

THE STUDY OF ARCHITECTURAL DESIGN

WITH SPECIAL REFERENCE TO THE PROGRAM OF THE BEAUX-ARTS INSTITUTE
OF DESIGN

THE ARCHAEOLOGY PROJET. PART I.

BY JOHN F. HARBESON

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, inclusive, and the Class B Plan Problem in more recent issues.—Ed.

MANY men take an "archæo" simply because a credit in archæology is required to get the certificate of the Beaux Arts Institute, and yet if we look over the published work, the premiated work, we find some names that appear again and again under an "archæo," and the oftener we find the name, the more likelihood that the work gives evidence of ability and cleverness. These men have found that there is a great fascination in the archæology problems, an appeal quite different from that of the projet, different even from the "decorative problem," for here there is little thought of *parti* or scheme, even the ordinary laws of design—symmetry, balance, arrangement of voids to solids, etc.—take a secondary place and there is great freedom for fancy, for picturesque effect; for imagination, in fact, unhampered by practical requirements. The *parti* is usually fixed by the program. At any rate, in an archæo a *parti* must not be originated; it, too, like the ornament and details, must be taken from documents of the style in question.

There are several good reasons for doing archæology problems. In the first place, if a man is working in an atelier at nights only, and in an office by day, taking an archæo gives him a chance

for a let-up from the hard grind of the regular projet, for the time given for the archæo is about twice as long as that given for the projet, and while all of this time can be used to advantage in studying the archæology, it is quite possible to do a very good archæo by using only a portion of it. It is thus possible to take one of these problems when one has not enough time to study properly a big plan problem.

Then, too, with this greater time and also because the archæo problem is not concerned with the finding or studying of a *parti* or scheme, there is always a very much greater proportion of time that can be used for the presentation than is the case with the plan projets. So these problems always offer the opportunity to try different kinds of rendering and to increase one's ability at rendering. Mediums may be used that would be frowned upon for a plan projet, opaque colors, lithograph effects; and drawing in perspective, which is seldom allowed for a plan projet, is here desired. The composition of the sheet is again of great importance, as usually details of the style are called for. When this is the case, if the small scale drawing is shown in elevation, as in Figure 1, a Spanish loggia, the problem of composition is very much what it was in

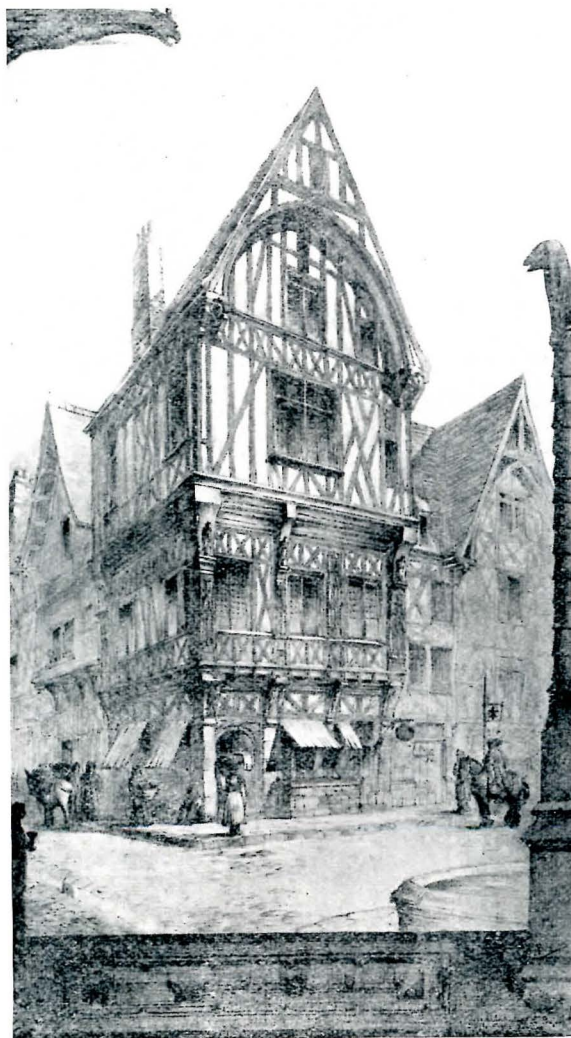


Figure 2. Archæology Projet, "A Normandy Shop Front," Clayton Evans Jenkins.

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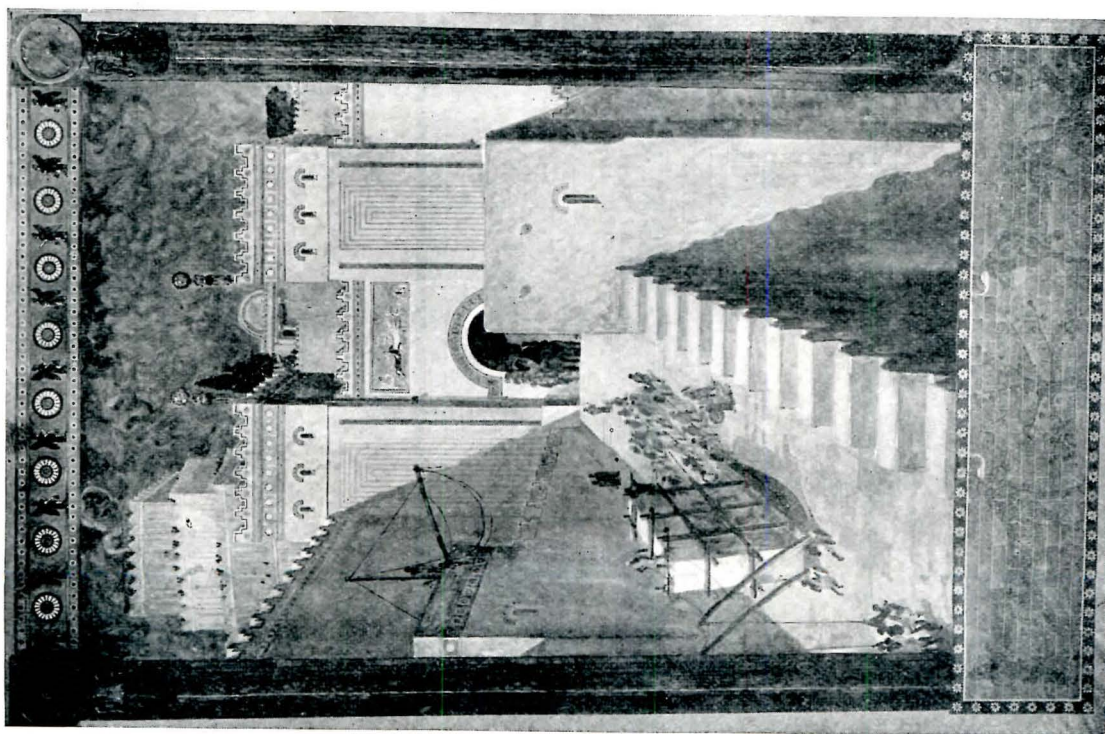


Figure 5. *Archæology Project, "Entrance to an Assyrian Palace," Paul Downille.*

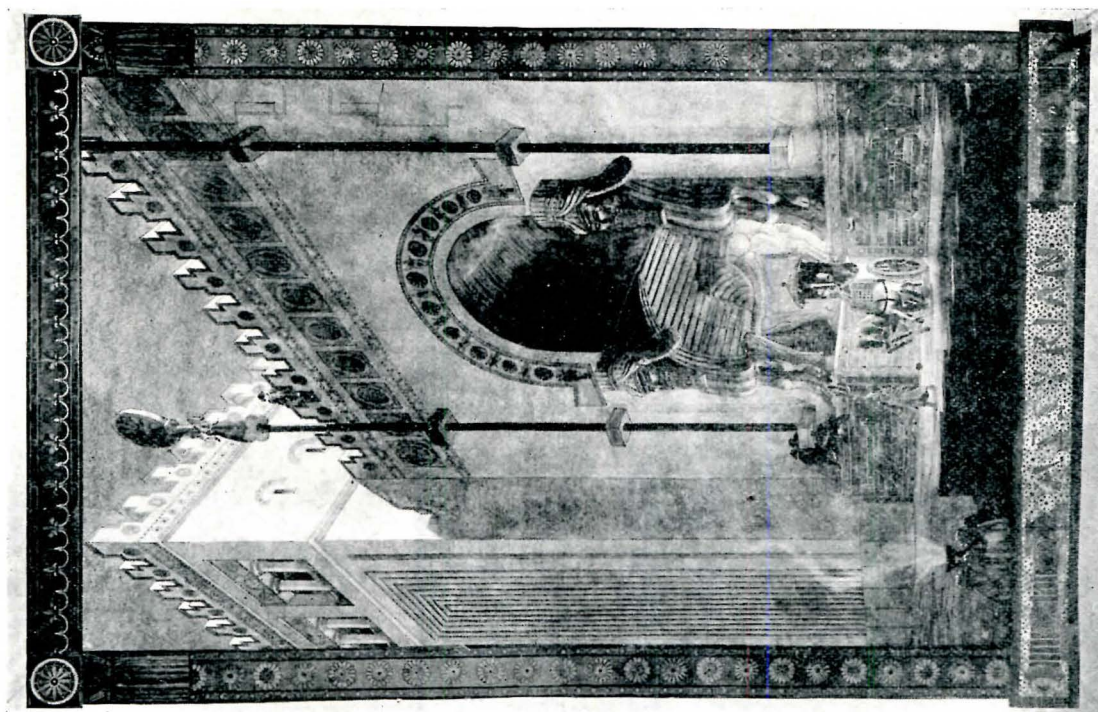


Figure 6. *Archæology Project, "Entrance to An Assyrian Palace," J. D. Epps.*

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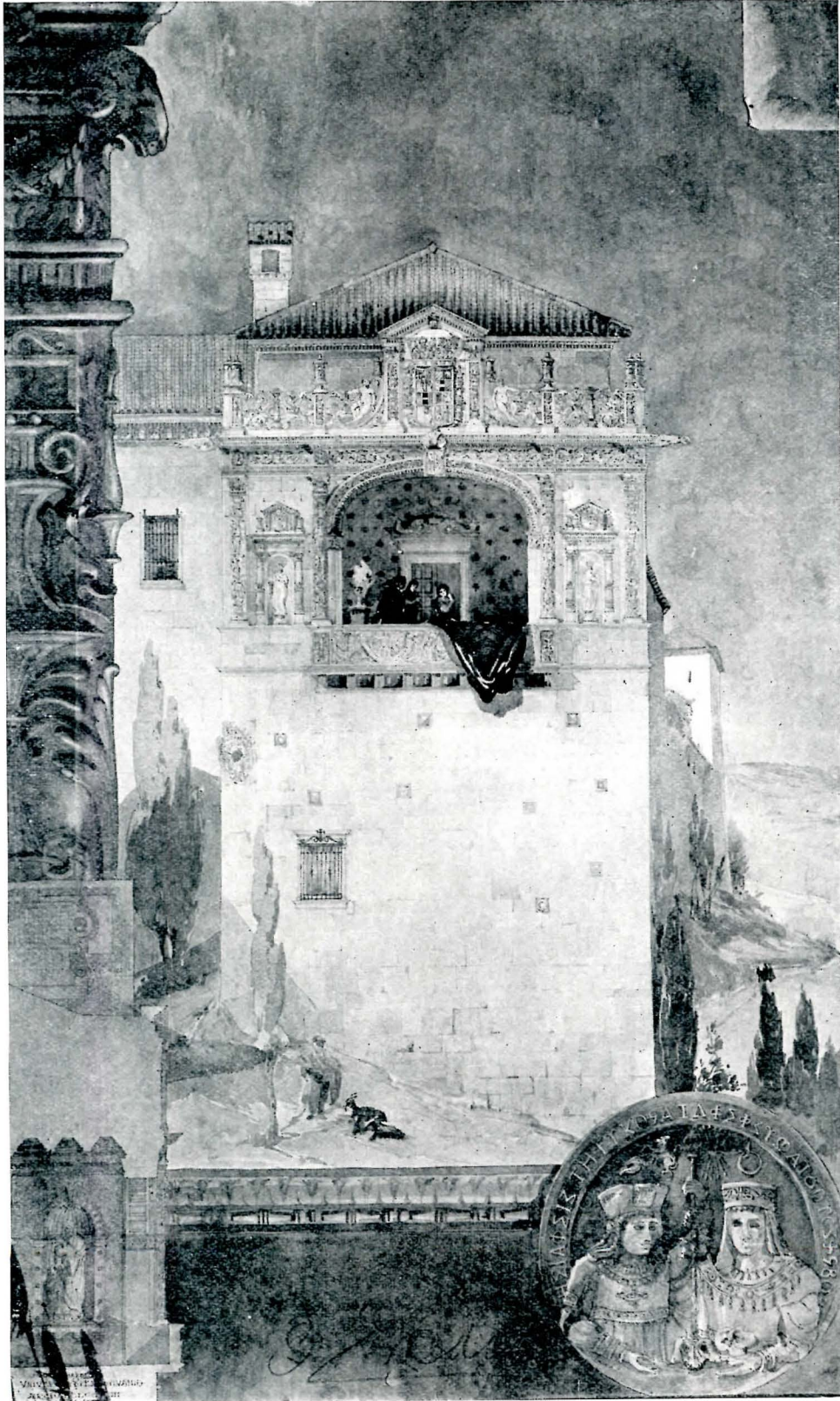


Figure 1. *Archæology Project, "A Spanish Renaissance Loggia,"*
John F. Harbeson.

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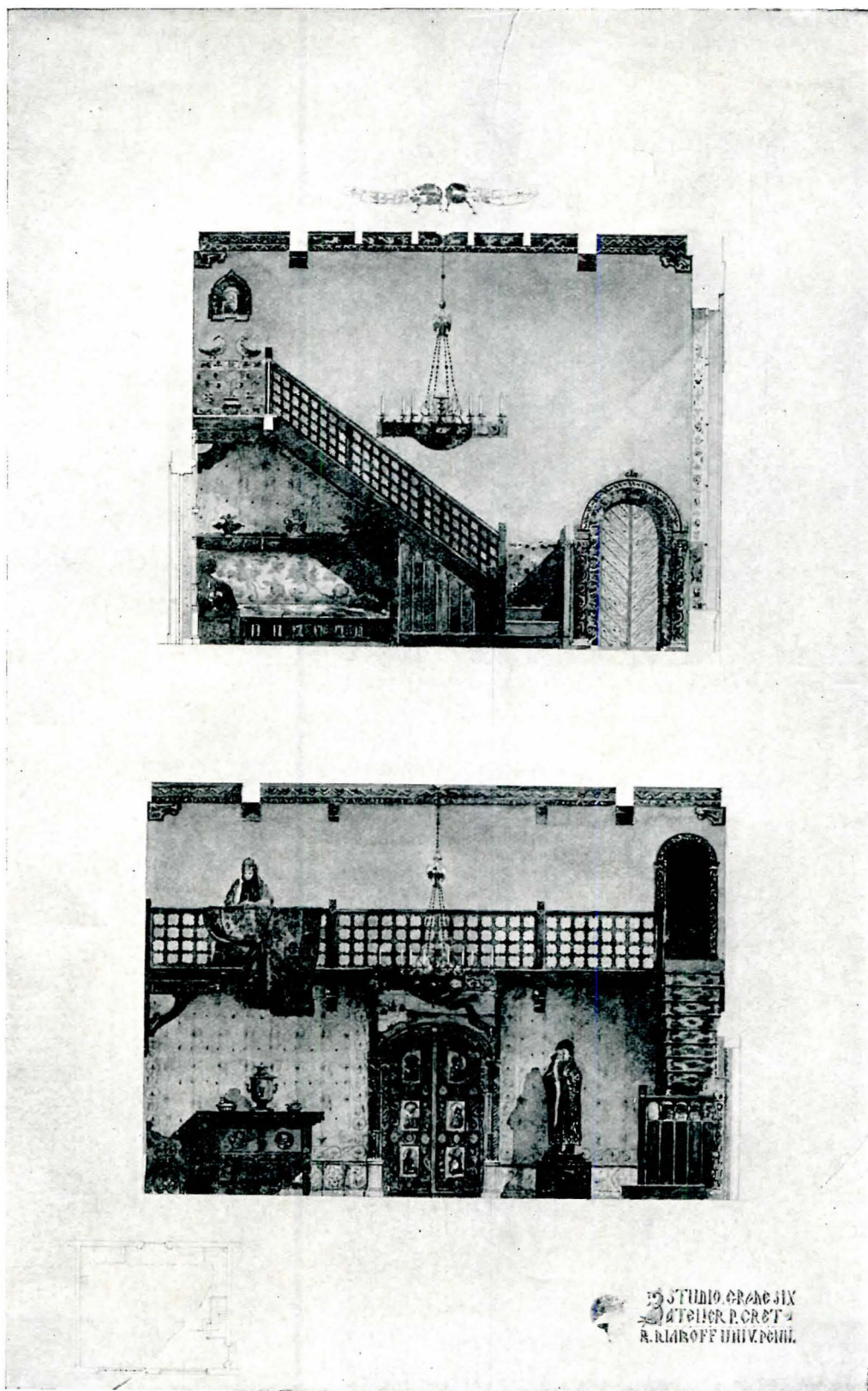


Figure 4. *Archæology Projet, "A Studio in the Russian Style,"*
Boris Riaboff.

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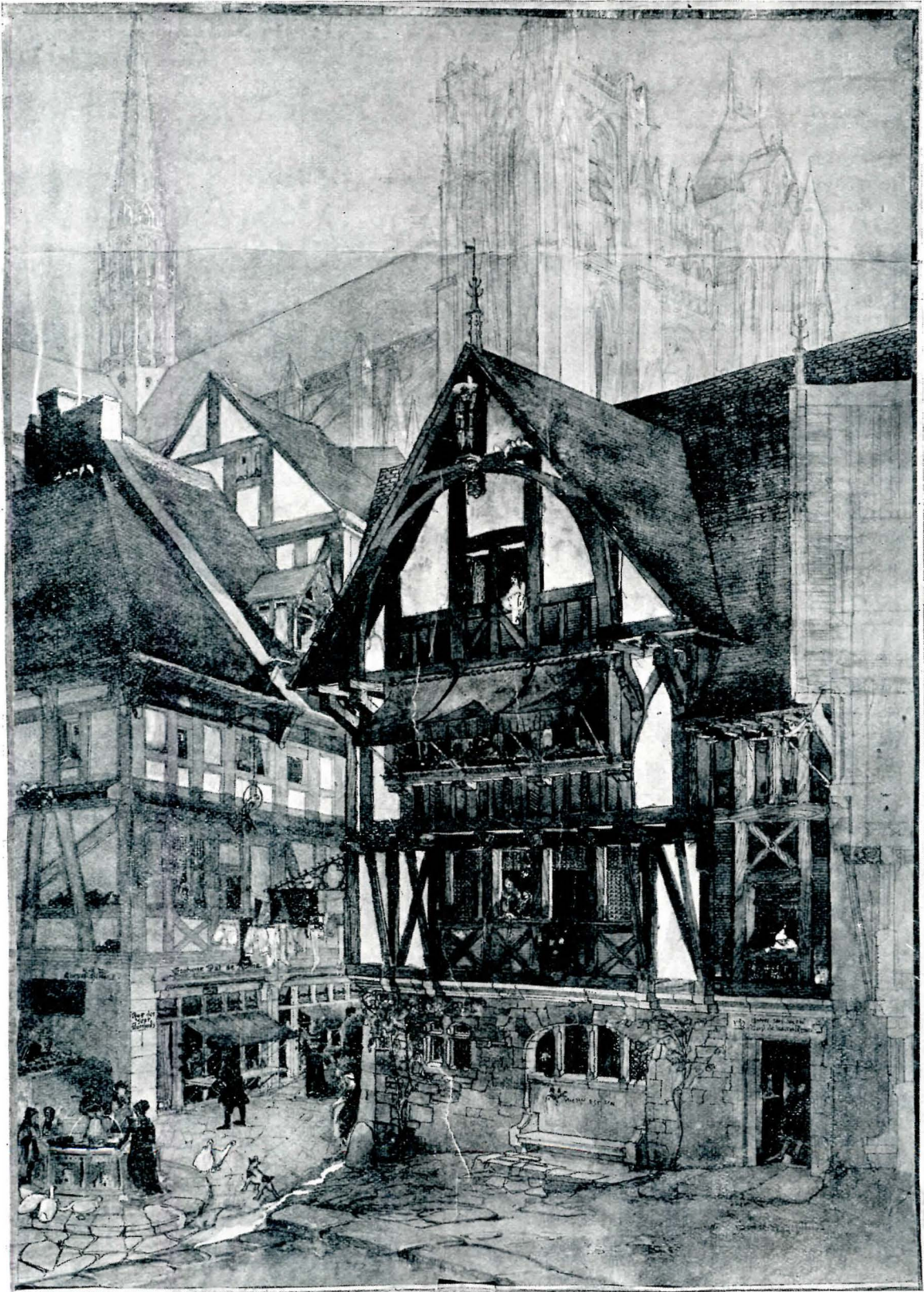


Figure 3. *Archæology Projet*, "A House of the Fourteenth Century in France," John F. Harbeson.

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the analytique only the forms are more free and one begins to see that much of the "composing" may be done in the rendering: i.e., that washes and tones can be used to arrange a drawing. More often in an archæology, however, the small scale drawing is in perspective as in the "Normandy Shop Front," Figure 2. In this case the selection of the point of view plays an important part in the composition, as does the location of the source of light, with the resulting shadows, and the arrangement of architectural forms, gables, chimneys, dormers, etc., and accessories, people and animals, signs, etc. When no details are required, the entire problem of composition is in the handling of this small scale drawing, selection of point of view, arrangement of light and shade, disposition of architectural features and accessories. Figure 3 is an example of this type of problem. When a student attempts this sort of thing he begins to realize the value of the training in composition in the "analytique." After an attempt of this character, he will find a book on com-

position, such as Van Pelt's, much more intelligible than before. I refer to the chapters on painter's composition—composition in two dimensions—and not to those referring to the composition of architectural forms, which is a study in three dimensions, always intelligible to the architectural student.

But the best reason for taking the archæology problems, the reason why one is required to take at least one of them, is that they are an incentive to the real study of "documents," of books and drawings. In the plan projets documents are used to furnish ideas here and there for a *parti* or scheme; even while they are being consulted one's thoughts are preoccupied with the *parti* and the documents are of secondary importance. In the archæo documents are studied for their own sake. The archæo is, before all, a study in style and the *parti* or scheme, so fundamental in plan projet, plays no part here except as it may figure as a question of style—of the style called for in the program; the *parti* itself should be studied from documents.

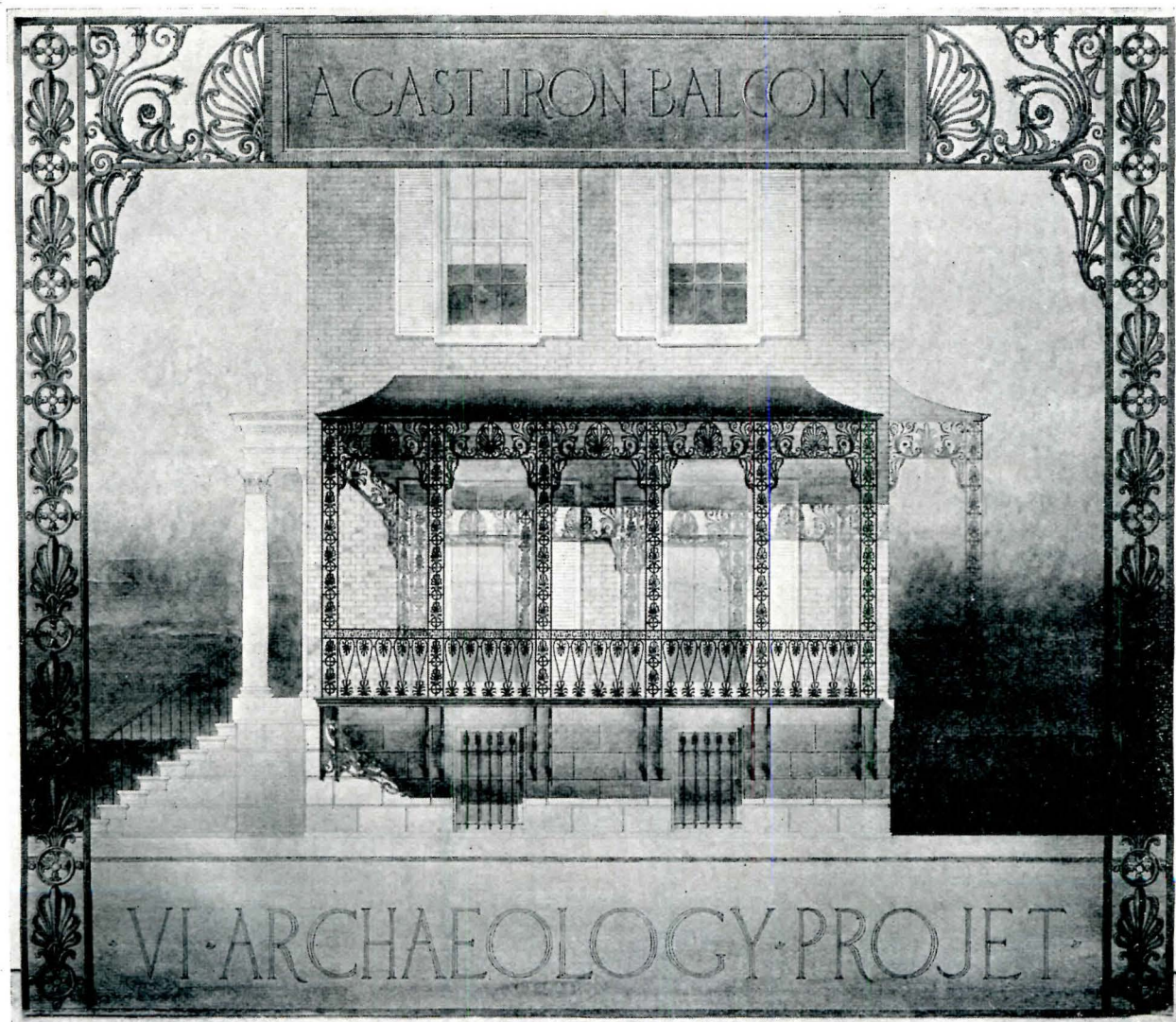


Figure 7. Archæology Projet, "A Cast Iron Balcony," L. C. Licht.

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The problem is primarily a study in the arrangement of motives and in the ornament of the style given. It familiarizes one with many documents he would not otherwise look at, certainly not examine carefully. It gives one many new and interesting dispositions of architectural forms and enlarges one's knowledge of different details. It is one of the surest methods of creating an architectural vocabulary. It is on the discerning use of documents that success in the archæology projet depends. The problem may be a "Pompeian Court," to choose one at random, but the documents must furnish not only the architectural details of the court but all the accessories that go to make up the composition and, especially, an insight into the life of the people of the period, for an intelligent study in archæology cannot be made without some understanding of the manners and customs of the time.

It is here that the student in the city has a great advantage over one in a small town. In New York, for instance, as well as Boston and Philadelphia, there are several architectural libraries of the first rank accessible to all and most of the larger architectural offices have libraries of a great number of well selected books, although in exceptional cases, such as "A Tribune in a Turkish Mosque," or a "Studio in the Russian Style," Figure 4, most of them would be found wanting, as such documents have no direct bearing on modern practice. Such problems are, of course, all the more interesting as they take one into unknown lands. But even in a small town the student can find documents, if he will look, perhaps in books of travel, or in files of the "Geographic Magazine" or in the circulars of travel agencies.

With ingenuity much can be done with scanty documents. Figures 5 and 6 show two different ideas of an "Entrance to an Assyrian Palace," both giving a convincing idea of reality and satisfying one as to being in "style." If we examine them closely, however, we find that almost every motif used in one may be found in the other, though used in a different way—the cheek blocks of the steep stairs in the first appear in the foreground of the second; the tower treatment is the same in each except for the top, the loggia in the top of the second shows at the back between the two towers of the first; the Assyrian "winged men" at the large entrance are the same in each; the animals in relief flanking the entrance in the second are shown at the bottom of the frame in the first, and so on. It is seen what can be done with a few documents understandingly used. In fact, these two men worked side by side and had between them only three pages in a history of architecture, part of which was text.

In some cases the program itself imposes a simplicity, as in the "cast-iron balcony" of Figure 7; here a great number of motives would have conflicted with the requirements of the style. However, as we shall see later, the presentation itself may be a study of archæology.

THE PARIS PRIZE.

COMPETITION for the Sixteenth Paris Prize of The Society of Beaux-Arts Architects is now in progress, the First Preliminary Competition having been held Jan. 6. The Second Preliminary Competition will be held Feb. 24, and The Final Competition will open on May 5. The judgment in the Final Competition will take place July 17, and the drawings will be on exhibition July 17 to 28 inclusive.

These competitions are organized for the purpose of choosing a scholar to pursue his studies in the First Class of the Ecole des Beaux Arts, Paris. The winner will receive three hundred dollars quarterly for two years and a half, dating from his arrival in Europe. The competitions are open to all citizens of the United States under twenty-seven.

In regard to the winners of the twelfth, thirteenth and fourteenth Paris Prizes, the Committee on the Paris Prize of the Society of Beaux-Arts Architects reports as follows:

The Twelfth Prize Scholar, E. E. Weihe, has completed his required work and expects to return in February and probably go to California. He has taken most of the programs at the Ecole and done especially well. This Spring he took a trip through Normandy and Brittany and shorter trips to the towns near Paris, Fontainebleau, Compiègne, etc. During the Summer he worked on Mr. Bigot's drawings for the new wing of the Sorbonne and took a short trip to Spain.

The Thirteenth Scholar, Duncan McLachlan, Jr., has been steadily working in Laloux's Atelier, has already received more values than required, also received a mention on the Godebeuf which is rare for a foreigner to get. During the Spring he visited the towns near Paris; in Summer he has been studying Romanesque and Gothic work in the South of France from Clermont-Ferrand to the coast and Roman buildings at Nîmes and Arles. He also did some excavating for Roman ruins in the Haute-Loire. In December he was sent by the Committee to Nice where Lloyd Morgan was ill in hospital.

The Fourteenth Scholar, Lloyd Morgan, arrived in Paris in January, entered Laloux's Atelier and shortly after arrival won a first second medal on the Rougevin competition. He took a number of the esquisse-esquisses, niggered on the Achille Leclerc, and then started niggering seriously on Pechin's drawings for the Grand Prix. In the Summer he went to the South for a sketching trip, but was unfortunately taken ill near Nice. It was a very serious case of congestion of the lungs with asthma, aggravated by the fact that he had been gassed during the war. He was taken to a clinic at Nice where he is now convalescent and writes that he expects to return to Paris in January. The Committee was enabled to get him the best doctors and hospital treatment through the generosity of one of the members of the Society.

The Fifteenth Scholar, Roger Bailey, has only just arrived in Paris, and is getting settled. He is living at the Hotel de Tours, Rue Jacob.

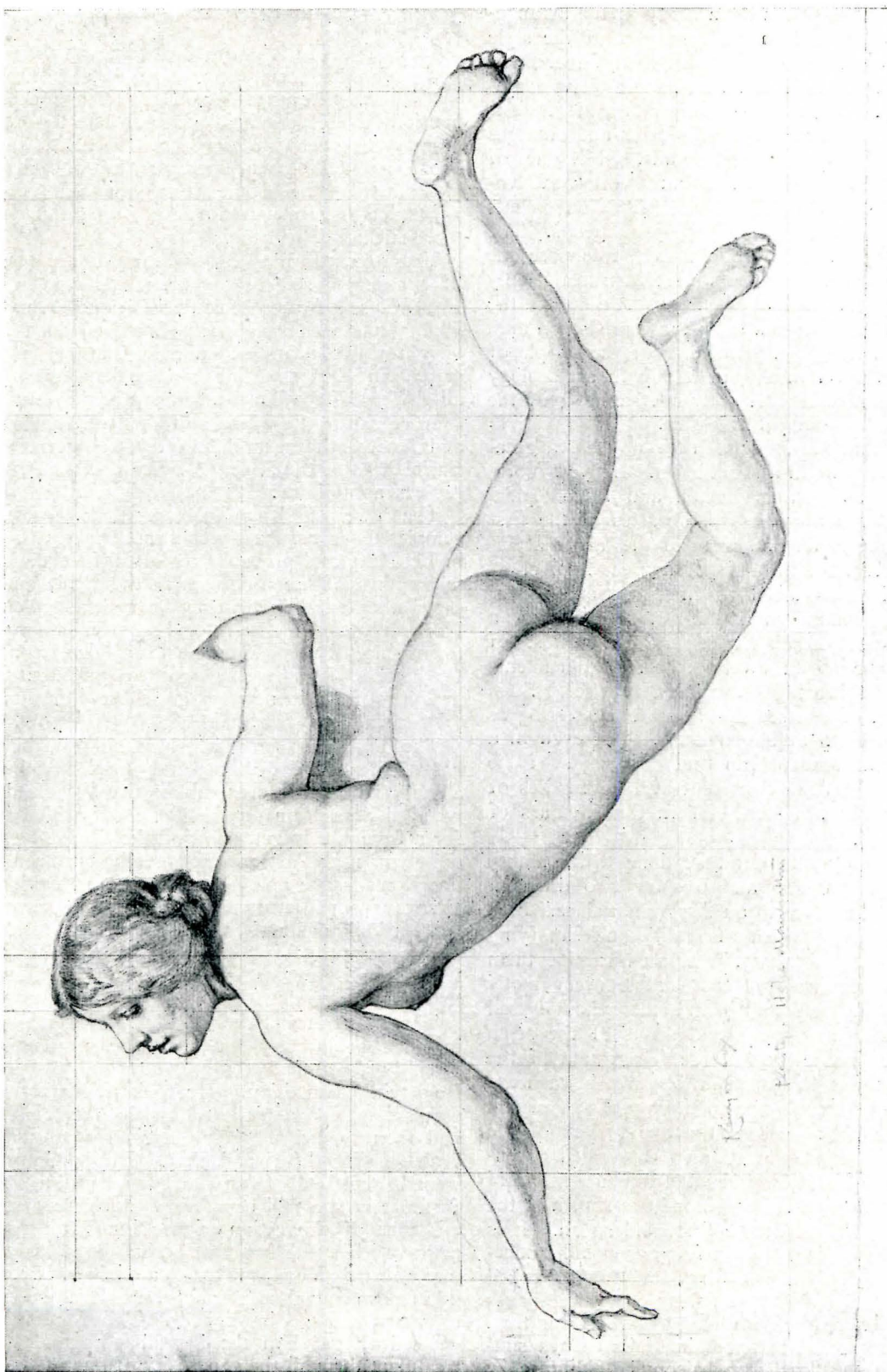


Figure Study in Pencil by Kenyon Cox. Decoration in The Hotel Manhattan, New York City. See Text on Page 31.

THE EVOLUTION OF A KENYON COX MURAL

UNUSUAL interest attaches to the illustrations showing the various steps in the development of a mural decoration by the late Kenyon Cox, which we are privileged to present here through the courtesy of Mrs. Cox.

In the lower portion of this page is seen a reproduction at reduced size of a blue print of the elevator enclosure of the Hotel Manhattan. In the space his decoration was to occupy, Mr. Cox pasted a piece of white paper and on this he made his first rough study for the design of the decoration. This may be seen clearly in our illustration which shows how effectively a few pencil strokes made with the greatest freedom can express a design. It is interesting to note, by comparing this first rough study with the miniature reproduction of the finished

to lightly support the cartouche between them—this effect is pleasant. Though these figures are not by any means ethereal, as may be seen by reference to the figure study on page 30, the lines of the pose, assisted by the skilfully disposed floating draperies, give a completely satisfying sense of lightness to the figures. This can be appreciated by reference to the small photograph of the finished panel shown on this page.

The life study and the drapery study for the right hand figure are reproduced on pages 30 and 32 respectively. Quite aside from their interest as illustrations of the successive steps in the development of a work by a master artist, they are of the greatest value as examples of exquisite draftsmanship, of sound technique, as evidences of the conscientiousness and thoroughness with which Kenyon Cox worked.

No better examples, we believe, can be found for the student of life drawing to examine thoughtfully than the study on page 30 and the other life drawing by Kenyon Cox which is reproduced on Plate VIII of this issue.

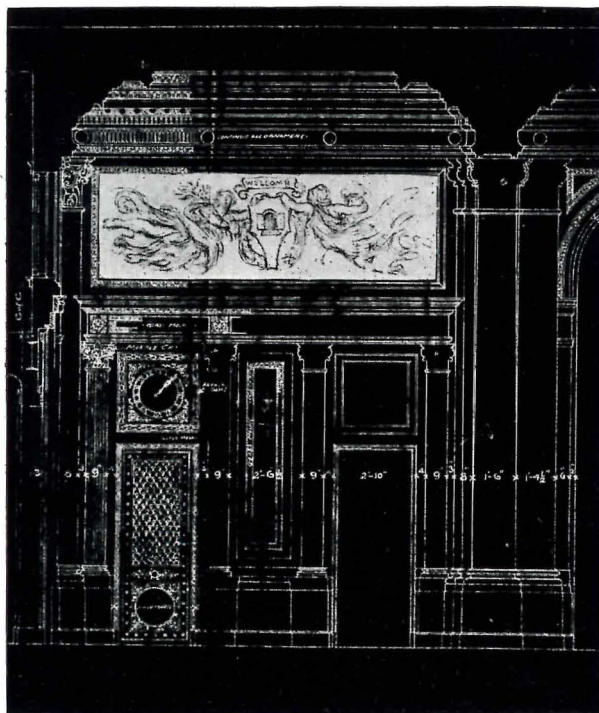
In these drawings it is a pleasure to note the combined precision and freedom, the sureness and expressiveness of the pencil strokes. These drawings are not "tight," though they render the subjects with painstaking thoroughness. They are full of character and tenderness and at the same time show a constant perception on the part of the artist of the purpose for which they were being made, that of serving as studies for mural decorations. This is evidenced in the grace of line, and the formality, without stiffness, of the poses.

Note—The Hotel Manhattan, for many years one of New York's finest hotels, stood on the northwest corner of 42nd Street and Madison Avenue. It was remodelled and turned into an office building and bank a few years ago.



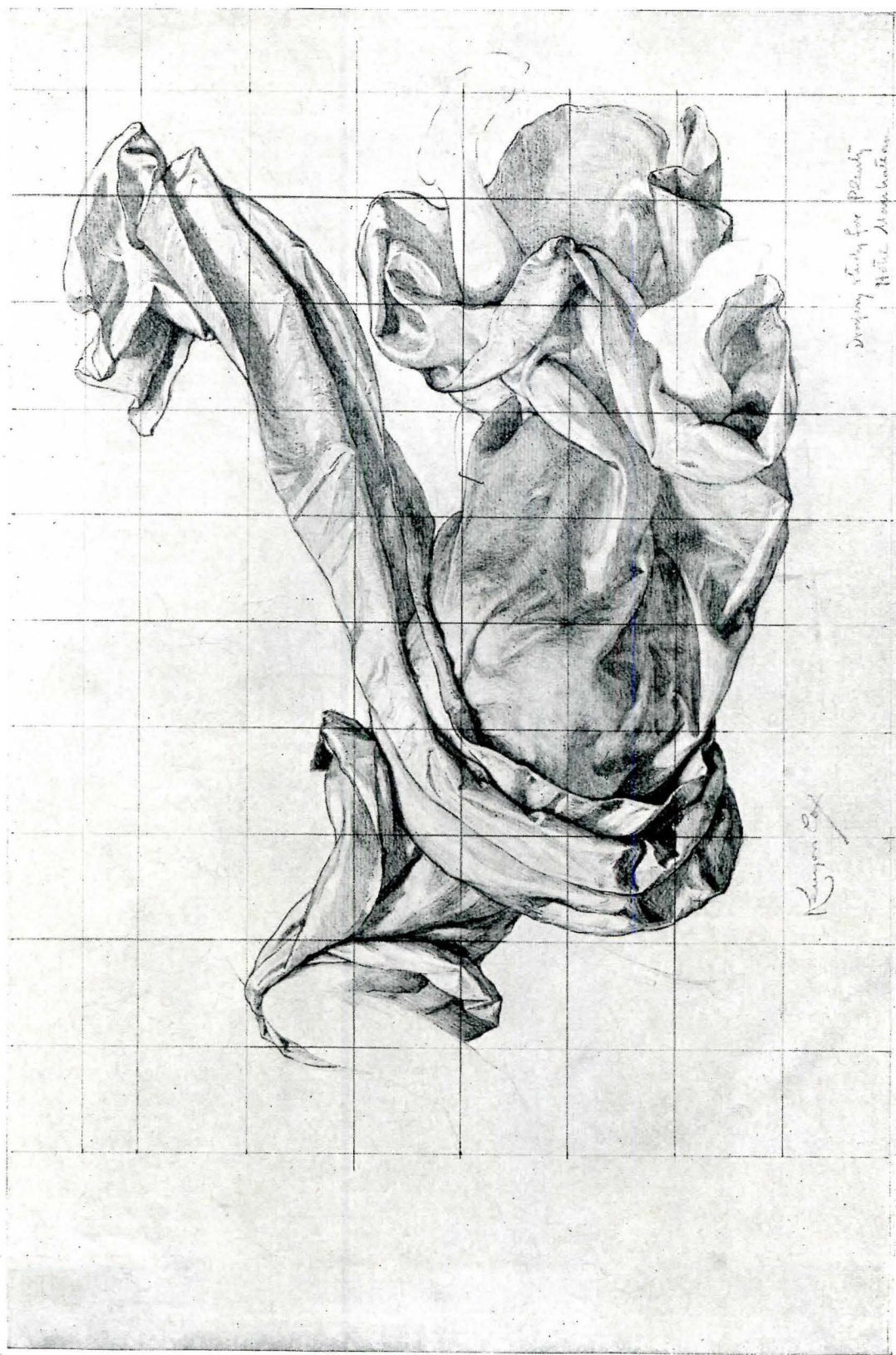
Copyright by Kenyon Cox, 1901.

Decoration by Kenyon Cox in Hotel Manhattan, New York City.



First Pencil Study by Kenyon Cox for Decoration Shown Above. Made on Writing Paper Pasted to Blue Print. H. J. Hardenbergh, Architect.

panel shown above it, how little it was found necessary to change the original conception in the later study of the design. This is characteristic of the work of the masterly designer, the clearness of vision and the sureness that enable him to present in his first rough sketch a design that can be carried to completion without great changes. It will be noted that the only material difference between the first study and the finished decoration is in the position of the arms of the figures in relation to the central cartouche. In the sketch, as may be seen, each figure rests a hand on the top of the cartouche. This gives a feeling that the figures are partly supporting their weight in this manner. A distinct improvement in the feeling of the design has been made during the further study by means of merely placing the hands under the cartouche in such a way that instead of receiving an impression of figures clutching for support, one feels that the figures quite naturally remain in equilibrium and are able



Drapery Study in Pencil by Kenyon Cox, for Figure Shown on Page 30. See Text on Page 31.

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SPECIAL NOTICE.

THE publication of Mr. Philip G. Knobloch's book "Good Practice in Construction" has, because of unavoidable manufacturing difficulties, been delayed. Copies are now promised to us on or about February 15th, at which time all orders on hand will immediately be filled. We desire to express to all those who have ordered this book, our regret that they have been obliged to wait for their copies.

AWARDS IN SLATE SLOGAN AND INSIGNIA COMPETITIONS.

PRIZES have been awarded in the competitions held by the National Slate Association for a slogan and insignia. William J. Reed, an advertising man of Aurora, Ill., is the winner of the one hundred dollar prize for a slate slogan. Mr. Reed's slogan, "Slate—Consider Its Uses," was selected by the judges as the best among one thousand seven hundred slogans submitted. This slogan was adopted for two chief reasons; first, it places a certain responsibility for thought and action upon the reader, thus stimulating his interest and imagination; second, the National Slate Association believes that while slate is widely known and recognized as a product of high merit for certain uses, this particular slogan will stimulate the general interest to a fuller consciousness of the possible extent and diversity of its uses.

The one hundred dollar prize for the Association's insignia was awarded to Emery J. LaLiberte, an architectural draftsman of Brockton, Mass.

The Association held a most successful convention recently, at which many matters of a constructive nature were taken up.

The primary purpose of the Association is to establish a definite source and responsibility for slate information through a recognized organization and to stimulate the sale of slate products by bringing its properties and uses to the public consciousness.

Headquarters were opened last summer in the Drexel Building, Philadelphia, under Warner S. Hays, Secretary of the Association. Results were immediate and of such value to the industry that the membership, now representing about 80% of all slate production in the United States, came to the first annual convention full of enthusiasm and eager to broaden its field of activity.

The officers of the National Slate Association are: President, W. H. Keenan, Bangor, Pa.; Vice-President, G. F. Bernard, Boston, Mass.; Treasurer, A. H. Morrow, West Pawlet, Vt., and Secretary, W. S. Hays, Philadelphia.

Three new directors were added to represent districts formerly unrepresented in the Association. These—C. A. Lowry, of Auld & Conger Co., Cleveland, Ohio; C. H. Davis, Davis Slate and Manufacturing Co., Chicago, Ill.; P. C. Stanwood, Blue Ridge Slate Co., Esmont, Va.

ALPHA ALPHA GAMMA.

A NATIONAL honorary fraternity of women architectural students has been formed under the name of Alpha Alpha Gamma. In 1915, an organization composed of women students in Architecture was formed at Washington University, St. Louis, Missouri. This organization was the foundation of the new fraternity.

Alpha Alpha Gamma was made a national fraternity in 1921, with Alpha Chapter at Washington University. The present chapter roll is: Alpha Chapter, Washington University, St. Louis, Missouri; Beta Chapter, University of Minnesota, Minneapolis; Gamma Chapter, University of Texas, Austin; and Delta Chapter, University of California, Berkeley.

TOURIST HOTEL ARCHITECTURE.

A MOST interesting article on "Securing a Distinctive Atmosphere in Tourist Hotel Architecture," by Roy Carruthers, managing director of the Waldorf-Astoria, appeared in the December number of *Hotel Management*, published at 342 Madison Avenue, New York City. The article is illustrated with views of the New Imperial Hotel in Japan, of which Mr. Frank Lloyd Wright was the architect, and of the Fujiya Hotel, named after Japan's marvelously beautiful mountain, Fuji Yama. The text and illustrations contain many valuable suggestions.

Below is shown at reduced size the cover design of the program for the recent "Architects' Frolic" at which the San Antonio Architectural Club entertained the Texas Chapter of the American Institute of Architects.



PENCIL POINTS

ARCHITECTURAL POLYCHROMY

A VALUABLE paper on "Architectural Polychromy" which was presented by C. Howard Walker, whose words are always authoritative on matters of architectural design, before a joint meeting of the Illinois Chapter of the A. I. A., the Illinois Society of Architects, and the Chicago Architectural Club, has been printed and copies can be had by readers of this journal who address a request to The Associated Tile Manufacturers, Beaver Falls, Pa. This paper was read on the occasion of the opening of an exhibition of tiles and tile work. Only a very imperfect idea of its scope and usefulness can be given here, the full text of the paper should be secured and read.

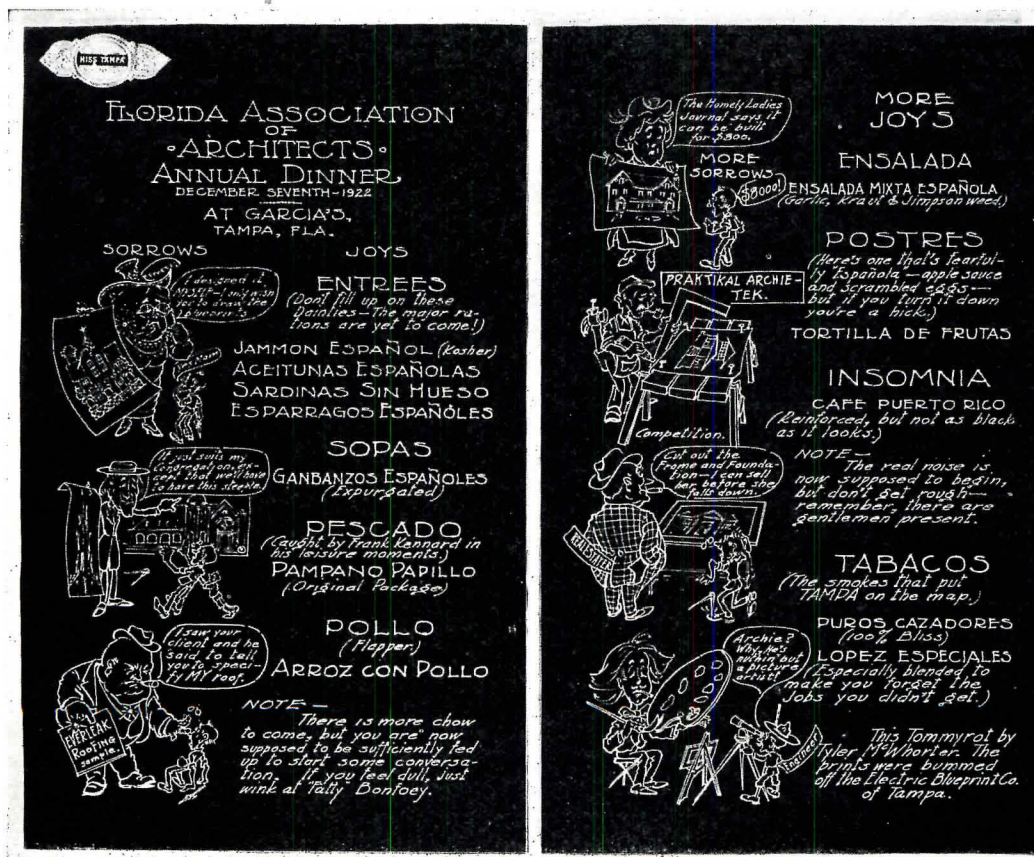
In a clear and very interesting way Mr. Walker discusses the proper use of polychromy in architecture, pointing out that unless there is a marked domination of one color a tendency to confusion is produced and the fact that a building is an entity denied. He advises that the introduction of polychromy, i.e., many colors, should be minor and accessory and devoted to intimate details which should accent, but not disturb, the general effect.

He traces briefly and in a very readable manner the development of the use of polychromy in architecture, from the earliest times, pointing out the improbability that the Greek temples of the Fifth Century were as crudely colored as they are shown in Hittorff's restorations, which have been considered authoritative. He pays a tribute to Mr. Leon Solon's knowledge and appreciation of the polychromy of the Greeks.

He speaks of the wall decorations of Pompeii, and of the geometric work of the Mohammedans, of mediæval work, and of early Italian colored terra cotta, as well

as of the earlier polychromy of Egypt, Assyria, and China, giving illuminating suggestions. For instance, he points out that in the attempts to restore the Mohammedan decorations in Spain, after the removal of the coats of whitewash under which they had been hidden, the same thing happened that occurred with the restoration of Greek polychromy, i.e., if an indication of a color appeared, it was spread over the entire surface of the unit upon which it existed and the color carried down on the edges or reveals until it met the color of the next plane. He states that in examining the work of the Moors he failed to find any color on the reveals. The white reveals were like an exquisite pattern of lace drawn over the colored patterns. The white edges defined each color area. He emphasized the importance of decisions of line and clear definition of areas of color as exemplified in tiles where little raised dikes are formed to hold and retain the glazes, which when fired upon plain surfaces would otherwise run into each other.

One of the most interesting parts of his paper deals with color harmony. He points out that in the past there was no apparent theory of color combinations, the principal desire seems to have been to have the colors clear and intense, unconfused with adjacent colors, and therefore separated from them. Few neutralized colors occur and the naturalistic color often affects the choice of color. Mr. Walker points out that complementary colors are conflicting, and conflict in color combinations is undesirable, except when violent sensation is desired, also that a strong tendency to harmony is produced if one color and its immediate changes into the adjacent colors in the spectrum is made the dominant of the color scheme. That any third of the circular spectrum is safe and contrasts may be obtained by introducing small areas of colors in the other two-thirds of the spectrum.



Above is Shown at Reduced Size the Menu of the Florida Association of Architects' Annual Dinner.

PENCIL POINTS

PERSONALS.

WHITNEY WARREN has consented to serve temporarily as director of the work of the Beaux-Arts Institute of Design in the place made vacant by the death of his brother, Lloyd Warren.

JOSEPH WESTON has opened an office for the practice of architecture, at 515 Hollywood Security Building, Hollywood, Cal.

EDWIN W. BYERS of Flint, Mich., VINCENT J. WAIER of Detroit, Mich., and JAMES C. HARRIS of Saginaw, Mich., have formed a partnership for the practice of architecture and engineering under the firm name of Byers & Waier Architects and Engineers, with offices in the Flint Coal Company Building, Rooms 1 and 2, Flint, Mich., and at 124 North Washington Avenue, Saginaw, Mich.

CLAUSEN & KRUSE, Architects, have removed their office to 910 Kahl Building, Davenport, Iowa.

JOS. VAN G. HOFFECKER has opened an office at 803 Eighth Street, Ocean City, N. J., for the general practice of architecture.

M. NIRDLINGER and R. M. MARLIER have formed a partnership under the name of Nirdlinger & Marlier, Empire Building, Pittsburgh, Pa., for the practice of architecture. FRANZ & BOND, Architects and Engineers, 189 High Street, Holyoke, Mass., have dissolved partnership due to the appointment of Philip E. Bond as city engineer. Fred H. Franz is carrying on the business at the same address.

A. C. ZIMMERMAN has opened an office for the practice of architecture and engineering at 417 San Fernando Building, Los Angeles, Cal.

DERBY & ROBINSON, Architects, have opened a new office at 3 Joy Street, Boston, Mass.

DAVID T. ELLIS from Cardiff, Wales, has joined the staff of Bertram Grosvenour Goodhue.

HAROLD S. KAPLAN, Architect, formerly with Stevens & Lee, is now practicing architecture at 298 Dundas Street, West Toronto, Ont., in association with A. Sprachman, under the firm name of Harold S. Kaplan & A. Sprachman, Architects.

WILLIAM W. DAWSON, JR., Architect, has removed his office from 127 Washington Street to 46 South Main Street, South Norwalk, Conn.

R. M. GUNZEL has been placed in charge of the new branch office of the Warren Webster Company in Los Angeles, Calif.

FRANK R. PECK, of 308 East 4th Street, Los Angeles, Calif., has been appointed to represent Gillis & Geoghegan for the sale of G&G Telescopic Hoists in California. Together with S. W. R. Dally, of 332 Pioneer Building, Seattle, they will handle all of the Pacific coast business of the firm.

SAN ANTONIO ARCHITECTURAL CLUB.

IN fifteen months the San Antonio Architectural Club has grown from fifteen charter members to about one hundred members. During the past year much good work has been done and seed has been sown that will, we are sure, make 1923 a fruitful year. Among the most important pieces of work accomplished by the club has been the overcoming of a spirit of jealousy and mutual disrespect that was all too prevalent in San Antonio, as it is felt to be in other cities of states where no license is required for the practice of architecture. The bringing about of a better spirit has been largely due to the efforts of the club.

The club successfully arranged and presented an entertainment for the Texas State Chapter of the American Institute of Architects during the recent convention of that organization. Features were a dinner, impromptu table talks, reading of verses by E. B. Hays, president of the Club, and a minstrel performance.



JOHN RICHARD ROWE.

JOHN RICHARD ROWE, one of whose sketches is reproduced on a plate page in this issue, is an architectural student at the Ecole des Beaux Arts, Paris, who was recently in this country on a visit, and has returned to continue his studies.

The sketch reproduced here was exhibited in the Autumn Salon, 1922, in Paris. Mr. Rowe's work has been shown in this country in an exhibition at the Toledo Art Gallery, and in the Albright Gallery, Buffalo, where a room was devoted to his drawings.

Mr. Rowe was born in Buffalo, N. Y. After graduating from high school, he worked in the office of Green & Wickes, architects, Buffalo, for two years. He then entered the Massachusetts Institute of Technology as a special student. After finishing his studies at M. I. T., he returned to the office of Green & Wickes for a year. He then went to Paris and entered the Atelier Gromort. He is now a student in the Atelier Laloux.

PORTO RICO ARCHITECTURAL CLUB.

A SOCIETY under the name of "Porto Rico Architectural Club" has been organized by the students in the course of Architecture established in the College of Agriculture and Mechanic Arts of the University of Porto Rico, Mayaguez, P. R.

The Board of Directors were elected as follows: Ernesto Pérez, President; Hernando Hernández, Vice-President; Domingo Caino, Secretary; Luis Alvarez Stefani, Treasurer; José Serrano Anglada, Voter.

Norris I. Crandall, Director of the Department of Architecture, was unanimously elected Honorary President. The Secretary's address is as follows: P. O. Box 235, Mayaguez, P. R.

The purpose of the organization is to promote the development, study and practice of Architecture in the island of Porto Rico.

PENCIL POINTS

SETTING UP A DESIGN AT FULL SIZE IN PAPER.

AN INGENUOUS method of setting up a design at full size in such a way as to judge its effect in execution at a comparatively small expense is shown by the photograph on page 37. It will be noted that the monument has the appearance of a marble or plaster statue on a pedestal of enduring material while the effect of the curved exedra can be well judged, still there is nothing more substantial there than paper, wall-board and two wooden seat-ends. The figure is a "solar print" photographic enlargement of the model shown on this page. The enlargement was made in sections which were pasted on wall board very much after the fashion of a poster on a bill board. The material was then sawed out to the silhouette and this piece of scenery set up on a pedestal made largely of paper. The bench, excepting the seat ends already mentioned was also made from paper. The idea was worked out by the architect John Mead Howells and the sculptor C. P. Jennewein associated as designers of the monument.

FONTAINEBLEAU SCHOOL OF THE FINE ARTS.

A SUMMER School for American architects, painters and sculptors is to be opened in the Palace of Fontainebleau, France, under the patronage of the French Government.

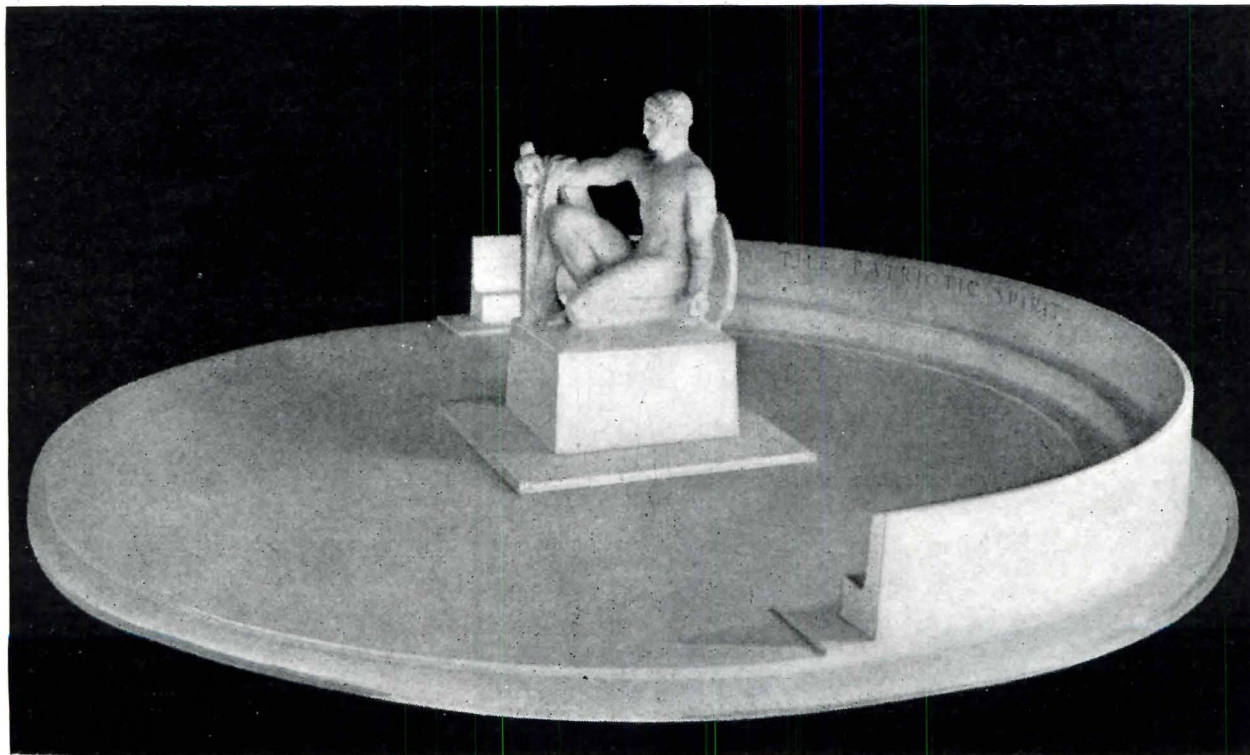
Arrangements were completed last summer by Mr. Lloyd Warren, and since his death the carrying on of his work has been assumed by his brother, Mr. Whitney Warren, the work of the American organization having been placed in his hands for the Department of Architecture. The results of this work are certain to be far-reaching since there is no place in France better adapted than Fontainebleau for the study of all styles of architecture, painting and interior decoration for at one time or another many of the great French and Italian masters

have left their imprint upon this group of buildings. It is also an excellent point of departure for excursions to study the notable works of architecture in the neighborhood of Paris.

The details of the plan are given in the following quotations from the circular issued by the American organization:

"In addition to the Music School for Americans which has functioned now for two years with great success in one wing of the Palace of Fontainebleau, there is to be opened this year, from June 25 to September 25, a School of Fine Arts devoted to the study of Architecture and Painting. These schools were conceived by M. Maurice Fragnaud, *Sous-Prefet* or Governor of Fontainebleau, and are under the direct patronage of the French Government through its Minister of Fine Arts. They are located in the Palace itself and the Professors are chosen from among the most distinguished French artists and architects, the School of Fine Arts being under the eminent directorship of M. Laloux, Member of the Institute, and one of the best-known patrons of the *Ecole des Beaux Arts* in Paris.

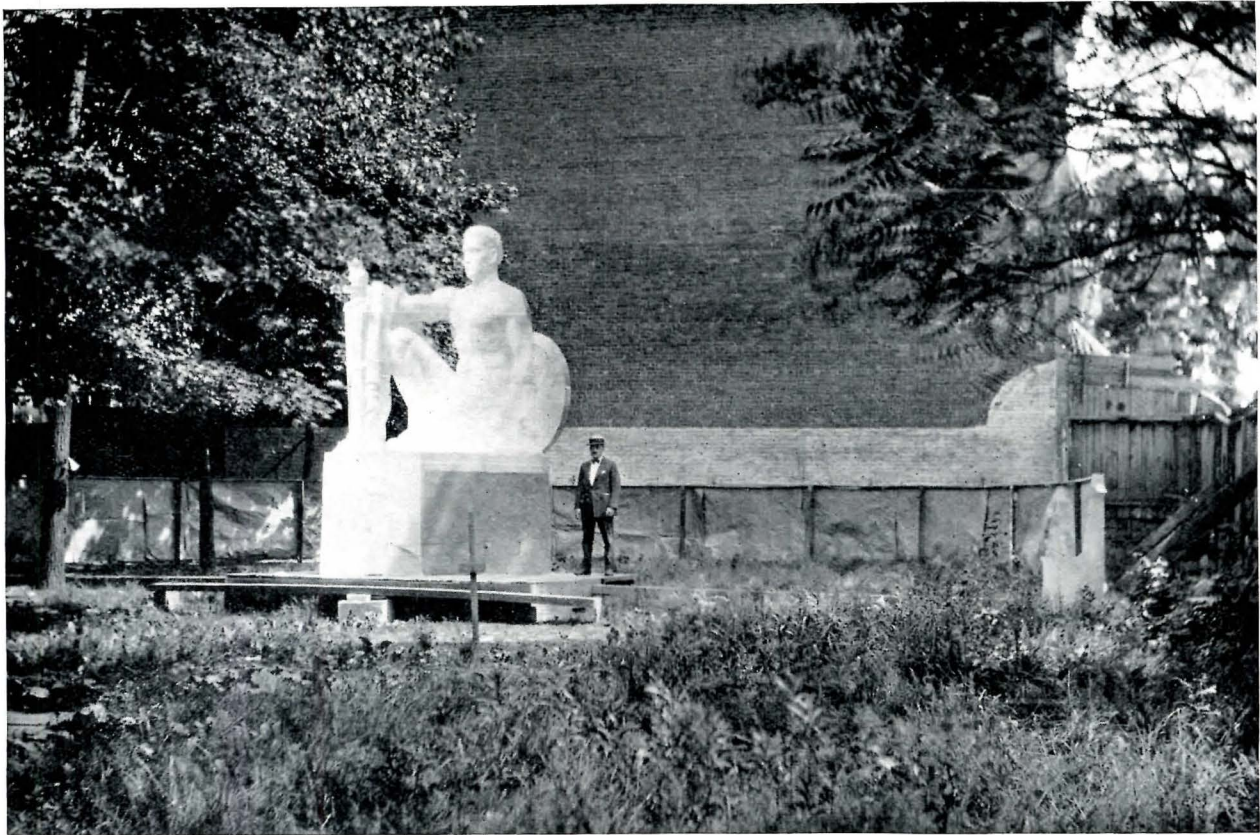
"The Fontainebleau School of Fine Arts does not duplicate any course of study that now exists in France or America. It is a summer school only and is designed as a sort of post-graduate school for advanced students who, under an intensive system of instruction, can benefit by their unique surroundings. The studios and drafting rooms are in the Palace itself, a palace completely furnished and justly considered one of the very finest in Europe, in which the pupils may study at their leisure the various styles and decorative features that have served as the inspiration of artists for centuries. We now possess in America every opportunity for technical training in the Fine Arts, but this school aims to supplement this and widen the artistic horizon of its students by travel and by contact with the artistic and historic tradition of an older civilization.



Courtesy of The Monument and Cemetery Review

*Photograph of Model of the Barre Monument, C. P. Jennewein, Sculptor, John Mead Howells, Architect.
See Text on This Page.*

PENCIL POINTS



Photograph Showing Full Size Paper Set-up of the Barre Monument. See Text on Page 36.

"For Painters and Sculptors: Atelier work in the Palace Studio, specializing in the study of the arts of Mural Decoration and the study of Ornament. Work in Tempera and Fresco. Frequent trips to Paris and elsewhere, by motorbus, to study the work of the older and the modern masters.

"For Architects: Atelier work in the Palace drafting-room. Specialized study of French Architecture, past and present, and of its allied arts. Study trips by motorbus to places of architectural interest, covering a wide area.

"For both: Lectures on the History of Painting and Architecture; on the French styles; classes in French and French History, etc. Excursions by motorbus under expert artistic guidance to chateaux, churches, and other monuments of interest in the neighborhood of Paris.

"The American organization is concerned solely with the recruiting of students. It has been placed, by the French authorities, in the hands of Mr. Whitney Warren for the Department of Architecture, and of Mr. Ernest Peixotto for the Department of Painting. They, in turn, have organized the committees that will aid them in making the school known in America and in selecting its students. It is hoped that all parts of our country will be represented in the student body, and for this reason the American Committee is working in connection with the heads of our leading art schools and colleges. It feels that it is offering a unique opportunity to American students.

"The number of students in the School of Fine Arts is limited to one hundred. All applications for admission should be accompanied by a note clearly stating where, with whom, and for how long the candidate has studied; and this note should be supplemented, if possible, by a

letter of recommendation from the director of the school or institution at which the candidate has studied.

"All applications should be made: for architects, to Mr. Whitney Warren, care Beaux-Arts Institute of Design, 126 East 75th Street, New York; for painters and sculptors, to Mr. Ernest Peixotto, care The Mural Painters, 215 West 57th Street, New York.

"By reason of the low cost made possible by the French authorities, the summer session of the Fontainebleau School of Fine Arts is brought within the reach of most students. Board, lodging and tuition fees, with the trips by motorbus alluded to above, are, all included, about \$100 per month. The French steamship line also allows a discount of 30% to students, bringing the price of a comfortable passage as low as \$90. The registration fee is \$10. Thus \$500 would represent the entire cost of a summer spent at the school.

"It is hoped that ateliers, schools and colleges will find scholarships of \$500 each, to be won in competitions, and awarded to the most promising students of their class. As the Fontainebleau School of Fine Arts is an effort on the part of France to render a real service to America, the American Committee feels that a knowledge of this rare opportunity should be clearly brought before every student who would wish to profit by it."

The membership of the Executive Committee in America is as follows: Mr. Whitney Warren, Chairman, Department of Architecture; Mr. Ernest Peixotto, Chairman, Department of Painting; Mr. Edwin H. Blashfield, President, National Academy of Design; Mr. Howard Greenley, President, The Architectural League; Mr. Thomas Hastings, President, Beaux-Arts Institute of Design; Mr. J. Monroe Hewlett, President, The Mural Painters; Mr. Hermon A. MacNeil, President, National Sculpture Society; Mr. James Gamble Rogers, President, Society of Beaux-Arts Architects.

PENCIL POINTS

ART STUDENTS' COMPETITION.

ASCHOLARSHIP Competition open to all art students in the United States, with the exception of those in New York City, will be held at the Art Students' League of New York on March 23, 1923.

Ten scholarships will be awarded to that work showing the greatest promise. Work in any medium, from Life, the Antique, Landscape, Etching, Portrait, Illustration, Composition, also photographs of Sculpture, may be submitted. All work should be forwarded so as to reach the League not later than March 15th, and must be sent with return express or parcel post charges prepaid.

Students entering this competition are urged to send the most comprehensive exhibition possible, to facilitate the work of the Jury. It will be readily understood that the work covering the widest field of Art expression will best enable the Jury to judge of the individuality and promise of the prospective student. The League wishes to emphasize that the Jury will be guided in making their awards, not by the degree of proficiency displayed by the applicants, but by an effort to find interesting individuals whose strength the League desires to add to its own.

The scholarships so given will entitle the holder to free tuition in any two classes of the League during the season of 1923-1924. The Jury will consist of the following instructors of the League: George B. Bridgman, Dean Cornwell, Edwin Dickinson, Guy Pene Du Bois, Frank Vincent Du Mond, Fred W. Goudy, Robert Henri, Charles R. Knight, Richard F. Lahey, Leo Lentelli, Hayley Lever, George Luks, Kenneth H. Miller, Wallace Morgan, Joseph Pennell, John Sloan, Duncan Smith, Allen Tucker, William Von Schlegell, George E. Wolfe.

All letters and packages should be addressed: For Scholarship Competition, Art Students' League of New York, 215 West 57th Street, New York City.

SCHOOL CRAFTS CLUB, NEW YORK.

THE January meeting of the School Crafts Club of New York City was a great success, both in regard to a large attendance, and because of the excellence of the program of speakers furnished. This meeting, held on Saturday evening, January 20, in the grill room of Lyons Restaurant on 41st Street, was under the leadership of A. W. Garritt and L. J. Young, Directors of Shopwork in the New York City Schools. Throughout the program, with only one exception, the presentation, rather than the projects themselves, was stressed.

"How shall we get the aim of our shopwork over to our pupils?" was the subject discussed by John Kuhn, of Public School No. 126, Brooklyn. If boys are asked the aim of shopwork, they are likely to reply—"to teach a trade." Lack of time allowed per pupil makes this an impossibility. Some of the real reasons are: (1) Because it is the natural thing for a boy to manipulate tools, man is a builder. (2) General educational aims. (3) Training in usefulness at home. (4) Co-ordinating development of mind and body. Sturdiness and development of intellect go hand in hand for success. Thought should come before action. (5) Accuracy. (6) Order of procedure.

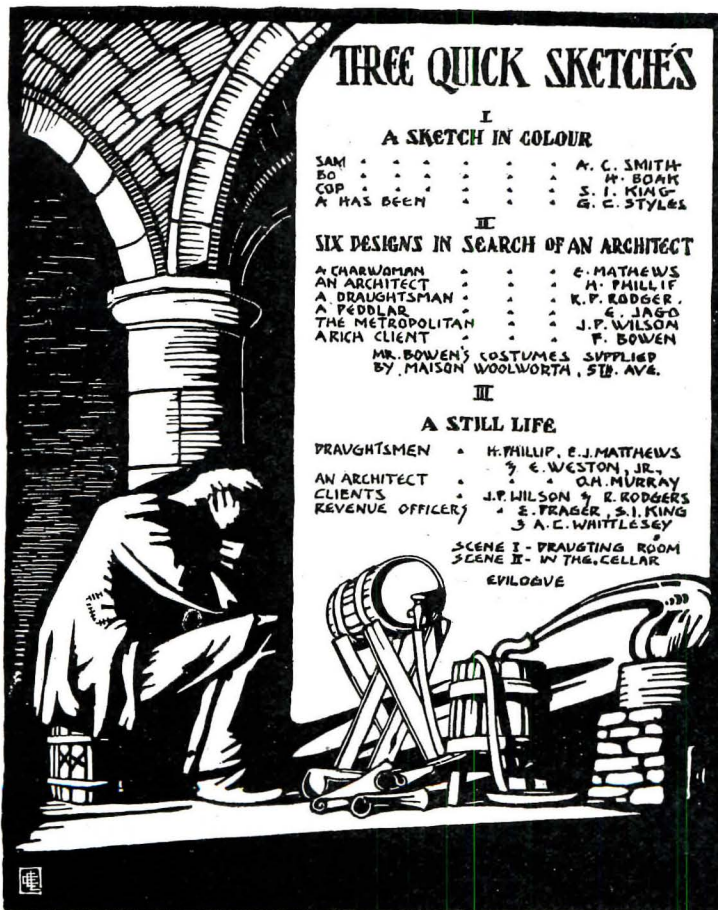
Talks were given as follows: "Forests and Their Value," by J. A. Mackay, Public School No. 95, Queens; "Shopwork Illustrative of Organized Thinking" by A. L. Markwood, Public School No. 46, Manhattan; "When Should Charts be Used," by E. Montague, Public School No. 110, Brooklyn. Charles Mu'ler exhibited glider models.

TWELFTH-NIGHT REVEL OF THE OFFICE OF B. G. GOODHUE.

THE Twelfth-Night revel of the staff of the office of Bertram Grosvenor Goodhue this year was as entertaining and clever as those of preceding years and, like its predecessors, it was marked by many evidences of the close and pleasant relation that exists between the architect and the members of his staff.

The program consisted of three dramatic presentations. The first, "A Sketch in Color," was marked by an amusing comedy; second "Six Designs in Search of an Architect," a farce in one act; and third, "A Still Life," an amusing bit, the subject of which is indicated by the fact that of the two scenes, the first is laid in the drafting room and the second in the cellar. Following the presentation of these little plays, the members of the party gathered, as usual in the large reception room. Features of this part of the evening's program were an address by Mr. Goodhue and the presentation to Mr. Goodhue, by the members of his staff, of a large toy automobile constructed from paper by members of the organization. In connection with this gift an amusing characterization, likening the various members of the organization to the parts of an automobile was read.

These annual entertainments have been a feature in Mr. Goodhue's office for the past sixteen years or so, excepting for the year this country was in the war when there was no play. An interesting history of the Twelfth-Night revel together with the full text of a notable address given by Mr. Goodhue at last year's gathering was printed in the issue of this magazine for February, 1922.



Program of Twelfth-Night Revel, Bertram Grosvenor Goodhue's Office. (Reproduced at reduced size.)



QUERIES

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, 19 East 24th Street, New York City.

Question—Will you please describe in your next issue the process of "rubbing" by which inscriptions or figures can be obtained from a flat, upright surface? J. R. T.

Answer—In addition to the generally-known fact that such rubbings are made by laying a paper against the surface and rubbing a pencil, marking crayon, or something of the sort across the paper, there are a few little tricks that men who have done the rubbing of many inscriptions have found an aid in their work.

For instance, in order to keep the paper from shifting it is well to take short pieces of adhesive tape, such as is used by surgeons, and stick part of it to the paper and let the other part adhere to the surface. This would be especially helpful to you in making rubbings from inscriptions on a flat, upright surface. For delicate work, such as mosaic, a bond paper that can be had in folio size is convenient and in making a rubbing of large inscriptions a heavier, stiffer paper in large sheets is required.

Where the work is delicate and the surrounding surface rough, the best results are sometimes obtained by smudging dirt on the paper with one's fingers, working out the design in this way. Usually a ball of blacking used by shoemakers on the heels of boots they repair, generally known as a heel ball, is best, especially for inscriptions of large size. This material is a sort of waxy composition and is very black. It is desirable to get it in as large sizes as possible, the usual size being about the size of a quarter. It is sometimes obtainable as large as a baseball. A larger piece is much less tiresome to hold.

Another excellent material is the kind of large marking crayon used in shipping departments for marking boxes. This can be had in red and blue as well as in black.

Question—Can you tell me where I can find information on the planning of orphanage institutions of the cottage plan type? M. S. **Answer**—We would refer you to the Child Helping Department of the Sage Foundation 130 East 22nd Street, New York City. They have a file of plans of a large number of institutions of this type, including the Hebrew Orphan Asylum, which was described and illustrated in the "Architectural Review" for April, 1919.

Question—Will you please give me the names of the publishers of the following books: "Over the Drawing Board" by Lubschez, and "Spain" by Calvert, two volumes? C. T. S. **Answer**—"Over the Drawing Board" by Lubschez is published by the Journal of the American Institute of Architects, New York City, and "Spain" by Calvert, two volumes, is published by E. P. Dutton & Company, New York City.

Question—Will you kindly give me the name of any book now in print that shows any details of Phœnician architecture? C. D. F. **Answer**—We would refer you to the "History of Art in Phœnicia and Its Dependencies" by Georges Perrot and Charles Chipiez, two volumes. Translated into English by Walter Armstrong. Published by Chapman & Hall, London.

GARGOYLE CLUB OF SAINT PAUL.

GROWING from a group of twenty men who met in hotel and office rooms, to an established club, including practically every architect and architectural draftsman in the city, many of whom have won nation-wide and even world-wide fame, and owning one of the most picturesque club buildings in the country, the Gargoyle Club of St. Paul has made for itself a unique place in the history of the city and is a nationally known organization.

The club was established in 1913, according to the constitution, "to create a closer affiliation between St. Paul architects, between draftsmen, and between architects and draftsmen." Since then its scope has been broadened and it includes landscape gardeners, sculptors and artists in other lines, among its members.

The emblem adopted was a gargoyle, high on a building, overlooking a city. The emblem gained considerable local fame during the winter Carnival, when members of the club, walking inside a huge cloth gargoyle, paraded the downtown streets and were present at every carnival function. That cloth gargoyle met a mysterious fate. On the last night of the Carnival the "beast" made its way to the doors of a local club building, but found the doors locked. The poor gargoyle was left outside in the cold and the "feet" went home. The next morning the gargoyle was gone. He has never been seen since, and is supposed to have dug himself in, after the manner of gargoyles, to escape the cold.

For the first three years after its inception the club met in various places—hotel's, office rooms, homes—any place that would accommodate the members. In 1916 the German Bethlehem Presbyterian Church, Oakland and Pleasant Avenues, Saint Paul, was abandoned by its congregation. The Gargoyle Club, both because it felt the need of quarters and because it disliked to see the picturesque little church, which had been designed by Cass Gilbert, later to become an internationally known architect, and which was the object of many visits by tourists, torn down or devoted to commercial purposes, bought it. The building is widely known as one of the most original and unique examples of church architecture in the country.

During the World War, 90 per cent. of its members being in the Service, the Board of Directors of the Club were obliged to lease the building and conduct its affairs, which were confined to a monthly dinner, at one of the other clubs in the city.

At the present time, its members gather once every month for an educational program, which include industrial films, stereopticon slides, speeches, etc. Once a month a social entertainment is conducted, enlivened with music, refreshments and a general good time. Our monthly dinner, at the Athletic Club, is still in force and very well attended.

At one time or another the club, as a body, is invited to make private inspection of buildings, plants and factories. Annual competitive exhibits and picnics have been arranged. All of which have been helpful in promoting the spirit with which the club is working its way to becoming one of the best architectural clubs in the country.

THE SPECIFICATION DESK

A Department for Specification Writers

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 PENCIL POINTS.

A SYSTEM FOR OBTAINING ACCURACY AND COMPLETENESS IN A SPECIFICATION.

By Selig Whinston, of B. H. & C. N. Whinston, Architects, New York City.

ALL of your contributors to the last issue on the writing of specifications agree on the necessity of obtaining completeness in writing a specification, yet few present any definite and developed system for obtaining just that which they all strive for. That is the deficiency which I propose to fill, with your consent.

It is apparent that the specification, in order to be complete, must contain some mention of each and every item of work necessary to construct and completely finish the building. It is also apparent that the drawings, properly read and interpreted with a view to the work of the actual construction of the building, together with all the notes thereon, and with all mental notes formed by the experienced builder, (be he architect, superintendent, draftsman or contractor) of the necessary preparatory work required to make the installation of each item of the finish of the building possible,—that all these drawings, notes, and mental conceptions contain all items necessary to be incorporated in the specifications in order to make the same complete. These items, then, supplemented by clauses pertaining to general work required to be done on every building operation, statements as to guarantees, quality, insurance, etc., etc., fitted into their proper places in the composition of the entire specification, make up, as far as I can see, *The Complete Specification*.

The general clauses can be obtained from a number of sources. The real problem is the casting of the drawings, so to speak, with all their notes, inferences, implications, and with all the mental notations which arise in reading the drawings, into the specifications by breaking up all this information into specific references to each of the multitude of component minutiae which go to make up the completed building, properly indexing them by placing them under their respective headings, such as "Excavating," "Concrete and Cement Work," "Mason Work," or whatever it may be, arranging the matter under the heading in logical and systematic form, and then giving the actual specification which determines exactly what that item is to be.

Now, how can all these items be assembled with the assurance that everything required for the building is included?

The system I use is somewhat more elaborate than any of those mentioned by your contributors. The "mental conception of the entire building," mentioned by Mr. Ward, is, beyond a doubt, essential. I go further, and completely analyze each and every detail of the building, especially those where the work of a number of trades come together and must coincide,—as suggested by Mr. Holske. I make these analyses by carefully and thoughtfully sketching out the actual details at a small scale, on a pad of paper, studying the same until I arrive at my best possible arrangement, later giving these sketches to the draftsman for drawing up at the proper scale. This preliminary work completed, I then take a set of blue prints made before the dimensioning of the drawings has been done, and several hundred slips of paper about $\frac{1}{2}$ " x 3", begin at the upper left hand corner of the uppermost sheet, and closely and carefully examine the drawing, checking off each item shown or note written thereon, with a small dot, and immediately thereafter writing that item down on the slip, condensed to save labor, following that with slips for each preparatory item required in conjunction with the item indicated on the drawing. For instance,—I come to an item "Tile floors, base and 5'-0" wainscot in all bathrooms,"—the building being brick walls and wood beam construction. I make one slip "Deafening in bathrooms" for the boards placed between the beams to receive the concrete foundation for the finish tile floor; then a slip, "Concrete foundations for tile floors"; next, "Tile floors in bathrooms"; next, two slips, "Base and 5'-0" tile wainscot in bathrooms"; one to be filed under tile contract heading, and the other under plastering contract heading; next a slip "Metal lathing for tile wainscoting in bathrooms," if such be required; next a slip, "Scratch-coating for tile wainscot-bathrooms." Should waterproofing, or any other supplementary items be wanted, independent slips are made out for them. This procedure is maintained until the lower right hand corner of the lowest sheet is reached, carefully going through the entire set of drawings, making sure, beyond a question of a doubt, that everything is perfectly understood by the writer and that everything is immediately noted on the slips, never relaxing the vigil until the end has been reached and passed. Notes made during conferences with the owner are also itemized in this manner on the slips. All itemizing done, the slips are generally sorted according to the various trades, care being taken to include no work under the heading of a trade that is not done by that trade. The next step is to take the slips pertaining to the first

PENCIL POINTS

trade to start work on the job and classify them further, putting all slips referring to one item of work together,—to be mentioned under a single paragraph heading in the finished specification. For instance,—the slips for "Carpenter Work" for a small brick building may be divided into the following items: Framing, Furring, Rough bucks, Rough flooring, Roofing boards and blocking, Deafening, Grounds, Stairs, Finish flooring, Trim and Millwork, Saddles, Application of finishing hardware, cutting, etc., etc., etc., and so covering all items to be done under that contract.

All this ground work having been completed, the actual writing of the specifications is then begun, and this then, resolves itself down to very little more than carefully transferring the information contained on the slips to the actual specification sheets, elaborating the condensed notes as may be necessary to convey in unmistakable terms a clear idea of what is wanted. I use no unnecessary words, but each requirement having any effect on the price to be figured for the item, the quality wanted, or the condition to be met, is mentioned,—or, to use a term of logic, every characteristic, having as its concomitant any material variation in either the bid or the product, is specified.

There yet remains to be explained the final arrangement of all the items, general clauses, etc., in the completed specification;—the "get up" as some-one has mentioned.

All my specifications, and they are all written so that any trade may be awarded separately from the rest, start immediately with "Scope of Contract" under which I stipulate what is included under the contract, listing all items as was indicated above, and including any general items such as removal of rubbish, watchman, fences, water, etc., which it may be desired to incorporate in the contract for the trade in hand, buttressed with provisions covering minor items inadvertently omitted. The next paragraph is headed "Similar Work Under Other Contracts," under which I make mention of anything which might affect the bid in this respect; then comes "Quality" which gathers under one heading all references to quality, ordinarily scattered throughout the length of the specification; then "General" under which all special general conditions, not covered by the A. I. A. or Uniform Contract general conditions, are stipulated; then follows in regular order, the amplification of the items included under "Scope of Contract" until everything to be done under that particular sub-contract or trade is covered, and points of contact with the other sub-contracts specifications are properly aligned and coordinated, fashioning the specification into a comprehensive whole, a body complete in itself, which when combined with the specifications for the balance of the trades, each in itself also a whole, form the result so much to be desired: the complete, ideal specification for the entire building.

All of the foregoing may appear to be tedious and laborious in execution. On the contrary, this system enables one to do the brain racking work of specification writing with surprising ease; and what

is more important, with confidence, assurance, and power; and the results of such a specification cannot fail to be anything but harmony with the contractor, a clear understanding of just what is included in a contract and what is distinctly omitted, and increased respect for the architect's business sense and buying ability from the contractor and owner, a clarifying of the entire business of "buying building construction work" so that the entire transaction becomes as simple and free from obscurity as that of a housewife presenting her carefully prepared shopping list to her grocer or butcher, and receiving the goods over the counter as ordered, or a modern and progressive purchasing agent who goes into the market knowing exactly what he wants to buy, and getting it.

THE EFFECT OF THE STANDARDIZATION OF BUILDING MATERIALS UPON SPECIFICATION WRITING.

By A. Lynwood Ferguson of the Structural Service Bureau, Philadelphia, Pa.

PROBABLY no one feature of building construction has received more attention during the past several years than that of the standardization of building materials. The Department of Commerce has even established a division to promote the idea of simplified practice, as it is termed. It is certain that nothing more important has been or could be accomplished to relieve the architect of individual effort, time and expense involved in the writing of architectural specifications. Yet few architects seem to have familiarized themselves with these various standards to which it would be so much to the advantage of themselves and their clients to refer. It would be difficult to cover such a broad subject in the small amount of space allowed in this issue, but the following will serve as an indication of the work already accomplished in this field.

Among the organizations which have established standards for building materials perhaps the most well known is the Bureau of Standards in Washington, D. C. The work of the Bureau in the testing and investigating of the properties of structural materials was taken up and is carried on primarily for the needs of the government in its structural work, but this information is just as necessary to the public in construction work and every effort is made by the Bureau to present its findings in a form available to the public generally.

The American Society for Testing Materials has for its purpose the promotion of knowledge of the materials of engineering and the standardization of specifications and methods of testing. Reference to the "Standards of the American Society for Testing Materials" in architect's specifications furnish a brief form of securing an assured product and an equitable basis for contractor's estimates.

The American Society of Civil Engineers, American Society of Mechanical Engineers, American Railway Engineering Association, The National

PENCIL POINTS

Fire Protection Association, The National Board of Fire Underwriters, Underwriters' Laboratories, Associated Factory Mutuals Laboratories, and many other national and international organizations have prepared standards as to materials and their correct application to insure the most efficient use possible with a maximum of fire and life safety. Such investigations as those being conducted by the Bureau of Research of the American Society of Heating and Ventilating Engineers on thermal-conductivity, insulation and air leakage will prove of inestimable value to the architectural profession.

The building materials industries are practically all organized into associations of producers and many of these are expending much time, effort and money each year in the investigation and standardization of their various products.

Among the many manufacturers of building materials and associations of producers who are trying to standardize their materials to promote efficiency, encourage year-round employment and simplify specification writing only a few can be mentioned here.

The Associated Tile Manufacturers have prepared publications such as Basic Information and the Basic Specification which will prove of inestimable value to the architect in his specification writing. The slate industry has recently so standardized all the slabs and parts which go to make up enclosures, shower stalls, stairways, etc., that on two small sheets of paper can now be shown the various but comparatively few parts which are required to make over one hundred and thirty fixtures of any size or combination likely to be desired. Advantage may be taken of these by specifying by type and standard size without preparing detail drawings for each.

Other associations of manufacturers which have adopted standards and specifications for their products are The Common Brick Manufacturers' Association, the National Terra Cotta Society, the American Face Brick Association, Portland Cement Association, and the Associated Metal Lath Manufacturers. The Lumber Industry is working now on a program for the formation of grading standards and the standardization of sizes of lumber and mouldings. Probably many other organizations are working along similar lines.

And yet how few architects avail themselves of this opportunity to use standards already established. The American Institute of Architects realizing that a book would be needed to even list the many government departments, societies, associations and other organizations which are working on standardization of building materials, prepared and issued the Structural Service Book. Every architect should encourage such investigations and should utilize as far as possible the data thus prepared, for it will mean the elimination of a tremendous amount of individual effort, time and expense in the preparation of specifications and detail drafting, it will permit industries to keep production well in advance of demand, insure more constant employment of workmen, furnish a uniform basis for estimates, reduce the cost of building, and finally, assure a

higher degree of safety and efficiency during and after construction.

A LETTER ON SPECIFICATION WRITING

From Clarence Wilson Brazer, Architect,
Chester, Pa.

YOUR January issue concerning specifications has been read with considerable interest and I find myself in agreement with most of the comments therein.

I am a firm believer in standard specifications written upon 4 x 6 in. cards in double space type, allowing for interlineation.

Where possible the (a) Necessary, (b) Economical, (c) Good, (d) Elaborate, Choice Methods or qualities, to be briefly covered on the same card.

By using the cards instead of an old specification one has at the same time a complete checking list and the cumulative result of his experiences in practice so that the standards of quality as corrected from experience, practically give an insurance against omissions.

By simply placing a parenthesis about the matter not germane, superfluous words can be kept out of the final specifications but remain as a reminder for future work.

We have in this office a standard classification given below for the trades, including Landscape Work and Furnishings, with which an architect comes in contact for the completion of his picture.

These have been grouped into ten major divisions each sub-divided into ten minor divisions as near as possible in the order in which the work is done upon the building or in which the trades are sometimes allied in various sections of the country.

1 *General Contractor's Work*:—11—Description of Competitive Drawings; 12—Outline Specifications; 13—Proposals; 14—Contracts; 15—General Conditions; 16—Preliminary Work; 17—Temporary Work; 18—; 19—Building Laws.

2 *Site Work*:—21—Moving and Underpinning; 22—Wrecking and Demolition; 23—Excavation and Grading; 24—Roads and Pavements; 25—Land Drainage; 26—Sewage and Garbage Disposal; 27—Well Sinking and Water Supply; 28—Planting and Gardening; 29—Piling and Bulkheads.

3 *Rough Masonry*:—31—Masons' Work and Materials; 32—Concrete and Reinforcement; 33—Stone Masonry; 34—Cut Stone, natural and manufactured; 35—Brickwork; 36—Terra Cotta, Structural; 37—Terra Cotta, Ornamental, Architectural and Faience; 38—Damp and Waterproofing; 69—.

4 *Finished Masonry*:—41—Plaster Block and Board; 42—Furring and Lathing; 43—Plastering and Stucco Work; 44—Paving; 45—Cork Tiling; 46—Tiling; 47—Terrazzo; 48—Interior Slate, Marble and Scagliola; 49—.

5 *Metal Work*:—51—Structural Metal; 52—Vaults; 53—Miscellaneous Metal; 54—Art Metal; 55—Metal Sash, Doors and Trim; 56—Screens; 57—Weather Strips; 58—Roofing and Sheet Metal and Kalamein Work, Metal Ceilings; 59—Hardware.

PENCIL POINTS

6—*Woodwork*:—61—Timber; 62—Carpentry; 63—Millwork; 64—Stair Building; 65—Cabinet Work; 66—Flooring; 67—Glazing; 68—Painting and Decorating; 69—.

7—*Mechanical*:—71—Heating and Ventilating; 72—Steam Power Plant; 73—Plumbing; 74—Gas Fitting and Generating; 75—Refrigeration; 76—Hydraulic Elevators; 77—Kitchen Equipment; 78—Laundry Equipment; 79—.

8—*Electrical*:—81—Electric Wiring; 82—Electric Fixtures; 83—Bell Work; 84—Clock Work; 85—Elevators and Dumbwaiters (Electric and Hand); 86—Mechanical Cleaning; 87—Mechanical Carrier; 88—Moving Picture Equipment; 89—Pumps.

9—*Miscellaneous*:—91 Auxiliary Fire Apparatus; 92—Wood Furniture; 93—Metal Furniture; 94—Upholstery; 95—Furnishings; 96—Lightning Conductors; 97—; 98—; 99—; 100—.

All catalogues of manufacturers are classified in vertical files in accordance with this standard classification. Every specification card bears the general classification number and, after a decimal point, the number of the card in such subdivision, thereby enabling the office boy to refile same in its proper place after having been typed.

While such a method probably does take a little longer, yet this is so with everything that must be thorough, and our experience is that the number of extras due to oversight is practically nil. It will be noted that room is left in some places for expansion.

MEASURING SAND FOR CONCRETE.

THE reliability of concrete construction is likely to be increased, and the cost in some cases reduced, by the application of a newly developed method of measuring sand, which is now being tested at the Bureau of Standards of the Department of Commerce. The method has been termed the "inundation method" and consists of measuring sand in a container which has been partly filled with water before the sand is put in, so that when the sand is in, the water is up to the top and the sand completely soaked.

PUBLICATIONS OF INTEREST TO THE SPECIFICATION WRITER.

Any publication mentioned under this heading will be sent free, unless otherwise noted, upon request, to readers of PENCIL POINTS by the firm issuing the publication. When writing for any of these items please mention PENCIL POINTS.

Architectural Metal Work.—Handsome brochure in sepia illustrating numerous examples of bronze and wrought iron work as installed in recent buildings. 10½ x 14 in. 32 pp. The Flour City Ornamental Iron Co., Minneapolis, Minn.

Color in Architecture.—Brochure illustrated in color plates and numerous engravings in sepia, on the basic principles of the application of color in available mediums. 8½ x 11 in. 38 pp. The National Terra Cotta Society, 19 West 44th St., New York.

Lighting Service for Banks and Insurance Companies.—Brochure illustrated by engravings and diagrams showing both direct and indirect lighting equipment suitable for use in banking and similar buildings. Contains much practical data. 8 x 11 in. 32 pp. I. P. Frink, Inc., 24th St. and 10th Ave., New York.

(Also "Lighting Service for Hospitals," "Picture Lighting" and "Lighting for Stores.")

Seamless Brass Pipe.—Bulletin No. 1, A. I. A., classification 29 B4. Illustrated bulletin with tables, price lists, weights, etc. Typical layouts of hot water systems of various kinds. 7¾ x 10¾ in. 24 pp. Rome Brass & Copper Co., 105 Dominick St., Rome, N. Y.

Anchor Post.—A monthly illustrated magazine covering subject of fencing for all conditions. Contains much material of interest to architects. 8 x 11 in. Anchor Post Iron Works 54 Church St., New York.

Electric Time Systems.—Loose-leaf portfolio containing information on this subject as applied to schools, banks, hospitals, libraries, hotels, public buildings, railway terminals and manufacturing plants. 8½ x 11 in. 60 pp. International Time Recording Co., 50 Broad St., New York.

Audible Calling Systems.—Bulletin covering this type of equipment for many different uses and under varying conditions. 8½ x 11 in. 16 pp. Holtzer-Cabot Electric Co., 125 Amory St., Boston, Mass.

(The following bulletins are also available on application. "Fire alarm Apparatus," "Inter-communicating Telephone Systems," "Annunciators and Signaling Apparatus," "Bells, Buzzers, Horns, Push Buttons and Relays" and "Magnetic Clock")

Painting Specifications.—Specifications covering new and old work, plaster, cement and concrete; iron and steel; repainting iron and steel; galvanized iron and steel; galvanized or zinc coated iron; copper and zinc flashings; tin roofs etc.; interior—complete specifications for all kinds of interior work. 14 pp. fully indexed. 8½ x 11 in., published by New Jersey Zinc Co., 160 Front St., New York.

Zinc Spouting.—Four booklets dealing completely with this subject. Detail drawings and other useful data. Illustrations of finished work. Tables of costs, charts, etc. Published by New Jersey Zinc Co., 160 Front St., New York.

Specification Data Sheet.—Contains information regarding Ventilouvre, a specially designed ventilator for use in doors and transom space. Full page drawing showing details. 8½ x 11 in. Ventilouvre Co., 103 Park Ave., New York.

The Right Angle.—Waterproofing issue. Covers subject of waterproofing concrete. 8½ x 11 in. 16 pp. General Waterproofing Co., Youngstown, Ohio.

Atlantic Terra Cotta.—No. 9 of this series illustrates several notable examples of terra cotta of the Fifteenth Century. Atlantic Terra Cotta, 350 Madison Ave., New York.

Handy Book on Painting.—A valuable compilation of painting data, covering formulas and methods of application for all classes of work. Vest pocket size. 3½ x 5½ in. 100 pp. National Lead Co., 111 Broadway, New York.

Pumping Bulletin.—Loose-leaf bulletin No. 45 containing specifications, drawings, tables of sizes and capacities of various types of centrifugal pumps for use in buildings. A valuable handbook on the subject. 8½ x 11 in. 60 pp. Chicago Pump Co., 2300 Wolfram St., Chicago, Ill.

A Series of Bulletins have been compiled by the Edison Lamp Works of the General Electric Company, giving complete Lighting Data relative to several types of Industrial Buildings, Automobile Garages, and Display Room Lighting, and Street Lighting. Size 6 x 9 in., and contains 32 pages each. May be obtained by addressing Edison Lamp Works, of General Electric Company, Harrison, N. Y.

Siphon Heating Specialties.—Technical handbook containing valuable tables, specification data, etc., for all types of steam and hot water heating. 3½ x 6½ in. 144 pp. The Fulton Co., Knoxville, Tenn.

Lupton Steel Windows.—Illustrated specifications brochure, No. 110. Windows for apartments, residences, schools, industrial plants, etc. Working drawings. 8½ x 11 in. 72 pp. David Lupton's Sons Co., Alleghany Ave. and Tulip St., Philadelphia, Pa.

Frame Construction Details.—Book containing 28 plates dealing with practical problems arising in the construction of frame buildings; to serve as a guide to those engaged in actual construction work, to prospective builders, to architects, and to students of architecture and building construction in the preparation of drawings. 8½ x 11½ in. Price \$1.00. Published by the National Lumber Manufacturers' Assn., 750 McCormick Bldg., Chicago, Ill.

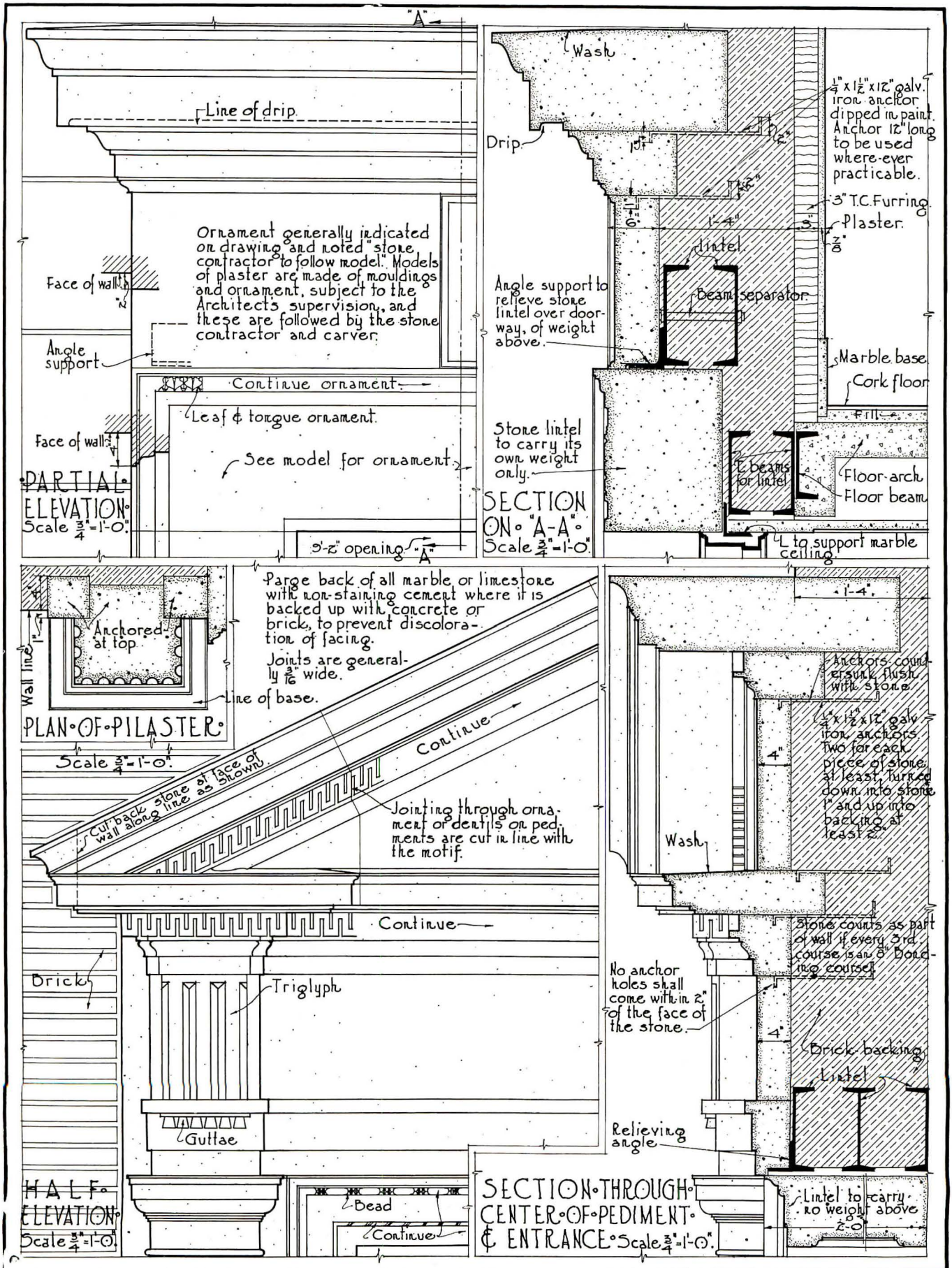
The Modern Method of Ash Disposal.—Illustrated booklet, 6 x 9 in. 8 pp. Published by the Sharp Rotary Ash Receiver Corp., Springfield, Mass.

Composition Flooring Specifications.—Covering Sanitary floor, base and wainscoting. Franklyn R. Mueller & Co., Waukegan, Ill.

Asbestone Composition Flooring.—Booklet containing illustrations and color suggestions for Asbestone Composition Flooring. 8½ x 11 in. 8 pp. Franklyn R. Mueller & Co., Waukegan, Ill.

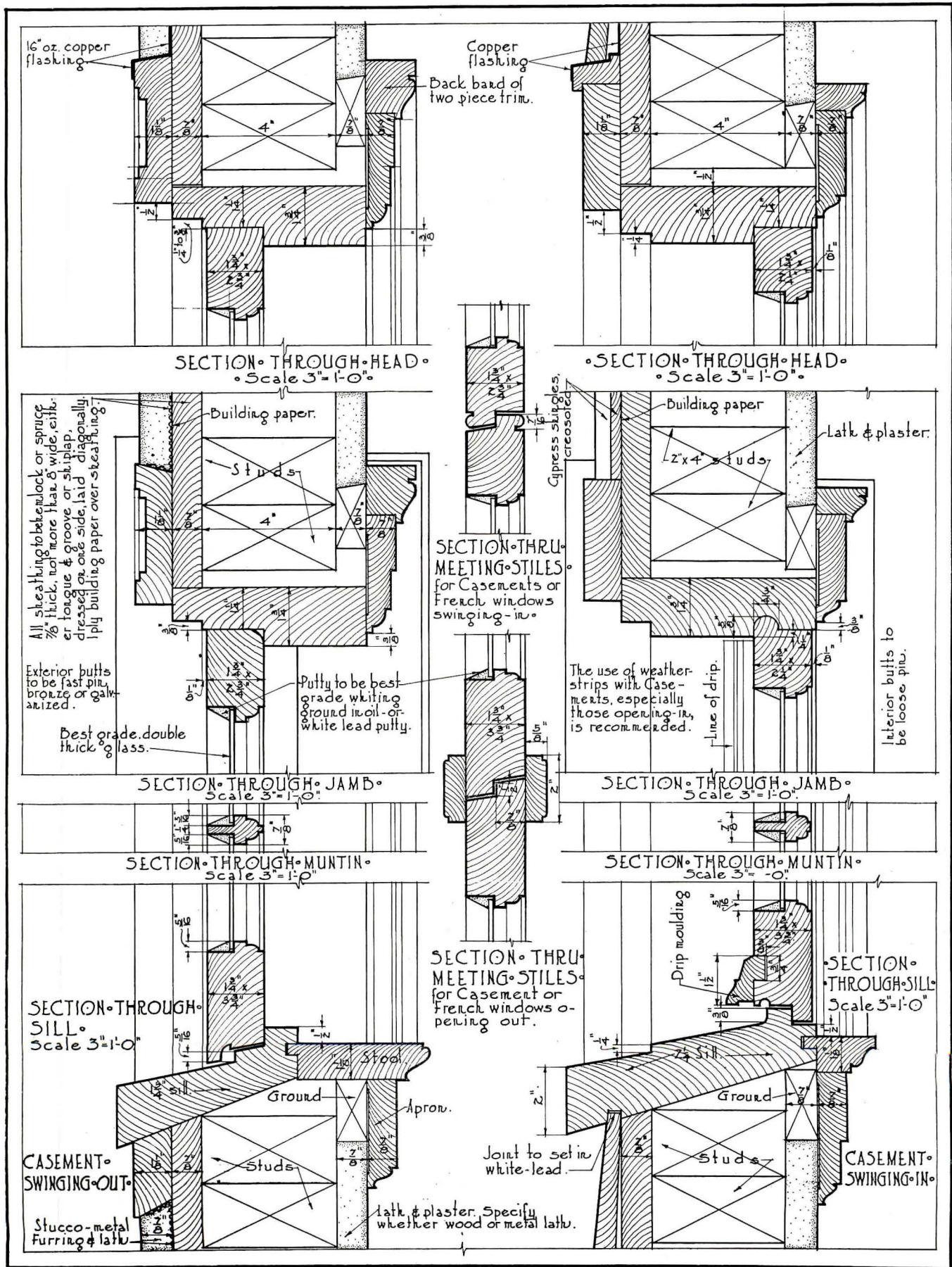
Asbestone Everlastic Magnesite Stucco.—Booklet containing illustrations and specifications. 4 x 9 in. 24 pp. Franklyn R. Mueller & Co., Waukegan, Ill.

PENCIL POINTS



Details of Stone Doorways, from Philip G. Knobloch's "Good Practice in Construction."

PENCIL POINTS



Details of Wooden Casement Windows in Frame.

WANTS



Advertisements in this column five cents a word, none less than \$1.00. Remittance must accompany order.

DRAFTSMEN—Wanted immediately several good, senior, high class draftsmen, experienced in Hospital and Church work. Reasonably permanent positions if satisfactory. Write stating age, experience, salary, and send specimens of work with first letter; general drawings, large scale and full size details. **RITCHER & EILER, 147 NORTH FIFTH STREET, READING, PA.**

WESTERN POSITIONS—Several openings for well qualified architectural draftsmen in Colorado and adjoining states. Write Business-Men's Clearing House, Denver, Colorado.

ARCHITECTURAL DRAFTSMAN wanted at once for permanent position in city of 40,000 population; experience on residences and small school buildings necessary. Apply to Geo. Barkman, Architect, Hamilton, Ohio.

WANTED: Architectural draftsman. Must have several years' experience and a college training. P. L. Small, 220 Union Bldg., Cleveland, Ohio.

WANTED: Good draughtsman by Barber & McMurry, Architects, Knoxville, Tenn. Must have ability to make accurate and complete working drawings from preliminary sketches. Beaux-Arts Atelier in connection with this office.

POSITION WANTED: Junior architectural draftsman, student of Columbia Extension, desires position with opportunity for advancement. Address Pencil Points, 19 E. 24th St. Box 63.

SENIOR DRAFTSMAN—Wanted immediately, thoroughly experienced senior draftsman, technically trained preferred, capable of acting as job captain in developing complete working drawings and details from sketches on high grade public and semi-public work. Write stating age, experience, salary and send specimens of work, general drawings and details. **HERBERT M. GREENE COMPANY, ARCHITECTS, DALLAS, TEXAS.**

A WELL ESTABLISHED FIRM in a Southern City of 200,000 population wishes to secure a competent draftsman who can design, make quick sketches and neat accurate working drawings for domestic work and who is willing to give his best efforts for the opportunity of becoming identified with the firm, after proving his worth. A young man of ability and of clean habits and morals will find this a good proposition. In answering, state age, experience and names of previous employers. Address Box 62, care of Pencil Points, 19 E. 24th St., New York, N. Y.

WANTED: Several architectural draughtsmen of experience and one superintendent of construction. State salary expected, experience, and other details. Guilbert & Betelle, 546 Broad St., Newark, N. J.

TRAVEL: Architectural student who intends to go to Europe for three months about May 15th, would like to arrange to travel with a group of individuals of similar intentions. Address Box 64, PENCIL POINTS PRESS, Inc., 19 East 24th St., New York.

THE AMERICAN ACADEMY IN ROME.

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

"The chief event of last month was the arrival of Messrs. Faulkner and Manship, who have come to work up the Thrasher-Ward Memorial. Mr. Faulkner and

Mr. Manship are both former Fellows of the Academy, and it is, therefore, peculiarly fitting that they should undertake to design a memorial for two other former Fellows, Thrasher and Ward, who died during the great war. Mr. Ward's uncle has generously agreed to pay for the actual cost of the memorial and the trustees are providing for the expenses of Messrs. Faulkner and Manship out of interest derived from the funds collected in memory of Mr. Frank D. Millet at the time of his tragic death on the Titanic. The central bay on the library side of the courtyard has already been prepared for the memorial and the artists have had a model of the bay made and are now studying fresco processes. They plan to make the upper portion a fresco depicting, in a symbolic way, a youthful Fellow of the American Academy embarked upon a voyage of discovery among the great artistic wonders of Europe; the lower portion contains the dedicatory inscription and a carved marble seat where future academicians may repose and ponder.

"Professor Showerman has just finished his interesting set of lectures upon 'Eternal Rome,' much to the regret of those who have been listening to him. At his last lecture there was an enthusiastic 'demonstration' in his favor, the like of which I have not seen during the eleven years I have been in Rome.

"Mr. Henry Osborn Taylor has delivered the first of his two lectures on 'The Formative Elements of the Mediaeval Mind.' The lecture was well attended and much appreciated.

"We have visited the famous Torlonia sculpture gallery in the Trastevere. Senator Lanciani kindly consented to lecture to us and, as he had aided in the excavation of many of the statues themselves, what he had to say contained many an interesting anecdote. As it is difficult to obtain permission to see this collection, we invited the students of the French Academy, Spanish Academy, and English School to go with us. Such visits as these, where the students from the various academies mingle, is about as far as we have progressed at present with the scheme of an association of national academies in Rome. Any year, however, may see a more closely knit association.

"The gifts of the month consisted of about one hundred and fifty books from the estate of Mrs. W. H. Hurlbert, a relative of Trustee George B. McClellan; Lire 500 from Mr. John Gray for the library; and one thousand dollars from Miss Isabelle Ballantine for the library.

"The head of the Architectural Department of the Massachusetts Institute of Technology has asked me to obtain for his department full-size plaster casts of the column and pilaster capitals of the Pantheon, Temple of Mars Vengeur, Temple of Castor and Pollux, and the Portico of Octavius. These casts were made years ago for the French Academy and the director of that institution has kindly agreed to let us have copies made. It is a great opportunity. We ought to have a set at our academy but economy is the watchword now.

"Roumania is to have an academy in Rome. The new director called a few days ago. They have only archaeologists at present but as soon as their funds are sufficient, artists are to be added.

"We have had a visit from Mrs. George Montgomery Tuttle, President of the American School of Music at Fontainebleau. It is planned to add painters, sculptors, and architects to the school.

"We had a most successful Thanksgiving dinner, thanks to the enthusiasm of those students who were selected to manage it. Sixty-six sat down at table. Rev. Theodore Sedgwick, Rector of Calvary Church of New York, made an excellent Thanksgiving speech. The checks for the Collaborative Prize winners of last year arrived just in time to be handed over at this meal to three lucky competitors. It was really a remarkable dinner for thirty-three cents a plate. After dinner, dancing, pool and bridge were in order.

"The sad death of former Fellow Harry I. Stickroth, Painter, which took place in Chicago on October 17th, is a great loss to his profession and to his friends. He was a young painter of the greatest promise and it is indeed hard to realize that the hand of death has arrested his steps."