DRAFTSMANSHIP

RIGHT NOW, in view of a degree of activity in the architectural field that in all probability is only the beginning of a long busy period, it seems to us that one of the most important matters is that of getting designs properly put onto paper in the shortest possible time with the least labor and the minimum of lost motion. This calls for the improvement of drafting room practice.

Now, we believe that a great deal of benefit can be derived from an exchange of methods, ideas and experiences on this subject between architects and draftsmen through the medium of PENCIL POINTS. We, therefore, invite you to write about anything you think will be helpful along this line, and we are going to publish a number of articles on various phases of this subject.

It is a broad matter. It begins with office organization, modelling of the make up of the drafting room staff on such a plan that the work will progress smoothly, by the proper deputizing of authority and the placing of responsibility all along the line. It includes the proper filing and handling of the documents required for reference during the designing, and it includes, among other things, draftsmanship in its broadest aspect and in its special divisions as well.

We believe that it is this last matter, draftsmanship, upon which the most helpful material can be presented—the actual doing of the work. There are short, time-saving ways of doing the things that must be done in the course of the regular work of every architectural drafting room—ways that get the results. The man who knows these ways gets through the work more easily, with less worry, and does it with speed.

Then, too, there is much more pleasure in doing any work in a highly efficient way. Relief from drudgery gives one an opportunity to enjoy the work, and if the men in the drafting rooms throughout the country did not have a love for architecture and for drafting, they would not be there, they would be devoting their time to some other work. The importance of draftsmanship needs more general recognition, we feel. The work of the draftsman is one of the biggest factors in the practice of architecture. Every seemingly unimportant part of it is essential to the translation of an idea into a building.

While architectural drawing is not an end in itself, but a means to an end, pride in one’s skill and the pleasure that comes with the mastery of the craft are as worthy and desirable today as they were in the days of the great draftsmen of the past. The joy in the act of drawing that many men of today feel would, if acquired by those who do not now possess it, turn what is now drudgery into pleasure. To the man who has never experienced satisfaction from the feel of his pencil on the paper this may seem untrue, but even the right bite of the pen on the cloth in making a tracing gives a certain satisfaction to the man whose hand is trained to its work. Now, let us hear from you, just an informal letter offering a suggestion or describing a method of working.

ARCHITECTURE OR TRADE

A PROBLEM that, in one form or another, faces many men who have a love for architecture, or for one of the other fine arts, is the subject of the Harvard prize play which is now having a highly successful run at the Belmont Theatre, New York City. Quite aside from the special interest it holds for architects, draftsmen and students, it is a very clever and entertaining production, well presented.

Whether to pursue the study and practice of architecture at great sacrifice or to put aside his aspirations and take a business opportunity that will give him a competence from the start is the problem that confronts the young man in this play.

Practically the same problem faced the young man’s father something over a score of years earlier. His great desire was to be a painter, but he entered the advertising department of a soap factory. He has succeeded rather well, but he is not happy. As he begins to age, the sense of loss through not having followed his natural inclination towards art expression becomes more keen and the desire to paint becomes more tormenting. How it works out, whether the son, in the light of his father’s experience makes the same choice, is too long a story to tell here, and, anyway, we do not want to lessen the enjoyment of those who may go to see the play.

THE FONTAINEBLEAU SCHOOL

M ANY students from all parts of the country have already enrolled for the course in architecture to be given during the summer at the Fontainebleau School of the Fine Arts. This school will be in the Palace of Fontainebleau, France, and will be conducted under the patronage of the French government. Mr. Lloyd Warren completed the arrangements for this school last summer and since his death his work has been carried on by his brother Mr. Whitney Warren. The headquarters of the American Committee for the Summer School of Architecture and Painting at Fontainebleau are in the National Arts Club Studios, 119 East 19th Street, New York City, where information and admission blanks may be had.
PENCIL POINTS

See the Article Beginning on the Opposite Page.
THE USE OF COLOR IN ARCHITECTURE

BY JULES GUERIN

In this article Mr. Guerin tells in a direct and informal way how he works out his schemes of color in architecture, both exterior and interior. As Director of Color for the San Francisco Exposition, he not only set a new standard in this particular for great expositions, but also awakened an appreciation of color as an element in architecture, and his interior work in the Hotel Pennsylvania, New York, his mural paintings and the Guerin prints have broadened his influence.—Ed.

Most of the old buildings that we find so delightful would be far from pleasing if their colors were different. For instance, Christ Church at Alexandria, which is the subject of the drawing reproduced on the opposite page, owes much of its charm to its coloring. The bricks of which it is built were made from a clay that during the process of burning takes on a delicate pink bloom, lending a tenderness quite in keeping with the refinement of Colonial detail. With this color the creamy white paint of the wooden portions harmonizes admirably. Imagine this building made from the kind of bricks that have a hard blackish glaze, or imagine the woodwork painted any other color than white, toning towards cream or buff, and it will be quite apparent that no other coloring would have been right.

An example of unfortunate color is St. Paul's Chapel in New York. The exterior woodwork, which should have been of white shading toward buff or ivory, is, instead, a dirty drab. Not far from this chapel is the old New York City Hall which is very lovely in the soft tones of its marble walls and we have reason to be glad that the proposal to have the exterior of this building cleaned by sand blasting some few years ago was defeated. If this exterior had been cleaned, its color would have been an unpleasant, staring white for a time, then, since the old surface had been removed, the marble would have caught the dirt easily, and under present-day conditions instead of ever regaining its beautiful color it would undoubtedly have blackened.

An inspiring example is the care exercised by the architects in the matter of color and texture in the additions to the White House, made some few years ago by the firm of McKim, Mead & White. Although the fact is not generally known, the White House was originally brown in color, having been built from a brown sandstone obtained at a quarry in Virginia. When the White House was burned by the British during their occupation of Washington the flames leaping from the windows chipped the stone. It seems to have been considered more economical to paint the building rather than to restore it. So the Executive Mansion became the White House; a brown sandstone building painted white. When the firm of McKim, Mead & White undertook the work of building the extensions along the lines of those comprised in the original design of the building they realized that it would be necessary to build the additions of the same material as the original building if the same texture were to be obtained, and texture influences the apparent color of a surface. Therefore, stone from the same quarry was used and then painted white.

A key to the solution of the problem of designing the color scheme for a building or a group of buildings can often be found in the colors of the landscape which is to form the setting, and the landscape setting must be taken into consideration in any case. In designing the color scheme for the San Francisco Exposition, I regarded the exposition as a great painting on a canvas three miles long; in the foreground yellow sand, in the middle distance the exposition stretching from right to left across the picture, the buildings lined against the ultramarine sea, and in the distance the hills of Marin County across the water.

As a basis for the color scheme I chose a tawny buff color and this was the color in which all of the stucco was made and the cast parts moulded. Upon this basis were added the other colors—reds, greens, yellows and gold—all toned in to harmonize. I used to get up on a hill a half mile back and look at my picture to see whether there was anything wrong, just as one would do with any painting on a canvas. If, for instance, a dome that was green did not look right I would have to change it to some other color, say, gold, in order to complement something in the distance.

One of the colors which I introduced was the green of growing vines; thousands and thousands of vines were planted and kept in readiness. When the work of painting a building had been finished the landscape gardener came along and set these vines in the ground and trained them to grow up the walls. My idea in this was to tie the buildings to the ground so that there would not be a harsh line of demarcation between the buildings and the grass. The vines spread over the walls and in a week became part of the scheme.

As I said before, I started by adopting a tawny color as the basis for my color scheme of the exposition, toning the whole thing, as a painter will tone a canvas. In addition to giving a good basic tone for my color scheme this did away with the white which would have been very disagreeable to visitors to the exposition on account of the great strength of the California sunlight. No smoked glasses were needed by the visitors; even the roads were brought into the picture by being topped with a tawny colored sand of about the color of traver-tine, but somewhat darker in tone than the buildings. If the exposition had been built of white staff no one could have looked at it. In order to demon-
PENCIL POINTS

haust your black and white values. Paint in red, blue, yellow should be handled in the same way that a general handles his army, one should not exhaust color resources, but should always have a reserve force, as a good general always has.

In this decoration upon which I am now working there is what grounds. The colors were all reduced with white, and those at great heights were stronger than those lower down in order that they might "carry." The whole exposition had an oriental effect in the play of color as well as in the character of its domes.

I have a great disbelief in white. For instance, on the canvas upon which I am now working in my atelier, a decoration two hundred and twenty-four feet long, the basic color is about the color of the marble of the architecture in which the decoration will be placed, and it is a long way from white—a tender, warm, buff, gray. In my opinion white or black should not be used in any painting because immediately you introduce them you ex-

Dining Room in the Hotel Pennsylvania, New York City.
McKim, Mead & White, Architects.

(Continued on page 43)
ZONING AND THE ENVELOPE OF THE BUILDING

BY HARVEY W. CORBETT

The provision in the zoning law which calls for the stepping back of buildings, has forced the designer to approach his problem from a new angle in every case where this provision applies. Before this law went into effect the architect was accustomed to taking into account the required floor space, the character of the building desired, characteristics of the piece of property upon which the building was to be erected, the limit of cost, practical requirements of plan, etc., and then he would begin work upon the plan arrangement. Following this, he would make a study in section for the story heights, number of stories, etc., clothing this general scheme in elevations which would give his architectural fancy such opportunity to display itself as the available funds and the owner would permit. Once you conceded fire-proof construction there were almost no mandatory limitations; the area of the property, the cost and structural limitations as to height were the main factors to be taken into consideration. There were few restrictions as to the form the building should take, but for economic reasons it usually took the form of a packing box.

Now the moment the zoning law appeared, owners and architects in general realized that here were restrictions, here were new limitations to what they could do. At first glance it did not appear just how these restrictions would operate to change the form of the building, but it was evident that the space from the property line up was no longer free—the law cut into it.

It became clear that it would not be logical for the architect to proceed as he had done in the past, starting with the plan, then passing to the sections and elevations, only to find himself in conflict with these restrictions and forced to start all over again. Furthermore, the moment the law put these restrictions on the use of property, the reaction of the owners in general was to want the most they could get under the law. As a result, the owner not infrequently comes to the architect with the intention of getting all the law allows him. He may say to the architect even before he tells him the purpose the building is to be used for, “How much bulk of building can I get?” If the owner had asked such a question before this law came into effect the architect would probably have answered him by asking another question, “How much money have you?” Now owners realize that the law has placed certain restrictions on building that limit and determine the maximum bulk. The architect may be presented with this problem even before he knows what kind of building he is to design or the purpose it is to serve. He may have to start his problem by working out the form or the peculiar scheme in elevations which would give his architectural fancy such opportunity to display itself as the available funds and the owner would permit.

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Figure 5. Final Stage, a Possible Development Within the Envelope.
height, the architect must provide either an interior or an exterior court. If he uses an interior court he takes the very heart out of his possible building for the slope of the step backs applies on the court side as well as on the street side, but to a greater extent. So it becomes necessary to cut the court from the outside, as one does not want to lose the advantage of indefinite height over 25 per cent. of the lot area which is allowed by the zoning law. The best advantage can be taken of this area by cutting the courts from outside instead of inside. This gives the shape shown in Figure 2.

Having arrived at the envelope represented in Figure 2 we find that it is a shape of rather unusual characteristics; vertical part of the distance, sloping the rest of the way, and with a tower which would be the ideal of Biblical days, actually reaching to the heavens, a veritable Tower of Babel. For practical reasons we begin to straighten up these sloping walls and for structural reasons we cut off the tower at a height that is possible. Having done this we find that we have the form shown in Figure 3.

Figure 3 is structurally very impracticable; step backs every two stories are not good and the area in a point like the one at the left would not be worth while, for the space would cost more than the owner could get for it. We therefore make our step backs at those points where a proper balance between the available floor area and economical construction meet. Of course, there is actually more space in Figure 3 than in Figure 4, but the cost of the additional space would make it not worth building.

We have in Figure 4 the possible structural bulk which can be lighted by daylight and that contains all the floor space worth enclosing. With this as the basis of our problem we may proceed to fit into it the requirements of the particular building we are to design. So it is apparent that our method of approach is practically reversed and we start where, in the old days we were not supposed to start (but often did start) with the facade first and the plan afterward.

Figure 5 shows Figure 4 architecturally “trimmed” and it happens that we have chosen a solution along modernized classic lines. An equally interesting solution might be had with Gothic inspiration, or, if one chose, one might leave the whole thing untouched, depending for effect entirely upon the pleasure to be derived from contemplating the masses of these forms. The design shown in Figure 5 represents merely the last stage in the development of the problem of getting all the law allows under the zoning law on an entire New York City block and it is not presented as a design for a proposed building.

On page 17 is shown a drawing in which Mr. Hugh Ferriss has presented the four stages of development within the envelope. The first and second stages are represented in the distance, a portion of the third development is shown in the foreground, while in the centre is seen the development of the building in its fourth stage. With the simple addition of window openings, the masses shown in the fourth stage, devoid of all architectural trimmings, stand forth in a way to emphasize the dominating characteristics of the form of a building under the set back provision of the zoning law.

THE AMERICAN ACADEMY IN ROME.

FROM a letter recently received by C. Grant LaFarge, Secretary of The American Academy in Rome from Gorham P. Stevens, Director, we quote the following:

“Prof. Frank delivered the opening lecture at the first meeting of the British and American Archaeological Society. Subject, The Foundation of Rome. This lecture is always quite an affair. Senator Lanciani was present, Dr. Ashby, Mrs. Strong, and many other archaeologists. The Chancellor of our Embassy presided. Prof. Frank’s lecture was well received.

“Prof. Henry A. Sanders, a former Director of the Classical School, has been in town looking up palaeographical material in connection with certain new portions of the Bible which have come to light recently. Prof. Frank induced him to give us a talk about his work, which was tremendously interesting.

“Prof. Guido Calza, Director of the Excavations at Ostia, has delivered the first of our Italian lectures. Subject, The Commercial Policy of Rome.

“Active preparations are in progress for the Greek trip, which is scheduled for the month of April. As there is a good deal of smallpox and typhoid in Greece due to the refugees from Asia Minor, Constanti nople and Thrace, we are requiring everyone to be inoculated against these diseases. There will probably be between twenty and thirty in the party, and both Prof. Frank and Prof. Van Buren are going. Mrs. Stevens has a small class in modern Greek.

“We are already beginning to plan for our Spring exhibition and concert. We hope to hire an awning to go over the courtyard and to give the concert there: perhaps the orchestra will be as large as sixty pieces, if Mr. Lamond can find the money for it. We hope to have Their Majesties present, and Mr. and Mrs. Mead to receive them.

“The Ward—Thatcher Memorial is advancing. The upper portion is to be a fresco, and the lower an inscription and marble seat. Mr. Faulkner has his cartoon at full size, and the wall has been prepared for actual work.

“Mrs. Jordan, for many years Dean of the women students at Ann Arbor, has shown great interest in providing more ample living quarters for our women students. I have been over the question with her and with Mr. Mead, and certain urgent recommendations have been sent to your Board.

“Mr. Charles Graham of 107 Via Torino, Rome, has presented the Academy with four beautiful suits of Japanese armor and twenty-three fine Jap-

(Continued on page 43)
DETAIL OF MAUSOLEUM AT HALICARNASSUS
FROM D'ESPOUVY'S "FRAGMENTS D'ARCHITECTURE ANTIQUE"
On the other side of this sheet is shown a detail of the restoration of the Temple at Halicarnassus which was presented in the March issue. This is an interesting restoration and an admirable example of rendering.
TEMPLE OF CASTOR AND POLLUX, ROME
ETCHING BY G. C. STYLES
An especially good etching of an architectural subject is the one reproduced on the other side of this sheet. Mr. Styles is a member of the staff of Bertram Grosvenor Goodhue. Another of Mr. Styles's etchings was reproduced on the cover of the March issue of this journal.
THE FIELD MUSEUM, CHICAGO, SKETCH BY CHESTER H. WALCOTT
The sketch of the Field Museum, Chicago, reproduced on the other side of this page shows a very effective use of pencil and pen-and-ink in combination. Mr. Walcott has done many interesting sketches and other examples of his work will be presented in early issues.
PENCIL STUDIES BY KENYON COX
Children are generally recognized as difficult subjects for the draftsman to represent successfully and this fact lends additional value to the two studies in pencil by Kenyon Cox, shown on the opposite side of this sheet. This drawing, like the others by this artist shown in this journal during the past few months, is reproduced here through the courtesy of Mrs. Cox.
THE STUDY OF ARCHITECTURAL DESIGN
WITH SPECIAL REFERENCE TO THE PROGRAM OF THE BEAUX-ARTS INSTITUTE OF DESIGN

THE MEASURED DRAWING

BY JOHN F. HARBESEN

In this series of articles, which began in January, 1921, Mr. Harbeson is explaining the method of working and how to get the greatest benefit in following the program of The Beaux-Arts Institute of Design. It is not intended as a substitute for personal instruction and criticism. The "Analytique" was treated in issues for February to September, 1921, the Class B Plan Problem and the Archaeology Problem in later issues.—Ed.

SINCE the beginning of the Renaissance in Italy, when Brunelleschi, Bramante, and the others down to Michael Angelo made drawings of the classic remains in Rome, the "measured drawing" has had a fascination for the real "student" of architecture. Many measured drawings have been made primarily for publication as records for the use of designers. All our familiar "documents" are measured drawings. Letarouilly's, "Edifices de Rome Moderne," Cesar Daly's "Motifs Historiques," Pfrnor, Garner and Stratton, and all the other well known names, including the many volumes of Piranesi's engravings of classic and Renaissance Rome, are compilations of such measured drawings. From time to time later investigators checked up and revised some of these measurements. A recent Fellow in architecture of the American Academy in Rome found such an error in the plan of the Villa Gamberaia as laid out by Percier and Fontaine. When measurements are undertaken for publication purposes and a large field must be covered, as is frequently the case, it is assumed that two sides of a form are alike, and a more careful measurement may show a distinct variation (as in this case).

A measured drawing is required by the Beaux-Arts Institute course and by the Ecole des Beaux Arts in Paris also, not as reference material, but because it is an excellent training in the study of profiles and of execution, of ornament, of surface textures. It is a connecting link between design, creation and execution, and it is by executed work that architectural ability is finally judged, not by drawings. Indeed, when the most clever men at the Ecole have won the "Prix de Rome"—have reached the apex of student achievement, they are sent to Rome to make "measured drawings" of the architecture of past ages. It is these measured drawings that were published in the work and that we are accustomed to speak of as "D'Espouy." Of this work many examples have been given here, all of them of the classic school. The Grand Prix men study fragments of other work, of the French and Italian Renaissance for instance, and of the middle ages: Figures 1 and 2 are examples of Italian Renaissance Work. Figure 1 is of a very beautiful piece of architectural sculpture, and is in itself a beautiful piece of work—note the ability.

Figure 5. Fountain, Piazza San Pietro, Rome. Drawn by William J. Hough, Courtesy American Academy in Rome.
Figure 1. Tomb in the Church of S. Domenico, Bologna. Drawn by M. Chedanne.
From D'Espouy's "Fragments d'Architecture de la Renaissance."
Figure 2. Ceiling in Farnese Palace, Rome. Drawn by Victor Laloux.
From D'Espouy's "Fragments D'Architecture de la Renaissance."
Figure 3. Doorway, Lycée de Lyon.
Drawn by Paul P. Cret.
with which the sculptural forms are modelled, and all the conventional system of shadows and washes—the careful picking out of high light, half tone and shadows.

Figure 2 is quite different—a flat ceiling in the Farnese Palace at Rome by the late Victor Laloux, who was later “Patron” of one of the well known ateliers at the Ecole des Beaux Arts; it is simpler in rendering, but very complicated in drawing. It is again a masterpiece of presentation.

A measured drawing is required also at the Ecole. One such, by Paul Cret, the doorway of the Lycée de Lyon, is shown in Figure 3. Note again the careful rendering—especially the modelling of the sculptural forms by the skillful division into high-light, half-tone and shadow, and the rendering within the shadows by the use of reflected light and back shadows. Note how the planes take their place forward or backward, simply by the value of the wash or tone. Here, as in most of the D’Espouy plates, the mouldings are rendered by dividing these mouldings by a series of parallel lines, and rendering by washes of graduated tones as explained in the chapter on rendering the “Analytique” (Sept. 1921 PENCIL POINTS). In this instance the lines are fairly close together and the washes are very carefully put in so that the lines disappear in the reproduction at a reduced scale.

The men at our own Academy in Rome now make measured drawings in the same way. The Ponte Rotto, Figure 4, by Wm. J. Hough, fellow 1914-1917, was a bridge built by Pope Gregory XIII in the Sixteenth Century. The presentation is inspired by the engravings of the time of Piranesi. The fountain of the Piazza San Pietro, Figure 5, by the same author, shows a very clever representation of water. Unfortunately a black and white reproduction does not show the variations in color of such a rendering; the student should look for drawings of this character at the architectural exhibitions and study the use made of color in modelling, and note changes in local color due to shadow, reflected light, etc.

A student from this country is fortunate when he has the opportunity to take measurements abroad for his measured drawings. There is such a profusion of usable material there that our own younger country seems bare indeed. Perhaps one of the best measured drawings made in this country was that made by Douglas D. Ellington (later winner of the Paris prize in 1912) from measurements made on a European trip in 1910 (Figure 6). This is not only a good measured drawing—it is a masterpiece in presentation. The technique is an “archeo” in itself, studied as it was from Piranesi’s engravings of Roman fragments, though Ellington first made a modelling by a series of light washes of a bluish gray water color.

One seeing the crisp lines of the presentation is apt to forget that a number of studies must be made beforehand, not only of the composition of the sheet and the arrangement of tone values, but also of the modelling of the different fragments. In this case such studies were made first in charcoal.
Figure 9. Pulpit in Old Swedes Church, Philadelphia. Drawn by Lawrence C. Licht.
Figure 7. Entrance, Wakeling House, Frankford.
Drawn by Bradford Tazewell.
and then with a 6-B pencil, which approximated the pen-and-ink technique to be later followed. A reproduction can hardly do justice to this technique—the drawing was made on an antiquarian sheet and considerable is lost in reduction.

But it is possible to find many interesting subjects in this country, new as it is compared to Europe. We have, of course, much Colonial work in the East and South, which furnishes both exteriors such as the Portico of the Wakeling House, Frankford, Figure 7, and interiors as the panelling of the State Parlor of Stenton, Germantown,—the home of William Penn's first Lieutenant Governor, Figure 8, and the pulpit of Old Swede's Church, Philadelphia, Figure 9.

Some work of the classic revival—the period about 1830—is available for material, including some very interesting tomb monuments. In the West and in Florida there is some architecture of very early date—the old Spanish Mission Churches. There are also some exotic things in this country: in museums, such as the Metropolitan in New York, will be found a complete Egyptian Tomb—a Turkish doorway, and complete rooms from the Tyrol, the Low Countries, etc.

The other large museums of the country have similar available objects. In Philadelphia there is in Fairmount Park a Japanese Temple Gate and a Hindu Temple; in the University Museum an Aztec Wall—and so on. If one is sufficiently interested, a subject can easily be found.

Having chosen the subject it is well to remember that measurements are useless unless they are complete. Everything must be measured and accurately, otherwise such work is a waste of time.

Cross section paper is convenient for making the survey; the mouldings should be carefully plotted. This may be done by dropping a plumb line from a projection and measuring back to the face at different points. For securing a really accurate profile one should have a thin strip of lead that can be bent against the moulding, and then placed on paper while the profile is traced. Try the same profile at several different points on the moulding to allow for inequalities in execution.

For ornament or sculpture, studies should be made in charcoal and measurements taken of important points, very much as sculpture is "pointed" up to a larger scale.

Photographs are of great use and as many as possible should be taken of the subject in every direction—especially if it is in a foreign country or in an inaccessible place, so that there will be a chance to check up on any errors or omissions. Photographs are very helpful in rendering, they show the "modelling" of surfaces in a very convincing way. Figure 10 shows a photograph taken for such a purpose, with the shadows at almost the conventional angle though the source of light is at the right instead of the left as usually.

Indeed at the Villa Medici when the men who have won the Grand Prix de Rome are making the careful renderings we are familiar with as "D'Espouy" plates, they take a cast of a cap, for instance, out into the garden, turn it until the sun is in the proper direction for the conventional architectural rendering, and then mark directly on the cast—the trace of the shadows on the object.

As such a great amount of time is given (Contin. on p. 50)
Figure 6. Doorway of Church of S. Trophime at Arles, France. Drawn by Douglas D. Ellington.
Design by Mrs. Ruth L. Gerth, of Minneapolis, Minn., Who Won the First Prize of Five Hundred Dollars in The American Face Brick Association's Competition for Designs for Garden Architecture in Face Brick. See text on the opposite page.
THE GARDEN ARCHITECTURE COMPETITION

Report of the Awards for the Best Designs for Architectural Features
in Face Brick Work for the Grounds or Garden
of a Residence

THE Competition for the prizes offered by the American Face Brick Association for the Best Designs in Face Brick Work for the Garden closed February 5 and was judged in Chicago February 23. The prizes aggregating more than Fifteen Hundred Dollars were awarded by a Jury of five prominent architects from different sections of the country. The competition was conducted by PENCIL POINTS for the donors of the prizes.

The designs which won the first and second prizes are shown here in general and in detail, the whole drawing being reproduced at small scale to show the sheet arrangement and to give an idea of all the features presented, while certain details are shown at larger scale in order that the rendering and design features may be seen more clearly. The third and fourth prize sheets are also shown. A portrait of Mrs. Ruth L. Gerth, winner of the First Prize, and a biographical account are published on page 47 of this issue. The report of the jury is as follows:

Report of the Jury

The jury of awards, which met in the office of Alfred Granger, Chicago, Friday, February 23, 1923, was made up of the following architects: Alfred Granger, Chicago, Chairman; Russell F. Whitehead, New York; Frederick W. Garber, Cincinnati; Edward Stotz, Pittsburgh; George A. Chapman, Minneapolis.

Of the designs submitted, a considerable number had to be eliminated from the judgment because of the failure of the contestants to meet one or more of the mandatory conditions of the program. Some competitors failed to include plans of the various features which were called for both in plan and elevation. Others failed to designate on the drawing the exact width and kind of mortar joints to be used. Various other failures to observe the conditions, caused the elimination of still other entries. The jury regretted the necessity of eliminating these drawings from the judgment because of the carelessness of the competitors in failing to meet the plainly stated requirements of the program.

The remaining drawings were numbered to correspond with the sealed envelopes containing the names of the competitors and the jury proceeded to place the drawings in the order of their merit.

The first prize, Five Hundred Dollars, was awarded to drawing No. 36, submitted by Mrs. Ruth L. Gerth, of Minneapolis, Minn. This design showed an unusual grasp of the requirements of the program. The characteristics of the design were markedly domestic and well adapted to a lot of the size stated, 100 x 200 feet. The author showed an excellent appreciation of the value of space in a property of this size and her treatment of brick was commendably simple and quite original in handling.

The second prize, Three Hundred Dollars, was awarded to No. 17, submitted by Louis C. Rosenberg of New York. This design was also of unusual merit and was a close contestant for first place, in the minds of the jury.

The third prize, One Hundred-Fifty Dollars, was awarded to design No. 31, submitted by A. Alex. Willson of Pittsburgh, Pa. The fourth prize, One Hundred Dollars, went to drawing No. 34 submitted by Leslie W. Devereux of New York. The designs to which third and fourth prizes were awarded, while possessing merit and showing evidences of careful study, were not regarded by the jury as being in the same class with the designs that won the first and second prizes.


While a majority of the designs submitted indicated study and thought on the part of the competitors the jury could not but feel somewhat disappointed with the quality of the entries in general. In the opinion of the jurors many of the competitors failed entirely to grasp the essential requirements of the program. Many of them failed to appreciate the fact that the layout for the garden and grounds on a plot of the size indicated should be essentially domestic in its conception and adapted to the requirements and means of an owner who wished to build an attractive home of moderate size rather than an ambitious establishment. In point of rendering the jury felt that the competitors had shown far greater ability than in the quality of design.

The jury feels that the American Face Brick Association, who instituted this competition, and the publishers of PENCIL POINTS, who conducted it, have done much through this means to encourage the study of a subject which should be of great interest to architects, landscape architects and draftsmen and believes that similar competitions should enlist the enthusiastic support of the best men throughout the country.

ALFRED GRANGER, Chairman.
Details of Designs by Mrs. Ruth L. Gerth, Winner of the First Prize in the American Face Brick Association's Competition for Designs for Garden Architecture.
Perspective from Mrs. Gerth's First Prize Drawing.

Detail by Louis R. Rosenberg. Winner of the Second Prize.
Perspective from the Sheet of Drawings by Louis C. Rosenberg, Winner of Second Prize in the American Face Brick Association's Competition for Garden Architecture.
Third and Fourth Prize Designs in the American Face Brick Association's Competition for Garden Architecture, Submitted by R. Alexander Willson, Pittsburgh, Pa., and Leslie W. Devereux, Respectively. The Third Prize Design is shown at the Top of the Page, the Fourth Prize Design Below.
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The Exhibitions Board consists of the following: Ellery K. Taylor, A. I. A., Chairman; John Craig Janney, Secretary; Roy Banwell, Treasurer; Thomas Edward Ash, A. I. A.; Sigmond J. Laschenski; W. H. Livingston, and R. J. Wadsworth, A. I. A., and H. L. Durhing, A. I. A.

PHILADELPHIA ARCHITECTURAL EXHIBITION.

The Twenty-sixth Architectural Exhibition of the Philadelphia Chapter of the American Institute of Architects and the T-Square Club of Philadelphia will be held at The Galleries of the Art Alliance, 1635 Walnut Street, Philadelphia, Pa., May 12-27, 1923. Exhibits will consist of drawings, models, and photographs of proposed or executed work of structural, decorative and landscape architecture; academic drawings; sketches; and paintings of decorative subjects. Sculpture and paintings not architectural in character will not be exhibited.

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THE USE OF COLOR IN ARCHITECTURE.
(Continued from page 14)

of the stucco without carrying the color into the fissures, streaking and washing to tone down the work until it had the soft effect of age. For instance, there were Spanish doorways sixty-five feet high that, when the scaffolding was carried away, looked as though they had been there for three hundred years or more; they held color in the recesses of the ornament where the weather would not have reached and removed it. There were doorways sixty or so square, cast in the tawny buff color of the exhibition with reds and blues and other colors, applied lightly in some places and with greater strength in others; the colors were stuck in the recesses and wiped off of the portions in relief. Compare the effect of such a capital with one cast entirely in white and left without color and you have a striking example of the value of color in giving a sense of richness, texture and quality to architectural detail.

The color used in architecture becomes stronger as one travels from England into the Orient. In England one seldom sees columns of beautiful colored marble. In Italy, one does see them, and in Spain there is much color, particularly in such buildings as the Alhambra and other Saracenic buildings. In northern Africa, Turkey, Greece and Egypt, always there is color and sunshine, vibrant and ever changing.

In using color in interiors the conditions are naturally quite different from those met with outdoors. The lighting and the proportions of the rooms are among the more important things that have to be taken into account. In the dining room of the Hotel Pennsylvania, illustrations of which appear on page 14, part of the problem was to produce an appearance of height as possible in a room, the actual height of which was limited by practical considerations. Consequently, the color scheme is lighter than that of the generally somber Arts and Crafts style and the aim was to give to the coloring a tendency and bloom that would produce a sense of texture and an appearance of age. The colors throughout were carefully studied and toned down to produce this effect.

AMERICAN ACADEMY IN ROME
(Continued from page 18)

ancient helmets, and two Saracenic shields and a Saracenic helmet. Prof. Curtis is planning an exhibition of this armor in the museum.

We have had three visits of interest. Mrs. A. Ross Hill, wife of the American Red Cross Commissioner to Greece and a Trustee of Vassar, was greatly interested in what the Academy is doing. The famous English painter and editor, Mr. Cameron, a Trustee of the British School, went over the building and asked all sorts of questions. Finally we have had a visit from a dozen "Civics" (this is what Dr. Ashby calls them), sent out by England to study conditions in Italy."
FETE CHARRETTE.

THE student body of the Harvard School of Architecture and the Department of Architecture of the Massachusetts Institute of Technology, having agreed to collaborate annually in the production of a costume ball modeled in a general way on the ball given annually by the Ecole des Beaux Arts, Paris, held the first of the series of parties, the "Fête Charrette," on the evening of February 22. This year the Harvard School of Architecture, through its student organization, The Pen and Brush Club, had charge of the party, the Architectural Department of "Tech" rendering valuable assistance. The plan is that each of these schools shall take the responsibility for the party, in alternate years. The aim is to give to these parties the air of having been produced by one school with two ateliers.

Professor J. J. Haffner of Harvard who, by the way, is a member of the Legion of Honor, and a holder of the Grand Prix de Rome, designed a very charming invitation in pen and ink, thereby immediately setting a dazzlingly high standard to which the rest of the preparations for the party must needs rise. In it was announced the style in which the ball was to be done, being that of Mediaeval Constantinople. This style was adopted for the first of the series of parties G. P. Baker because it was thought wise in an enterprise, the idea of which was so comparatively new to this country, not to limit the scope of the individual imagination to any very exact period; and as Mediaeval Constantinople was the constant meeting place of the whole of the civilized world, both Occidental and Oriental, it was agreed that the possibilities of the setting, any costumes that might conceivably have been seen in the streets of Byzantium, between the time of the Emperor Constantine and the beginning of the Sixteenth Century, would be considered as coming within the scope of the idea of this party.

A general dance committee was appointed, each member of which was to be the chairman of one of the various sub-committees for entertainment, finance, decorations, costumes and publicity, so that in some capacity or other every member of the Harvard School became personally responsible for the success of the enterprise, beyond his assumed financial responsibility with its necessary sale of tickets. Tech very generously volunteered to produce a dramatic interlude, the exact nature of which was to be kept secret until the very night of the party, together with various other features in the manner of vaudeville and tableaux vivants, as well as to contribute toward the decoration of the hall and to attend to their own mailing of invitations and making of posters for local display. The making of the decorations necessary to transform a rather bare hall into a glittering representation of the vanished glories of the capital of the Eastern Roman Empire was, of course, the most difficult part of the undertaking; and it is with pardonable pride that the school feels it achieved a very creditable result, inasmuch as the "atmosphere" of the settings was wholly adequate to the requirements, and distinctly novel in effect, having been achieved largely through the medium of lighting effects, the apparatus for which, together with a large part of the purely scenic properties, were generously loaned by the famous Harvard 47 Workshop of Professor G. P. Baker, one of the plays of whose, by the way, is now enjoying a highly successful run on Broadway.

Little by little the work of preparation proceeded; first the compiling of an invitation list, and the sending of invitations, and the production of over a dozen posters, then the securing of the music, excellently supplied by the Technology Jazz Orchestra, and the engaging of a caterer and selection of supper menus, then the making of the decorations—scene painting, drapery designing, lamp manufacture, and all the infinite little odds and ends that count so much in the final ensemble, the rehearsal of the various vaudeville numbers, and finally, and perhaps the most important of all, the making of the costumes.

Came the night of the ball. As each guest entered the long hall hung with what appeared to be sumptuous draperies and priceless Oriental rugs he or she stood for a moment involuntarily spellbound. The floor was a magnificent whirlpool of color, picked out in places by rainbow spot-lights that brought forth flashes of gold and precious gems. The costumes were superb. This was no commonplace masquerade in cheesecloth and charcoal, but a stunning panorama of silk, satin, and cloth-of-gold. Everyone had entered into the spirit of the original idea of the party, and it was easier than not to imagine that these gorgeous people were all participants in the magnificent intrigues of the corrupt Byzantine Court. At
the far end of the hall, in a blaze of light, was a most convincing stage-setting of Arab inspiration, before which, from time to time, appeared the fantastically attired entertainers who had been recruited from the ranks of both schools.

The ball was officially opened with a joyful pageant symbolizing the friendly union of the rival schools of Harvard and Tech, which was most effectively carried out, leaving no one in doubt as to the permanently friendly relations between these two great institutions. There followed intervals of dancing and vaudeville entertainments, culminating in the performance given by Tech. On the programs it was announced as "Two Tanks' Farewell Party, Or Why the Tomb Was in Disorder," and when it was over everyone admitted that as a spontaneous conception of classic burlesque the show was a triumph, with originality. Then came the grand march, with the awarding of prizes for beauty and originality of historical thought in the costumes, and then the supper, which was not elaborate, but altogether satisfying. The closing feature of a party that from a point of view, including the financial, was an emphatic success, was a glorious battle of confetti and colored streamers so that when the crowd reluctantly departed, there were many who felt that after all it was not such a privilege as is commonly thought to be a citizen of Mediaeval Constantinople had as many charms to offer as had its revival in this the first millennium.

The opportunity will surely be met as enthusiastically as was the World's Fair project twenty years ago, and will challenge the membership of the St. Louis Architectural Club to assume leadership in civic affairs when the Supervisory Committee is ready for actual work on the items comprising city beautification.

There are six projects for which the Committee will undoubtedly ask the local chapter of the American Institute of Architects to conduct competitions. The total sum voted for these six items is nineteen million, two hundred and fifty thousand dollars and provides for a new Courthouse, Municipal Auditorium, World War Memorial Building with its surrounding plaza, an Aquarium, new Public Market Houses, and also a plaza to occupy four city blocks facing the Union Station.

The most gratifying outcome of the election (twenty items out of a total of twenty-one having received the necessary two-thirds majority) is the result of many years' work on the part of a group of St. Louisans, several of whom are practicing architects. As a matter of fact the agitation in this city for civic improvements of long ago as 1900. Reviewing the Club's Year Book for 1900 were new Public Market Houses and also a plaza to occupy four city blocks facing the Union Station.

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A FEATURE of the New York "Own Your Home" Exhibition at the 71st Regiment Armory, Lexington Ave. and 26th Street, will be the House that Bob Built, constructed on the floor of the exhibition and designed to incorporate the latest ideas in small house planning and equipment.

ST. LOUIS ARCHITECTURAL CLUB

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TRIBUTE TO SIR CHRISTOPHER WREN

THE Architectural League of New York recently paid a graceful tribute to one of the world's greatest architects, Sir Christopher Wren, upon the two hundredth anniversary of his death. The League, learning that the Royal Institute of British Architects were to have a special delegation hang a wreath upon the tomb of Sir Christopher Wren in St. Paul's Cathedral, arranged with Ambassador Harvey to have a representative from the Embassy carry a wreath at the time of the R. I. B. A. pilgrimage. Mr. Ian McAllister, Secretary of the R. I. B. A. has expressed his pleasure at this tribute from America as a delightful and unexpected addition to their program.

To commemorate this event simultaneously with the ceremony in London, Howard Greenley, President of the Architectural League of New York, assisted by members of the Executive Committee, hung a wreath under a portrait of Sir Christopher Wren in the Annual Exhibition of the League.

Below we quote the address made by Mr. Greenley on this occasion:

"The thirty-eighth Exhibition of the Architectural League is strengthened and embellished by a comprehensive exhibit of the work of notable contemporaneous English Architects officially shown for the first time in this country through the courtesy and interest of Paul Waterhouse, Esquire, the President of the Royal Institute of British Architects, seconded by the uniting efforts of our esteemed member, Mr. Alfred C. Bossom. This exhibition takes on further significance through the fact that simultaneously in England and here in America we are offering to Sir Christopher Wren, perhaps the most notable of all English architects, the honors of bi-centenary remembrance. His lofty expression of the value and importance of architecture may be summed up in his own words: 'Architecture has its political use, public buildings being the ornament of a country. It establishes a nation, draws people and commerce, makes the people love their native country, which passion is the original in all great actions of a commonwealth.'"

"With his history you are all well acquainted. Born on October 20th, 1632, his early education was acquired at Westminster School and afterward at Oxford. Until he was thirty years old he displayed no distinct tendency toward the art of architecture, confining himself to matters of science to which he made valuable contribution. After the great fire of London in 1666, he developed a comprehensive plan for the rebuilding of the city, which in point of design can be said to be some two hundred years in advance of his time. His masterpiece is unquestionably the Metropolitan Cathedral of St. Paul in London originally begun upon the lines of Inigo Jones of which great master he was the pupil. To show the prodigious quality of his work in his capacity of Surveyor General of the King's works, a position he held for forty-nine years, reference should be made to the Churches of London of which he reconstructed over fifty on their Medivial sites in the Renaissance manner, with special attention to St. Mary le Bow in Cheapside, Saint Brides in Fleet Street and Saint Martin's in Ludgate Hill, whose towers and steeples are of surpassing beauty. Of equal importance is the new wing at Hampton Court Palace the Greenwich Hospital, Kensington Palace, Marlborough House and the Library at Trinity College, Cambridge.

"Perhaps one reason for his success can be attributed to the extremely able body of fellow craftsmen he gathered around him, a subject of unusual significance to the members of the League in the principle of its own composition, such names as Strong, his master mason; Leavings, his master carpenter; Cibber and Grinnling Gibbons, his sculptors and carvers, and Jean Tijou, his iron worker, and the craftsmen that worked under him.

"The last five years of his life were the last in Feb. 1723, were somewhat clouded by the neglect he suffered at the hands of his official patrons. Nevertheless he has left us a memory as imperishable as the monuments he conceived and executed.

"The architecture of Christopher Wren in England represents the soul of a man of whom England should ever be proud, an architect, sprung from and nourished by herself and worthy to be placed in the first rank of men of genius of all time..."

"And so, with entire consciousness of the honor of representing you, the Architectural League of New York, in this memorial ceremony which we are conducting here today and which will also be performed at the ceremony in the Cathedral of Saint Paul in London by his Excellency the American Ambassador, I place this tribute from American architects of today at the feet of the great architect of yesterday whose name and whose work are an inspiration for all ages—Sir Christopher Wren."

CHICAGO WOMAN'S DRAFTING CLUB

A DRAFTING club composed entirely of women was organized a year ago in Chicago under the name of the Chicago Woman's Drafting Club. The president, Miss E. A. Martini, is the only licensed woman architect in the city. The members are actively engaged as "draftsmen" in architectural, mechanical and structural lines. Meetings are held once a month, each member in turn having charge of the program and giving a talk concerning her particular line of work.

The club would like to get in touch with other women's clubs in regard to the work they are doing with the hope of exchanging helpful ideas. Address all communications to the secretary, Miss Florence Wright, 71 E. Elm Street, Chicago, Illinois.

THE Architect's Costume Ball of the State College of Pennsylvania was held Saturday, March 10, at the A. D. S. House. The cover of dance program which we have received shows a very effective design in red and black on orange paper, the background being a Spaniard with typical hat and inevitable cigarette. The design is in the flat tones of a block print.

SIR CHRISTOPHER WREN.

Courtesy of The Architectural League of New York
Meyer and Holler's Annual Dinner and Dance

The First Annual Dinner and Dance of the office of Meyer and Holler, Architects, Los Angeles, Cal., was held on the evening of Feb. 20, at the Palais Royale.

The entertainment of the evening was carried through most successfully and showed clearly the spirit of good will that exists throughout the organization. The program is especially well gotten up, including a very attractive cover design printed in brown and applied to the cover. The program itself is of harmonizing buff paper printed in brown.

Personals.

L. T. Bengston is practicing architecture at Room 510 Travelers Building, Richmond, Va., the partnership of Benton & Bengston, architects, having been dissolved.

Scott Quintay, Architect, is now located at 219 West Main Street, Alhambra, Cal.

Good & Wagner, Architects, have removed their offices to the Mohawk Building, 2094 Water Street, Akron, Ohio.

Walter C. Sharp and W. Brown Fowler are now associated in the firm of Herbet M. Greene Company, Architects and Engineers, Dallas, Texas. The firm name remains unchanged.

Hugh A. Sprague, who was for several years associated with Robert B. Crandall, Landscape Architect, 1000 Bailey Building, Philadelphia, Pa., has opened an office as Landscape Architect and Engineer at 2539 Clifton Street, Indianapolis, Ind.

Forest H. Haskell, Architect, has removed to 65 North Raymond Avenue, Pasadena, (Tel. F. O. 3290), where he will practice in association with Cyril Bennett, Architect.

George Bain Cummings, Architect, has removed his offices to 520 Security Mutual Building, Binghamton, N. Y.

Pasquali M. Torraca has been selected as instructor in architectural design in the Department of Architecture at The Pennsylvania State College. Mr. Torraca is a graduate of the University of Pennsylvania.

James F. Baugh, Architect, has opened an office for the practice of architecture at 404-404 First State Bank Building, Waco, Texas. This is the office formerly occupied by Birch D. Easterwood, Architect, for whom Mr. Baugh has been chief draftsman for the past eight years.

George B. Bangs, Architect, has opened an office at Hollywood, Florida.

Lloyd Rally, Architect, has opened an office at 1019 Wright & Callender Bldg., Fourth and Hill Streets, Los Angeles, California.

The Scarab Sketch Exhibit

There is on the road, and showing at the present time at Armour Institute, an exhibition of sketches of the work of students in the Scarab Architectural Fraternity. This exhibit is the representative work in sketching of the students in the Colleges and Universities in which Scarab has temples. The sketches, presented in any medium, are collected annually by the temples in turn and a traveling exhibit scheduled to include all the temple schools. The plan was devised to stimulate and develop to the greatest extent the talent of the members of the Fraternity. The preliminary to this competition was held last month in each school where Scarab is represented and the winner in each received a medal. The three best drawings from each temple will be sent to the convention city and there judged by leading architects of that city during the days of the Convention. The artist of the winning design of this judgment is to receive the final prize. The exhibition will be held this year at Armour Institute, Chicago, April 6-7.

Pencil Points

Ruth L. Gerth

Ruth L. Gerth, winner of the First Prize of Five Hundred Dollars in the American Face Brick Association's Competition for the Best Designs for Face Brick Work for the Grounds or Garden of a Residence, is associated with Wm. H. Gerth, working together as consultants and designers in decorative art. She studied architectural drafting in Omaha, took the required course at the Art Institute, Chicago, both day and night classes, then specialized in design and color in the night classes. In the third year of school Mrs. Gerth outlined her own course in design, studying in the Art Institute Library, in place of night classes.

Mrs. Gerth's work has been shown in the following exhibitions: Applied Arts Exhibition, at the Art Institute of Chicago, 1918; Chicago Architectural Exhibition, Art Institute, Chicago, 1920; St. Paul Architectural Exhibition, St. Paul, Minn., 1922.

Mrs. Gerth has done much designing for decorative materials, furniture and lighting fixtures, etc., including designs for special furniture, drapery materials, color schemes, etc., hundreds of fixtures for various Chicago manufacturers, also book plates, greeting cards, etc., and in collaboration with Mr. Gerth, war medals, service pins and war workers' pins.

Lecturing is one of Mrs. Gerth's activities for she gave fourteen talks at the Minnesota State Fair in 1922; and a series of talks for the College Woman's Club, State Home Economics Association, Woman's Community Council and League of Women Voters.

Recently she has designed sets of patterns for metal stampings for a firm in Providence, R. I.; lighting fixtures for several eastern manufacturers and for several large high schools. She has just been commissioned to design and supervise the lighting installation of a new two and one-half million dollar university library building, and she won first and second prizes in the recent Cloister Clock Competition.
The contributions printed below were received in response to the suggestion published in the January number that the papers in that issue be discussed with a view to bringing out any additional ideas bearing on the specification problem. It is hoped that all who are interested in the preparation of specifications will feel free to submit their ideas for publication in subsequent issues of Penick Points.

SPECIFICATIONS FOR CRITICISM.

Acting on the suggestion of one of our readers, Mr. M. N. Nirdlinger, of Nirdlinger and Marlier, Pittsburgh, we have secured a set of architect’s specifications for a brick and hollow tile residence and we print below the first part of this set of specifications in order that they may be criticized by our readers. The object in doing this is to provide material for a discussion that will be helpful to all who have to do with the preparation of specifications by showing up the weak points in this set of specifications.

You are invited to join in and help rip up these specifications. We are withholding the name of the architect from whom we borrowed these specifications and he has entered into the spirit of the thing so you may feel at liberty to criticize them as severely as you like. We hope that you will also present many suggestions for improvement. The good resulting from this discussion will be in proportion to the number of men who join in with criticisms and suggestions, so we ask that you do not depend on the other fellow doing it but write us yourself, then the thing will be a success. Here is a good sized portion of the specifications—let’s go!

SPECIFICATIONS OF

Workmanship and materials to be used in the erection and completion of a brick residence and garage

FOR

.............................

ON

A certain piece of property located

AT

.............................

CITY

In accordance with the accompanying plans, etc., and under the supervision of

............................., ARCHITECTS

CITY

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DRAWINGS:

Consist of survey sheet, cellar, first, second, attic and roof plans; front, rear and side elevations, and sections on which are figured height of stories, size of joist, etc., and preliminary detail sheet setting forth portions of the more important work.

The drawings, together with all figures and writing thereon, shall constitute part of these specifications.

GENERAL CONDITIONS:

PART 1.

The following specifications are intended to embrace all labor and materials necessary in the erection and completion of the buildings hereinafter described. The contractor is to give his personal attention, superintendence and direction to the work, keeping also a competent superintendent constantly on the work from the time excavation is started until completion of contract, including the contracts of all sub-contractors. Contractor’s superintendent will superintend all work and give instructions. The superintendent is to be subject to the approval of the architect.

Contractor’s superintendent must check up materials and workmanship of all the different sub-contractors and be able to give the necessary reports to architect on demand.

PART 2.

Before work under this contract is started, the contractor shall provide on property (location to be given by the architect) an outside privy for the use of the workmen. On completion of the buildings, privy must be removed from the grounds and hole to be well tamped and filled with clean earth. The privy to be in keeping with the City Laws.

PART 3.

The contractor is to provide all labor, materials, carriage transportation, apparatus, machinery, tackle, centering and scaffolding necessary for the complete and substantial execution of everything described, shown or reasonably implied on the drawings or in these specifications.

PART 4.

The drawings and specifications are intended to co-operate and agree, and anything mentioned in these specifications, though not shown on the plans in particular, or shown on the plans and omitted in these specifications, is to be considered as mentioned in both, and must be executed in a thorough and workmanlike manner, satisfactory to the architect and owner.

PART 5.

The contractor is to take no advantage of any manifest omission or discrepancy that may be found to exist between the plans and specifications, and in all differences and disagreements as to sizes, materials and work-
managing the decision of the architect upon his own plans and specifications is final and binding on the contractor. The contractor shall make all the work, etc., as per the plans and specifications as architect will insist on his complying with them.

PART 6.

Discrepancies, if any, must be reported immediately to the architect for his revision or correction; the architect will supply details for such work as hereafter specified, and on occasion necessitates. All details must be carried out in a careful manner, as the contractor will be held responsible for them and will have to make corrections at his expense.

Figure measurements on plans to be taken in preference to the measurements of scale and when no figures or details are given, use the scale, calculating from figures given.

PART 7.

Particular care must be taken by the contractor of materials and finished work as the buildings progress which must be thoroughly protected and covered up from injury or defacement and until the completion of his work or contract, and he must make good any defect, settlement or shrinkage in the work arising from improper, defective, or improper materials or workmanship which may arise before the final completion of the buildings.

PART 8.

All work and materials shall be subject to the approval of the architect who shall have the right to approve, condemn and inspect all work and materials at any or all times, and all condemned or rejected work and materials not in accordance with the plans and specifications shall immediately be torn down and removed from the buildings and grounds within twenty-four (24) hours after condemnation, and replaced with the kind that does conform with the plans and specifications; the architect's decision regarding the above is final and binding on all parties and cannot be appealed.

PART 9.

All payments made on the work during the progress of buildings on account of this contract, or of extra work, shall in no case be considered as an acceptance of the work executed, but the contractor shall be liable to all the conditions of the contract, until the work is finally completed and accepted.

All extra work, including percentage work, on the above buildings, to be governed by all the conditions of these specifications.

PART 10.

The contractor shall provide proper and sufficient safeguard and protection against the occurrence of any accident, damage or injury to any person or property during the progress of the work and up to the final acceptance by architect, and shall alone be responsible.

Contractors shall take out and pay for all permits, in any damage done to property, pavements, curbing and low walls. Each contractor upon the work shall be required to keep pavements and streets clear according to the City specifications for submitting estimate and before actual work is started. Correcting or correcting the details, certain things follow naturally in well constructed buildings that must be considered.

The contractor shall provide proper and sufficient safeguard and protection against the occurrence of any accident, damage or injury to any person or property during the progress of the work and up to the final acceptance by architect, and shall alone be responsible. Contractors shall take out and pay for all permits, in any damage done to property, pavements, curbing and low walls. Each contractor upon the work shall be required to keep pavements and streets clear according to the City specifications for submitting estimate and before actual work is started. Correcting or correcting the details, certain things follow naturally in well constructed buildings that must be considered.

The general and sub-contractors will make thorough inspection of property, pavements, curbing and street before estimate and before actual work is started as the general and sub-contractors will be responsible for any damage done to property, pavements, curbing and street during the construction of buildings.

PART 11.

The owner and architect and architect's agents have the right to enter the buildings at all times, and the owner shall be allowed to make changes they deem advisable. The contractor must demand written orders for such changes or same cannot be considered on final payment of buildings. Such changes that are made will in no way invalidate the contract, but will be deducted from or added to balance of the contract, as the case may be.

PART 12.

The architect has the right to discharge any workmen on the buildings without question.

PART 13.

The buildings are to be insured by the owner.

PART 14.

When the buildings are finished they are to be broom cleaned and all rubbish, etc., removed by the contractors. Each contractor is to make good any work damaged by him to the work of the other contractors during the progress of the work, and they are to leave the buildings in a finished and clean condition.

PART 15.

All drawings, blue prints and specifications are the property of the architect, and shall be kept constantly at the buildings during the progress of the work and at completion of the buildings shall be returned to the architect before the final payment is made. All mill details, plans, etc., are included in the above.

PART 16.

The owner reserves the right to reject any or all bids. The names of all sub-contractors are subject to the approval of the architect and owner and a complete list must be submitted to the architect before the signing of the contract. The changing of sub-contractors after the signing of contract will not be permitted.

NOTE:

The following specifications are for the residence. Contractors will find garage specifications attached to the back of these specifications but it must be understood that the construction of garage will be governed by all the above general conditions.

EXCAVATION:

Excavation to be made under building for cellar when completed 7'-2" in the clear from finished cellar floor to underside of joists at wall lines with an average fall to bell traps of 1" to 5'-0". All excavation to be made at least 6" larger on all sides than figured sizes given on drawings.

Excavate extra depth all around and at inside walls, chimneys, piers, etc., for footings which will have a 3'-0" projection on the outside for main walls and on all sides for chimneys, piers, posts, etc.

Do all excavating, per drawings, for terrace foundations, areas, etc. Necessary excavation for front terrace to be in a separate estimate.

(Plumbing contractors will do their own excavating for pipe trenches.)

Concrete floor in cellar will be 4" thick. (The stone contractor will fill in between walls and banks as walls are being built but not until after they are pointed and inspected and approved by architect.) All earth taken out of excavation to be left on property where directed by architect. Final grading, leveling and sodding of property will be left under separate contracts.

This contractor will see that the spaces under unexcavated portions of porches are filled up to finished grade line, before porch floors are installed so no low places will exist at the enclosed portions of buildings. Such top soil as exists where excavations occur shall be placed in a pile at rear of property for future use in connection with landscape work.

This contractor will submit a separate estimate for extra excavation according to the above specification quoted by the cubic yard.
CONCRETE FOOTINGS AND RUBBLE STONE WORK:

NOTE:

This, the stone contractor, will include the filling in around all foundation walls up to finished grade line. Said fill to be put in place after exterior of stone walls are pointed and approved by architect. The fill must be cleaned, well tamped and back earthed as it is put in place.

All walls, piers, posts, etc., are to start on concrete footings of thickness and size shown on drawings. Said footings to be true in line and surface. Concrete for said footings to be made up of either A - , A - , V- 0-, L- , or U- - cement, sharp, clean river sand and clean washed medium size gravel (which ever brand of cement is adopted same shall be used throughout the work as no mixing of brands will be permitted). Proportions for the above footings to be 1, 3 and 5, well mixed dry on clean platforms, then moistened and again mixed at which time it shall be put in place and well tamped.

All walls, piers, etc., above footings, unless otherwise shown on the drawings, or hereinafter specified otherwise, to be built of good quality of B- - C- - or local sand stone, which must be of good size and laid up with pointed on both sides in a neat and careful manner. Leave all openings and recesses as shown on drawings and required by the different trades.

All walls except where chimney abutments are shown and where brick veneer is shown on face of foundation stone walls shall be 18° thick. Walls to be carried up straight and plumbed and leveled off as shown. Walls to be laid to a line. Chimney abutments that are built in with main walls are to be built up same height. Inside cellar windowsills to receive 1° cement finishing coat 45 degrees trowelled to a smooth and even surface.

Cellar chimneys, piers, etc., free from outside walls will be built of brick from the top of footings. This contractor will furnish his own scaffolding. This contractor will give an extra price for rubble stone work quoted by the perch and for extra concrete work quoted by the yard.

MORTAR FOR RUBBLE STONE WORK:

Mortar for rubble stone work to be made up of best quality of sand and water of required by the different trades. Said fill to be put in place after exterior of stone walls are pointed with mortar similar to that specified for face brick work. Mortar for rubble stone work shall be built with one (1) row of headers every sixth course.

THE STUDY OF ARCHITECTURAL DESIGN

(Continued from Page 34)

for the measured drawing—all of the season, or even all of the next season, if one has his subject reappraised at the beginning of the new (Academic) year—much is expected in the way of presentation. Something more than for a usual problem is expected in the way of composition of the sheet.

This does not mean that more articles must be grouped together, though a complete presentation as in fig. 7 may be very satisfying—but simply a greater effort at composing well what one has decided to use, whether it be simple or complex—it may be only one drawing—as in fig. 3 or fig. 5. It is then a question of determining where on the sheet the drawing shall go. Where details are shown, the relation of these to each other and to the central drawing must be studied as for the analyst, but carried further, because of the greater time at one's disposal, as already said.

Note in fig. 8 how the furniture is added to "make a composition" of an otherwise uninteresting piece of paneling, and how the pieces of china in the cupboard give a needed point of interest.

It goes without saying that the drawing must be carefully—noted, and that any lettering used as a part of the composition must be studied in its spacing, and in its relation to the rest of drawing; such attributes as the china just spoken of, could not be omitted. In fig. 9 for instance, you will see the same modelling of the moulding, by means of washes within parallel lines, as in the French plates, and yet this drawing gives the appearance of great simplicity of presentation. Make studies of the presentation first in charcoal until the values are satisfactory and then make a study in color before starting the rendering of the drawing itself.

A LETTER FROM THOMAS W. LUDLOW, A. I. A.

IT GIVES me pleasure to endorse your campaign for better specifications, commenced in the Special Specification Number of Pencil Points, issued in January, and also to note that you propose to publish a specification for a small brick and tile residence in toto, with notions for its betterment.

Your magazine is primarily the one in which this campaign should be conducted, as it reaches better than any other publication, the architectural student and younger draftsmen. Men who in ten years will be commencing their own practice, with no other knowledge of specification writing and use of materials than that imperfectly gathered from the specification writers in the offices where they have worked, who are too busy to give instruction to their juniors when writing specifications, and when not so occupied the question never arises. Therefore when the young architect is confronted with writing his first specifications, he will copy without modification all sections that are not fully understood, from a specification for a similar type of structure to the one in hand, without having seen the plans which it was intended to supplement and having no knowledge of the special conditions that governed the site. The result is a confusion of clauses that discredit the writer both in the eyes of his client and those of the contractor.

About twenty years ago I won a scholarship that permitted me to study in Europe. I thought that I had attained the goal—a design man. The awakening was still before me. Shortly after returning I began to pick up a practice, and then for the first time did the co-ordination of specifications, which was to dawn upon me as the major principle underlying all architecture. My utter ignorance of the first two sub-
Some text here...
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