the home (and others of similar nature) —or, again, the drawing of decorative headings, marginal sketches and titlepieces, it is impossible to do so, by the addition of an ornamental border or lettered inscription or something of that sort. There are many drawings, however, where the architecture is simply a part of the decoration, being sometimes entirely imaginary or perhaps distorted into forms which would be impossible to build or undesirable if built, yet which add nicely to the decorative appearance. In such work, the main purpose is to catch and hold the attention, and in advertising work, prominence is thereby often given to such architectural features as are considered quaint and picturesque. Thatched and tiled roofs are popular, for example; as are huge chimneys, windows with shutters of unusual design, flower boxes, lattices, garden gateways, etc.—birdhouses, weather vanes and sundials, rainwater leaders and lead-eaves, door knockers, ornamental hinges, and so on.

**TRAFFIC TOWER COMPETITION**

The competition which closed at noon, August 17, to secure designs for traffic signal towers to be donated to the City of New York by The Fifth Avenue Association, Inc., brought a very large response from competitors. The competition aroused so much interest that it is probable that many excellent designs were submitted and the result should be the selection of a design that will make these towers ornaments to the Avenue. Mr. Eliot Cross of Cross & Cross, Architects, is professional advisor in the conduct of the competition.

The purpose of the Fifth Avenue Association to replace the present temporary towers with towers of suitable design is an excellent one. The present towers were installed through the generosity of Commissioner John A. Harriss and the idea has proved a successful solution of the problem of regulating the traffic on Fifth Avenue. The new towers, like the present ones, will be equipped with automobile headlights, mounted on the top.
Although lack of feeling for texture produces a mecha-
nical effect and leaves the art-lover cold, too much of it
becomes theatrical. On page 29 is shown another part
of the residence by Charles L. Berg, a view of which has
already been discussed. Here the architect exhibits more
reserve. The soft effects of tapestry brick and the va-
diety of the stone finishes do not seem like an effort to
reproduce something old. If we except a cracked and
re-leaded pane of glass the treatment of this whole corner
is rendered in structural expression of an artist han-
dling his material with loving care. Notice the relieving
arch over the window, where brick comes to the assis-
tance of a stone lintel proportioned to no more than the
support of its own weight. No hidden steel backer is
needed here.

3.—The texture of each material must be in keeping
with that of its neighbor.

In the view of a portion of beautiful Princeton Dining
Halls on page 29 it seems to me that the slate roof
—stone is the simplest in character, and rougher build-
ing is forced for the rather clean-cut texture of the stone,
both ledge and cut, and for the sharp and delicate carv-
ing of the arch spandrels. Perhaps this view is badly
selected to point the moral for I appreciate the fact that
the group is on the whole so large as to be willing to
call up its regular business meetings. Keeping the meeting
schedule which has been in progress on Saturday after-
noon for some time, the Atelier of the Club held its
"First Annual Roughhouse." Shortly afterward the Atelier of the Club held its
"First Annual Roughhouse.

Since the coming of hot weather the club has given
up its regular business meetings. Keeping the meeting
dates in mind by giving entertainment in some way to
cool a few of the sweltering moments of "dog days." A
swimming party, a watermelon festival, and a theatrical
party have been given and a picnic is planned.

Considerable rivalry has been shown in the baseball
schedule which has been in progress on Saturday after-
noons, during the past few weeks.

Mr. J. W. Dehnert, first Vice-President of the club
was recently tendered a farewell luncheon, upon leaving
to take charge of the branch office of C. I. Hill & Com-
pany, in Houston, Texas.
In this department PENCIL POINTS will endeavor to answer questions of general interest pertaining to Architecture and allied arts, giving the best available information from authoritative sources. We desire that you feel free at all times to make use of this service, inviting your co-operation in making the department both interesting and valuable. Should you desire an answer by mail, enclose stamp for reply. Address queries to The Editor, PENCIL POINTS, Metropolitan Tower, New York City.

Question—Can you give me a list of books on architectural ornamentation of the Empire, Adam and Renaissance periods? We suggest the following books for the architectural ornamentation of the Empire, Adam and Renaissance periods: Empire—"Motifs Historiques" by César Daly, "Ventriculo Pinacoteca" by Lambert, "La Maison des Arts Décoratifs" by Lambert, "Le Palais de Fontainbleau" by Roussel, Percier et Fontaine, "Style Empire" (French Text) by Salmonier, "Empire Style" by Roussel, Percier et Fontaine, "French Decoration" by Strange, "Decorations and the Tuilleries", published by Albert Morance, 11 Rue de l'Odeon, Paris, and "La Renaissance en France" by Camille Martin. Adam—"Robert Adam and His Brothers" by John Swarbrick, published by B. T. Batsford, London, England; "Reprints from the Works of Robert and James Adam", "A Book of Mantels" by Adam, "The Art of the Plasterer" by Bankart. 


Question—Will you kindly inform me whether or not you have ever illustrated Park Shelter Houses in any of your publications, or if you can mention any book or other publication on this topic? M. E. S., South Bend, Ind. Answer—Vol. 9 of The Architectural Review contains details on Garden Architecture, but this issue is now out of print. We however, submit several references which we believe will be useful in the design of park shelters, as follows: "Gartenarchitektur," published by the J. B. Lippincott Co., 1914; "Landscape Gardening—Buildings, Western Landscape Architecture," Municipal Facts, Vol. 3, No. 9, September, 1930, p. 9-12; "Gartenarchitektur," Wien, Lehman & Wenzel, 1876, "Architektonisches Skizzen Buch," 1855; "Construction et Decorations pour Jardins" by J. Bousard, published by A. Morel & Co., 1881, "Architectural Features of the Garden" by J. T. Fallon, Brickbuilder, Boston, 1916. 

Question—Can you supply me with the names of the leading architects in the principal countries of South America, or refer me to the source from which these names can be obtained? W. N., N. Y. C. Answer—we have no list of names of the principal architects of the leading manufacturers and architects of South American countries, which is similar to our Hendrick's "Commercial Register of the United States", as follows: Ammann of the American Latina, Bailly-Bailliere-Riera, Eduardo Riera Solanich, Consejo de ciento 240, Barcelona, Spain. 


THE SYMBOLISM IN ST. THOMAS'S.

(Continued from page 9)
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THE SPECIFICATION DESK

WRITING THE SPECIFICATION

BY LOUIS R. HOLZE

IT may be well to open this article with some remarks on the preparation necessary to enable one to write a specification, so that the intent of the specification may be readily grasped by any one on reading it. Regardless of the nature and extent of one's previous education, the first step for anyone desiring to sit down for specification writing, is a thorough training in an architect's office as a draftsman. This training must be thorough, and be continued over sufficient years to give a wide range in types of buildings worked over, and to insure an ability to make a clean, clear working drawing, scale or full size detail, as well as the ability to read quickly, any drawing. Having satisfied himself that his work is ready for the printing press, he will still need to cultivate the habit of thinking in detail without losing sight of the problem as a whole. A mental attitude that is skeptical and analytical must obtain. Conditions must not be accepted at their face value, but must be carefully analyzed and separated into their component parts and each part weighed separately. Things are not always what they seem. A material proposed for substitution for one specified must be studied, its characteristics and compared with those of the one specified, and its effect on other adjoining materials determined before a decision as to its use is given. Similarly a form of construction proposed for use in place of one specified, or detailed, must be carefully analyzed, its relation to all other work considered and its sufficiency determined before rendering an opinion. During the years of superintending the constant need of referring to specifications will give a familiarity with them, an ability to discern their faults of arrangement and of language as well as other shortcomings. It will be excellent practice having the defects of a specification for a current piece of work well in mind, to rewrite it in accordance with one's ideas while superintending the work. At this time one should be in a position to write a specification, selecting a small building, preferably a country house, the drawings of which may be accessible. After writing the specification, it would be an excellent scheme to have it criticised by some competent person. From this point on it is a matter of practice and study. As one gains skill it is necessary to have a filing system to collect the technical data and requirements of all trades necessary in writing specifications. This is matter gathered partly from one's own experience, partly from the experience of others obtained by personal contact, or from books and the technical journals. Good constructive matter is very often found in catalogues, but it must be carefully weighed. It should be properly classified and filed to be readily accessible, because it is matter which is being constantly added to and changed.

In time one will write the specifications by hand, referring to paragraphs of other specifications obtainable, followed later by dictating to a stenographer, who will typewrite a draft for correction, and, later, as one becomes more proficient, will come the dictation of the specification to be typed in finished form.

In writing a specification it is important that the drawings be arranged to give one a comprehensive view of them all. They should be arranged in some order and in such manner that the eye may travel swiftly from one to another. Writing a specification with the drawings placed one on top of another, having to lift each in turn to get at the one under it, is not likely wasteful of time, but is very apt to lead to duplications and omissions. The drawings should be either tacked to racks of wood properly arranged, or pinned to muslin shades which should be attached to spring shade-roller.

The drawings having been arranged properly, it will be necessary next to study thoroughly the scheme before one. A specification can not be written intelligently until the theory of the proposed building is fully understood and assimilated. In the case of a simple building this may not require much time, but in larger and more complex buildings the time that should be necessary for the purpose should be given. The scheme having been assimilated thoroughly, the items of work in the various trades should be picked out in their order and noted on a pad, the trades kept separate and in order. As one picks out the items in each trade, many of them require either mention or work in other trades to tie in properly, so that some kind of index and outline is necessary for the purpose. After writing a specification it may be mentioned that the arrangement of some kind of index will be a necessity, as well as in the order in which the work is customarily installed in the building. Where a trade installs both exterior and interior work, they should be separated, the exterior work specified first, followed by the interior.

In taking off the drawings the items of work to be done in the various trades, the customs in vogue in the locality should be followed closely, and all items of work specified under the trade or trades which must install them. This is particularly important in large cities where the labor unions are strong and agreements between them and the employer's associations exists. Work specified under one trade and rightfully belonging to another, is very apt to be overlooked by the sub-contractor in estimating with a situation resulting which is very unpleasant.

Having listed all items of work required in all trades, it will be necessary to prepare the general and technical requirements for each trade, which determine the quality and method of installation of the work. As explained before, this is matter which is made up partly from one's own experience, partly from the experience of others and acquired in contact with them, and in many other ways. It is constantly changing and must be revised from time to time. Indeed, it varies with different types of structures.

With this arranged satisfactorily and with the list of items of work to be done, the dictation of the specification may be safely started. This should be done preferably in a room where one is free from interruption, as mental concentration is not only desirable but necessary for the best results. As to the typing, it is much better, until the work becomes familiar, to have a draft typed "triple spaced" as a stenographer, to be corrected and then written in final form. The triple spacing allows room for corrections without making it so difficult for the stenographer to copy.

From this point on it becomes a matter of practice. The habit of analyzing constructions and separating them into their component parts must be practiced con-
continually. The specification writer should be able to demonstrate the practicability or reverse of any proposed construction. As he works, he must actually, in his mind, erect the building. Any construction which he does not understand fully, he cannot properly handle in the specification. It is imperative that he acquire an understanding of any construction before attempting to specify it. The specification writer should at the same time keep himself informed as to costs. He should watch the changes in the material market and labor as well. If asked, he should be able to name the more expensive of any two materials or forms of construction having the same result in view. He must study constantly along this line. He must keep abreast of the times by reading all manufacturers' literature reaching the office, and should have a great deal of it in such manner as to be readily accessible. He should be informed as to the manufactured devices in the market and know where they may be obtained. Also he should be particularly alive as to the new ones, their merits or defects.

He should acquire the art of estimating the probable cost of work by taking off quantities both of material and labor in all trades. As estimating requires a great deal of analysis, it will be very helpful in his specification work and will develop in him a certain quick judgment of it well for him to purchase a practical book on estimating and study it diligently.

One more point only need be dwelt on, and that is a specification reminder. It would be an excellent thing early in his experience to start a reminder, i.e., a list of possible items entering into the construction of buildings of all classes. It should be arranged to separate the different types of buildings, i.e., country houses, city houses, non-fireproof and fireproof construction. Or, perhaps better, country houses, non-fireproof and fireproof construction. It should be gradually developed by the individual, and after lining out all specifications it should be read over to pick up any possible omissions. Printed reminders have been obtainable in the past, but as methods change, their usefulness becomes less and one built up by the individual is always preferable.

Besides the research necessary in preparing such a reminder is very beneficial.

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TABLE OF CONTENTS

PART I.
The Architect and the Owner
2. The Selection of an Architect.
4. The Agreement between the Owner and the Architect.
5. The Employment of Engineers.
6. The Architect’s Status.
7. The Owner’s Duties.

PART II.
The Architect’s Office
8. The Office, its Organization and Plan.
9. The Outer Office.
10. The Draughting Room and its Methods.
12. The Accounts of the Owner and his Contractor.

PART III.
Surveys, Preliminary Studies and Estimates, Working Drawings and Specifications.
15. The Survey and Information to be Furnished by the Owner.
16. The Survey of an Existing Building.
17. Preliminary Studies and Models.
19. The Delivery and Acceptance of Preliminary Studies.
20. The Ordering, Delivery, and Acceptance of Working Drawings and Specifications.

PART IV.
The Letting of Contracts
22. Competitive Bidding.
23. Methods of Contracting for the Execution of the Work.
24. Letting the Work under One, Several, or Many Contracts.
25. Laws Relating to Work Paid for from Public Funds.
26. The Quantity System.
27. Invitation to Submit a Proposal.
28. Instructions to Bidders.
29. Form of Proposal.
30. Legal Details of Agreements.
32. Bonds and Deposits.

PART V.
On Notifying the Owner and the Contractor of the Execution of the Work.
33. Certain Duties.
34. The Schedule of Detail Drawings and the Schedule of Progress.
35. The Schedule of Values.
36. Shop Drawings, Schedules, Supervision, Superintendence, and Diagrams of Progress.
38. Applications for Payment.
39. Certificates of Payment.
40. The Architect and the Law
41. Architects’ Partnership Agreements.

PART VII.
Documents of the American Institute of Architects
A. Agenda for Architects (Memoranda of Procedure and Progress).
B. A Circular of Advice Relative to Principles of Professional Practice.
C. Architectural Competitions.
D. A Circular of Advice and Information.

C.1. The Standard Form of Competition Program.
D. Professional Practice of Architects.
E. Details of Service to be Rendered.
F. Standard Form of Agreement between Architect and Contractor.
G. A Form of Agreement between Owner and Architect (on the fee-plus-cost system).
H. Standard Symbols adopted by the National Electrical Contractors’ Association and the American Institute of Architects.
I. J. The Standard Form of Agreement between Contractor and Owner (when a stipulated sum forms the basis of payment).
K. The General Conditions of the Contract.
L. The Standard Form of Bond.
M. The Standard Form of Agreement between Contractor and Subcontractor.
N. The Standard Form of Acceptance of Subcontractor’s Proposal.
O. A Form of Agreement between Contractor and Owner (when cost plus a fee forms the basis of payment).
Q. Constitution and By-Laws.
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