



WANTED

A LETTER we have received from one of the foremost architects in this country is printed below because it not only describes a type of man that is wanted in his office and in other offices but lays stress on certain qualifications that are of the greatest importance in men wanted to fill other places as well. Here is the letter:

"Your letter of April 11, asking me to dictate an informal letter giving suggestions for the improvement of drafting-room practice has remained unanswered until today it has again come to my attention. I shall not attempt to answer it, but take the occasion to ask you a question.

"Do you know a competent, practical architectural draftsman whom I can get to come into my drafting room and act as a sort of general censor of practical working details, a man whose mental attitude is such that he can keep good feeling among the draftsmen he comes in contact with and at the same time check over their work and aid in systematizing it, prevent errors of a practical kind and instruct them, where necessary, in standard, economical, and practical ways of doing the job? He does not have to be an engineer or an artist. He simply has to be a common-sense, level-headed, experienced, practical draftsman who has a thorough-going knowledge of good building practice. If you can tell me of such a man, I shall be glad to take him on, for he would be a God-send to this office."

Rather a large order for us, for men of that calibre are not looking for jobs—they are usually well established in some architect's office and have no reason to make a change. As a matter of fact, there are very few men who answer this description. This should not be so. The requirements are perfectly reasonable.

The demand for a man whose mental attitude is such that he can criticise and check over the work of his associates and instruct them in practical methods while keeping good feeling among them is probably one of the most difficult to meet. Along the same line is the demand that he have common-sense and that he be level headed. With characteristic clearness of vision this architect has seen the element of personality in its true proportions—and it looms up very large indeed in almost every position. Too little recognition has been given to this side. Knowledge, industry, accuracy and certain other qualifications are generally recognized as important—and personality is overlooked or given slight value. The lack of the right mental attitude towards the world, his work, and his associates blocks the way to advancement and success for many

a man who never dreams of the cause of his failure to get on.

Note, please, the requirement that this man shall be an experienced, practical draftsman and let us remember that years spent in any line of work bring experience only to the man who thinks and learns as he works.

The demand in this letter for a draftsman who, in addition to the other qualifications, has a "thorough-going knowledge of good building practice," draws attention to another weak spot. How many men are there who could qualify on this point? Still, architecture comprehends the practice of building and such knowledge might well be supposed to be among the fundamentals.

There is much in this letter to stimulate thought, we have barely touched on it here. We hope that you will let us know what you think about it. Write to us and if we believe that your letter contains something helpful to our other readers, we will print it. Let us hear from you, please.

ARCHITECTURAL DOCUMENTS.

WE NOW have in preparation a reprint of "Architecture Toscane," first printed in 1815. This reprint, which will be ready some time this month, will make available a collection of drawings of the greatest practical value as a source of design inspiration in the architectural drafting room. Copies of the old French editions are practically unobtainable and prohibitive in price. This reprint will be within the means of all to purchase.

In "Architecture Toscane," A. Grandjean de Montigny and A. Famin, Architects, and Fellows of the French Academy in Rome, presented a very beautiful and useful record of many of the finest old works of architecture, in a collection of one hundred ten plates.

This reprint of "Architecture Toscane" is the first of a series of books which will be published under the general title "The Library of Architectural Documents." Other titles will be announced shortly.

This new series of books will round out the plan of service which the publishers of PENCIL POINTS are carrying forward. First the magazine, with articles and pictures and news; second, "The Pencil Points Library," with its books on various interests that center in the drafting room; and third, the "Library of Architectural Documents," supplying the historic background.

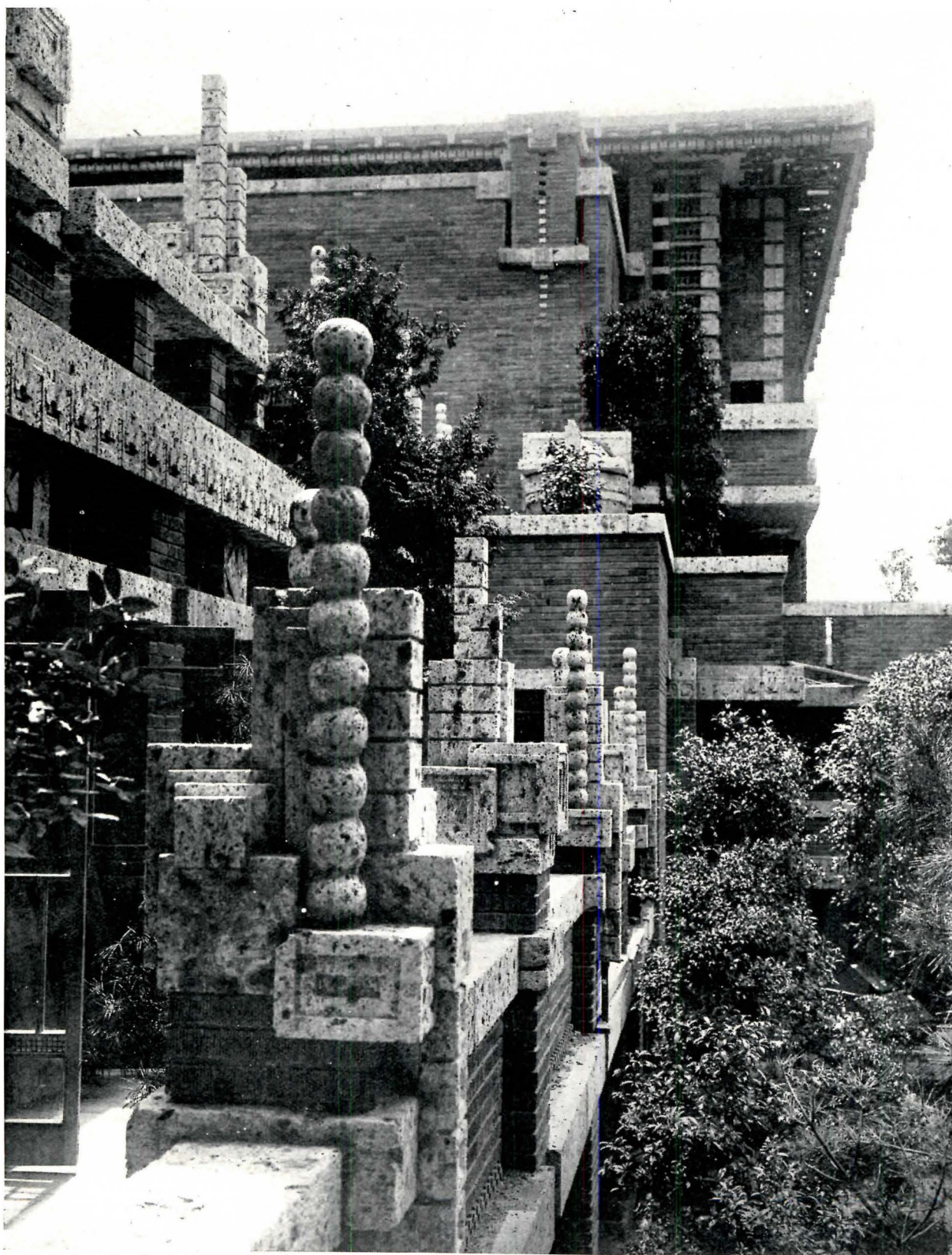


Figure 1. Detail of The Imperial Hotel, Tokyo, Japan. Frank Lloyd Wright, Architect. The Architectural Character of this Hotel is One of its Greatest Assets as a Tourist Hotel, in its Particular Location.

HOTEL ARCHITECTURE FROM A HOTEL MAN'S VIEWPOINT

BY ROY CARRUTHERS

This is the first installment of a serial article in which Mr. Carruthers, who is Managing Director of the Waford-Astoria Hotel, will tell what are the practical requirements in hotel design from the hotel man's standpoint. Mr. Carruthers will discuss design character, planning and equipment.—Ed.

THE first step in the planning of a new hotel should consist in getting a clear idea of the type of hotel it is to be. This will be determined by the character of the place in which it is to be built and the kind of patrons it is to serve. A commercial hotel is a very different problem from a residential hotel, and a tourist hotel is still different in its requirements.

The commercial hotel has become standardized, the type is well known and its design character has been established, it is a simple, dignified, light and airy building, arranged for the convenience and comfort of its guests, but usually with little individuality of character.

The residential hotel may well have an atmosphere of its own to a greater degree than the commercial hotel. It is, however, the tourist hotel that requires the most pronounced individuality.

The tourist hotel that is sufficiently different and interesting to become talked about, advertises itself, it attracts tourists. Other things being equal, it has a much greater chance of success than the hotel that is commonplace. Striking and appropriate design character is a very valuable asset to a tourist hotel. Tourists travel for the sake of change of scene and to enjoy the atmosphere of unfamiliar places, they do not want to see a hotel in Florida or California or Arizona that looks like the hotels they are familiar with in New York.

One of the most talked of hotels is The Mission Inn at Riverside, California. Its architecture was inspired by the old California missions and is interesting and appropriate. It has the right atmosphere. It fits in with the tourist's attitude of mind and increases his enjoyment of the trip. People who find the atmosphere of a hotel to their liking not only advertise the hotel but they are much more contented and easier to please.

A striking example of suitability and interesting character in tourist hotel design is the Imperial

Hotel, opened a few months ago in Tokyo, Japan. I spent some time there recently and was impressed with the wisdom of the president of the operating company, Honorable K. Okura, and of the managing director, Mr. Yamaguchi, in appreciating the

value of the unusual architectural design made and carried out so successfully by Mr. Frank Lloyd Wright. Speaking now only of the design character and deferring the discussion of the very interesting plan of this hotel, I may say that it is a work of genius. It provides the atmosphere required. It neither reminds the tourist of the hotels with which he is familiar at home nor competes



Figure 2. View of The Imperial Hotel, Tokyo, Japan.
Frank Lloyd Wright, Architect.

with the native Japanese architecture. Though there is no detail that is Japanese, this building does express very definitely and effectively the spirit of Japan, for in some mysterious way the architect has wrought into this structure an epitome of the traditions and the progressiveness of the country. Figure No. 1 is a photographic view showing characteristic detail of this building. The exterior of the Imperial Hotel is of buff bricks and the stone work is of a greenish yellow lava marked with brown spots. The copper roofs are turquoise color. Plants and flowering shrubs, carefully tended, add their notes of color to the scheme. The interior is equally out-of-the-ordinary and attractive. The brick and lava showing in the interior establish unity with the outside. Where the walls are plastered they have a coating upon which ground pearl shell has been dashed. The wood throughout is Hokkaido Oak, waxed.

This hotel occupies an area three hundred by five hundred feet, and is three stories in height for the most part, with portions rising more than twice this height. This hotel is designed not only to accommodate tourist travel but to provide a centre of social life for residents of Tokyo. It has a cabaret, a theatre seating one thousand, a banquet hall and



*Figure 3. Hotel Ponce De Leon, St. Augustine, Florida. Carrère & Hastings, Architects.
From a Rendering in Pen-and-Ink by Otto H. Bacher.*

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restaurants to accommodate this feature of its service.

Probably the first great resort hotel in America to be designed in the spirit of the architectural traditions of the locality in which it was built is the Ponce de Leon, at St. Augustine, Florida, of which Carrère & Hastings were the architects. See Figure No. 2, an excellent pen-and-ink drawing of this hotel. It is interesting to bring together in these pages this pioneer among great resort hotels and the newest of these hotels in far away Japan. That the architects of the Ponce de Leon perceived the importance of creating a hotel in keeping with the atmosphere of its location nearly forty years ago is an evidence of remarkable clearness of vision.

The hotel that serves as a centre for social life in addition to its other functions requires most thoughtful planning and painstaking direction. Two of the hotels the writer has operated may be regarded as examples of this type, namely, the Palace Hotel in San Francisco, and the Waldorf-Astoria, New York. The Palace Hotel was an institution rather than a private enterprise, so far as the attitude of the public went, and the same may be said of the Waldorf-Astoria. The Waldorf-Astoria has been a great leader among hotels. It was the first hotel to which great social events of the city were taken

instead of being held in the homes of those giving them. It was there the first large social event of the kind, the Bradley-Martin Ball, was held. Its plan and policy are the results of the far-sighted genius of George C. Boldt. The Waldorf-Astoria was the largest in its day and, at the present time, I feel safe in saying that no hotel in the world has the facilities for handling the public that the Waldorf-Astoria has.

A third hotel with the operation of which the writer has been identified, the Hotel Pennsylvania, stands out as the greatest commercial hotel in the world. It has an average daily arrival and departure larger than the individual capacity of 99 per cent. of the hotels throughout the world. Features of the plan and equipment of commercial hotels will be discussed in a later issue.

The plans of the Olympic Hotel, Seattle, Washington, the design for which has been drawn by George B. Post & Sons, will be shown and discussed. The Olympic is a hotel of the standardized type, into which have been introduced the latest ideas. It is a hotel of moderate size in a city that may be regarded as typical of American cities. It has been chosen as representing a widely interesting type of hotel—the kind of hotel the architect is

(Continued on page 55)



Figure 4. *The Olympic, to Be Built at Seattle, Washington. George B. Post & Sons, Architects.*

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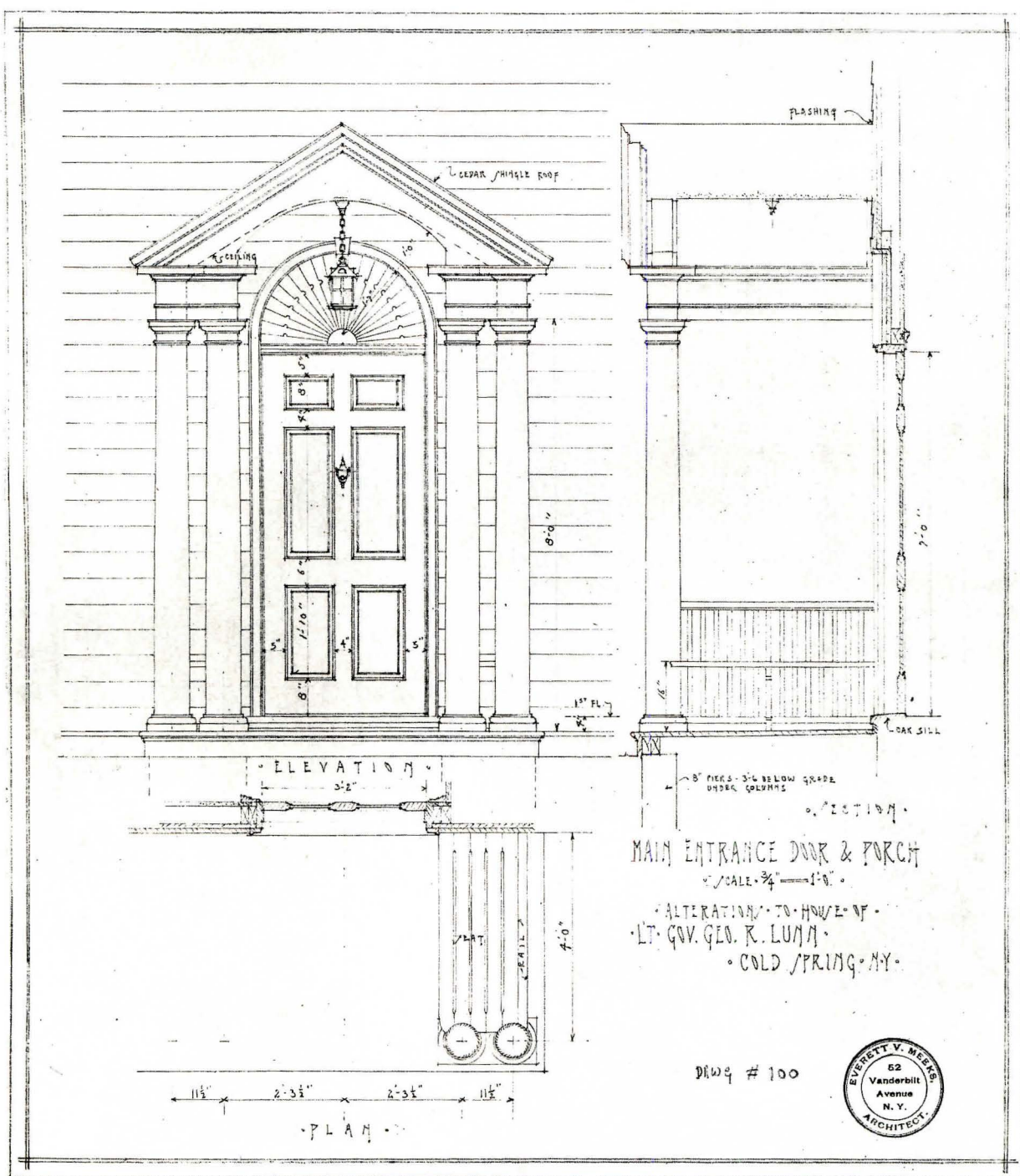


Figure 1. Main Entrance Door and Porch, Alteration to House of Lieutenant Governor George R. Lunn, Cold Spring, N. Y. Everett V. Meeks, Architect.

THE MAKING OF WORKING DRAWINGS

PART II, SCALE DETAILS

BY JOHN C. BREIBY

This is the second of a series of articles in which Mr. Breiby, of the staff of Carrere & Hastings, is giving much practical information on drafting room work. This first article covered the preparation of general drawings, the one-quarter or one-eighth inch scale drawings. This article covers the making of three-quarter and other scale details. Architectural models, shop drawings, etc., will be treated and at the conclusion Mr. Breiby will take up the preparation of sketches, etc., particularly sketches of interest to the drafting room.—Ed.

IN THE last article on the making of working drawings, the general $\frac{1}{4}$ -in. and $\frac{1}{8}$ -in. architectural drawings were considered in a small measure. The general drawings, framing and mechanical drawings, larger scale drawings, full-size details, models, shop drawings, specifications and superintendence are all so intimately related and have such important parts in the ultimate result desired, a complete building, that it is impossible to consider any part of working drawings, without giving thought to all.

The composer of a symphony carefully works out each melody theme and motif, its development and orchestration, and takes pride in each part, but it is not until the entire work is finished that full satisfaction is realized. The composer will always consider that no matter how beautiful any detailed part may be, it must be subordinate to the effect of the whole.

So it is with the making of drawings. Pride should be taken in each drawing as it has its particular purpose to serve in the completed composition. Always visualize the completed work, not on paper, but as actually erected in materials which nature has provided, moulded into shape by man. However small a part is played by the individual draftsman, his work will stand as a testimony to skill or lack of it.

In the editorial on "Draftsmanship," which was published in the April number of PENCIL POINTS, parts are well worth committing to memory. Try to feel the work and do it for the sake of a good result, not merely because it was so ordered.

Scale detail drawings are developments in part or in whole from the general architectural $\frac{1}{8}$ -in. or $\frac{1}{4}$ -in. scale drawings, or they may be prepared to show some detailed information which would be impossible to work out in small scale.

Scale drawing is perhaps the most interesting work the draftsman is called upon to perform in the routine of his work, bringing out the very best in the skill of drafting, knowledge of materials, the use thereof, and of construction.

These drawings are generally prepared at a scale of from $\frac{1}{2}$ -in. to 3-in. to the foot, in fact, any convenient scale may be selected, providing all necessary information for which the drawing is made can be shown. Most offices use some particular scale as being standard. Perhaps the best scale to use is that of $\frac{3}{4}$ -in. to the foot, as it enables the contractors in the execution of the building to use the ordinary rule, for 2-in. indicated on

the scale detail would equal exactly $\frac{1}{8}$ -in. on the builder's rule.

In the general estimating sets of working drawings some scale details are very necessary as such drawings enable the contractor to establish prices more closely on ornamental work such as carving of the stone, ornamental iron work, and other special features. Such drawings then become a part of the contract set of general drawings.

For the purpose of this article it may be well to classify scale detail drawings into two parts. First those relating to architectural design and ornamentation, and secondly drawings which cover purely practical points.

Design detail drawings are not intended to more fully work out the design of a building, for if all mouldings, ornament, values of materials and color values could be possibly drawn small enough on the $\frac{1}{4}$ -in. or $\frac{1}{8}$ -in. drawings, perhaps better proportions could be maintained for the completed work. As this is not possible, the design scale drawings will serve to a great extent as the magnifying glass and therefore must retain all of the character of the design, values of mouldings, proportions, etc. By this it must not be taken that no thought to design is necessary or that it is merely a copy at a larger scale, for as the magnifying glass will show up flaws, so will the working up of larger details bring out conditions necessary for re-study and the particular detail may be simplified or elaborated or even proportions changed in order to bring its proper relation to the complete design. If a complete change of design is desired it is best to step back and re-study at a smaller scale and incorporate such desired change with the ensemble, where it can best be judged as a part of the complete design. Such work really is a part of designing and these suggestions may be over-stepping the bounds of how to prepare working drawings, but as the first step in design given to the younger draftsman in an office is often to study and prepare some detail drawing, the suggestions may not be amiss.

Practical conditions, and how to show them clearly, always become a part of preparing of design details. Figures Nos. 1, 2, 3, 5 and 6 clearly indicate this and the drawings are all details of design. From these drawings the contractor can accurately measure and will know almost within an inch how much material has to be gotten out, to perform the work as called for. The mill man, the modeler, and stone carver, in short all artisans and material men, will know exactly what is wanted. The above

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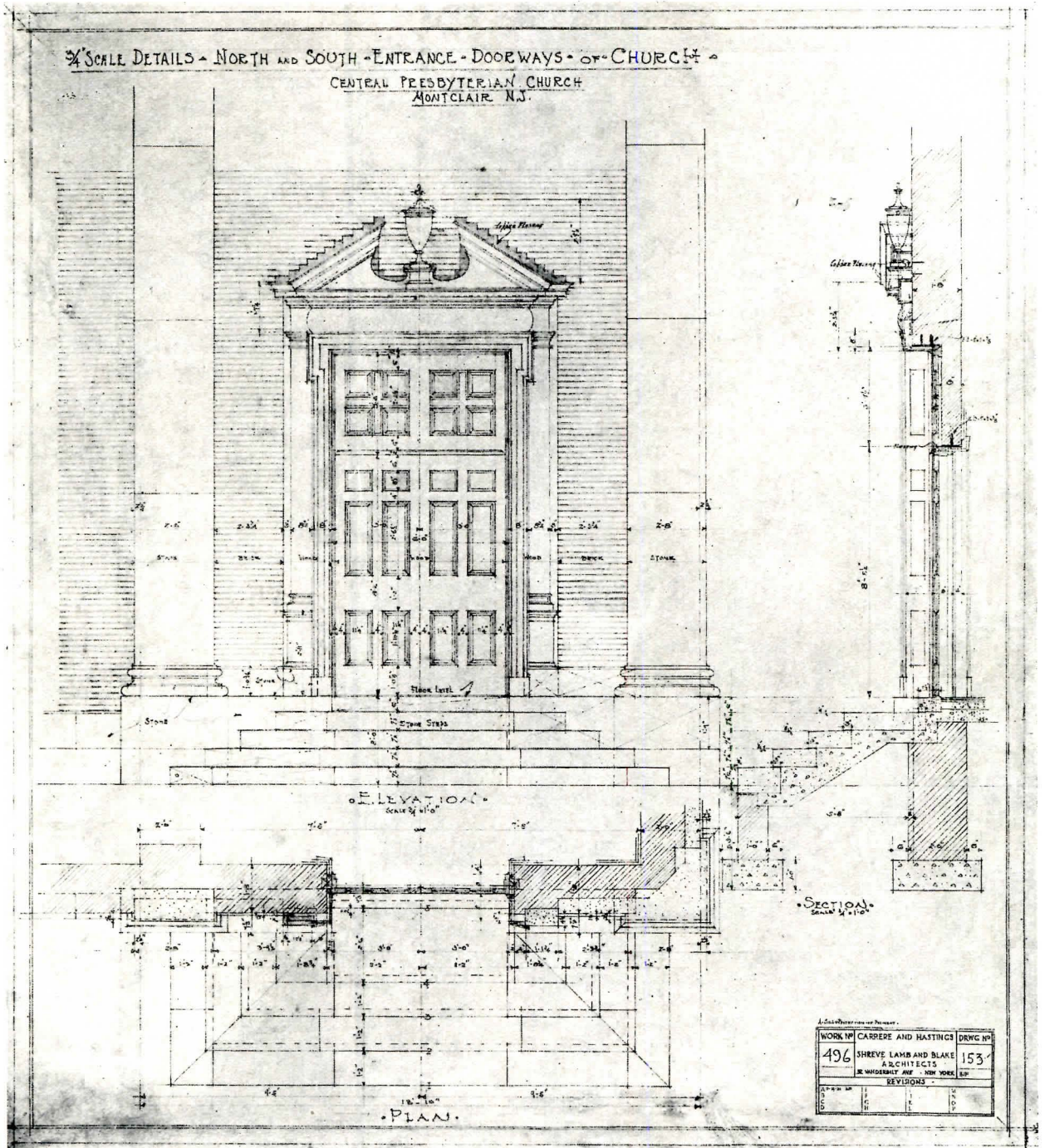


Figure 2. North and South Entrance Doorways of Central Presbyterian Church, Montclair, N. J.
Carrère & Hastings and Shreve, Lamb & Blake, Architects.

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mentioned drawings were all necessary with the estimating set and contracts based thereon.

To prepare accurate detail drawings simplifies the making of full-size details which are to follow and also guides the checking of shop drawings. At times shop drawings can be almost completely prepared from scale details and the checking thereof may only mean the correction of profiles, etc. This subject will be taken up in another article.

The foregoing chapters have mainly explained scale details and their relation to design.

The drawing indicated by Figure No. 4 is a $\frac{3}{4}$ -in. scale detail of an absolutely practical nature. Such details are very necessary where particular parts of the building require special attention and where it would be impossible to indicate detail completely enough on small scale drawings, and are very often prepared to interpret the meaning and functions of materials as called for in the specifications, for the execution of the work. To mention all particular parts of the work which would require explanatory scale details is too great a subject to mention under the scope of this article.

Remember that all large scale details must show practical work in connection therewith, and do not allow the effort to make a pretty drawing, showing ornament, etc., cause neglect of the necessary information.

Consider the general working drawings well, study carefully what portions are necessary to detail, especially to form part of the estimating set. It is assumed that all practical and required conditions have been checked from the general working drawings, framing and mechanical drawings, specifications, etc. Check again practical points which may affect the particular detail to be made. Do not take it for granted that no mistake has been made.

It is of utmost importance that the designer be consulted and his criticisms and suggestions carefully followed.

Read the specifications thoroughly, more especially regarding materials and methods of construction as called for therein, concerning the particular drawing which is to be made.

Think carefully what portions are necessary to be detailed—avoid any repetition—for instance if window or door details are to be prepared and many are of the same design, draw one door of a particular type and state by a note on the drawing the number required or give the serial numbers, if door and window openings are numbered on the general set of working drawings. Many offices follow the practice of numbering the door and window openings on the small scale general drawings.

Detail drawings should be made more or less in sequence as required by the construction of the building, for instance, first the details required for cellar or basement work, then the exterior windows or doors, as the door and window frames are usually set when the walls are built; then details of chimneys and rough fireplace openings, practical parts of stair construction and of many other practical points.

Ornamental or practical details required for the exterior details must be started as soon as the work

is under contract. The scale drawings which are required for estimating and contract drawings must of course be worked up with the general $\frac{1}{8}$ -in. or $\frac{1}{4}$ -in. scale general drawings. See that all detail drawings are made and prints issued to the contractors before it becomes necessary for them to request them.

Follow up with scale interior drawings as rapidly as possible. For especially designed interior finish drawings it is very necessary at times to take actual measurements of the executed work and this will also oftentimes be necessary for practical drawings. As an example, if a skylight is to be detailed, the actual opening provided therefor at the building must be measured, and so on for other details necessary to be provided after the work governing same has been erected.

For most scale drawings, full-size details must follow as rapidly as possible, the making of which will be considered as another subject.

Keep well ahead of the actual construction with necessary drawings.

Follow the same general principles as suggested in the article on general drawings previously issued, in the laying out of scale detail drawings whether they are made for design or practical purposes, establish main axis line, height lines, etc.

It may be well to state that all of the drawings illustrated with this article are drawn to a scale of $\frac{3}{4}$ -in. to the foot with the exception of drawing shown by Figure No. 3, which was prepared according to the metric system.

Figure No. 1 shows the detail of a small entrance doorway. Notice that the building up of the door itself is shown, transom over door indicated, height of columns figured, etc. The actual construction of the pediment is not shown. It is better in some cases to allow the contractor to execute the actual practical construction according to his builders' knowledge.

Specially studied detail of parts of small buildings such as indicated on this drawing, always makes for the best results and gives some character to the building. The main cornice, window heads, lattice work, window frames, wooden shutters, etc., can all be detailed likewise in a simple way, at a small cost and this is well worth the labor spent therefor. The result will be a "home" and not merely a place to live in.

Figure No. 2 shows the detail of an entrance door to a church. Carefully study how the practical points are considered on the plan and sections: lintel angles supporting brick work indicated; detail of steps and foundations are shown; backing of stone work; the door itself is completely figured tying it up in relation to stone pilasters. It is quite safe to say that all information necessary for the making of later full-size details and execution of the work is simplified by a drawing of this character.

Figure No. 3, shows a detail of a part of the main elevation of a large residence erected in Havana. This drawing was drawn to the metric scale of five centimeters equals one meter. This is a very interesting drawing for practical use as well as for design: character of iron work is shown; types of

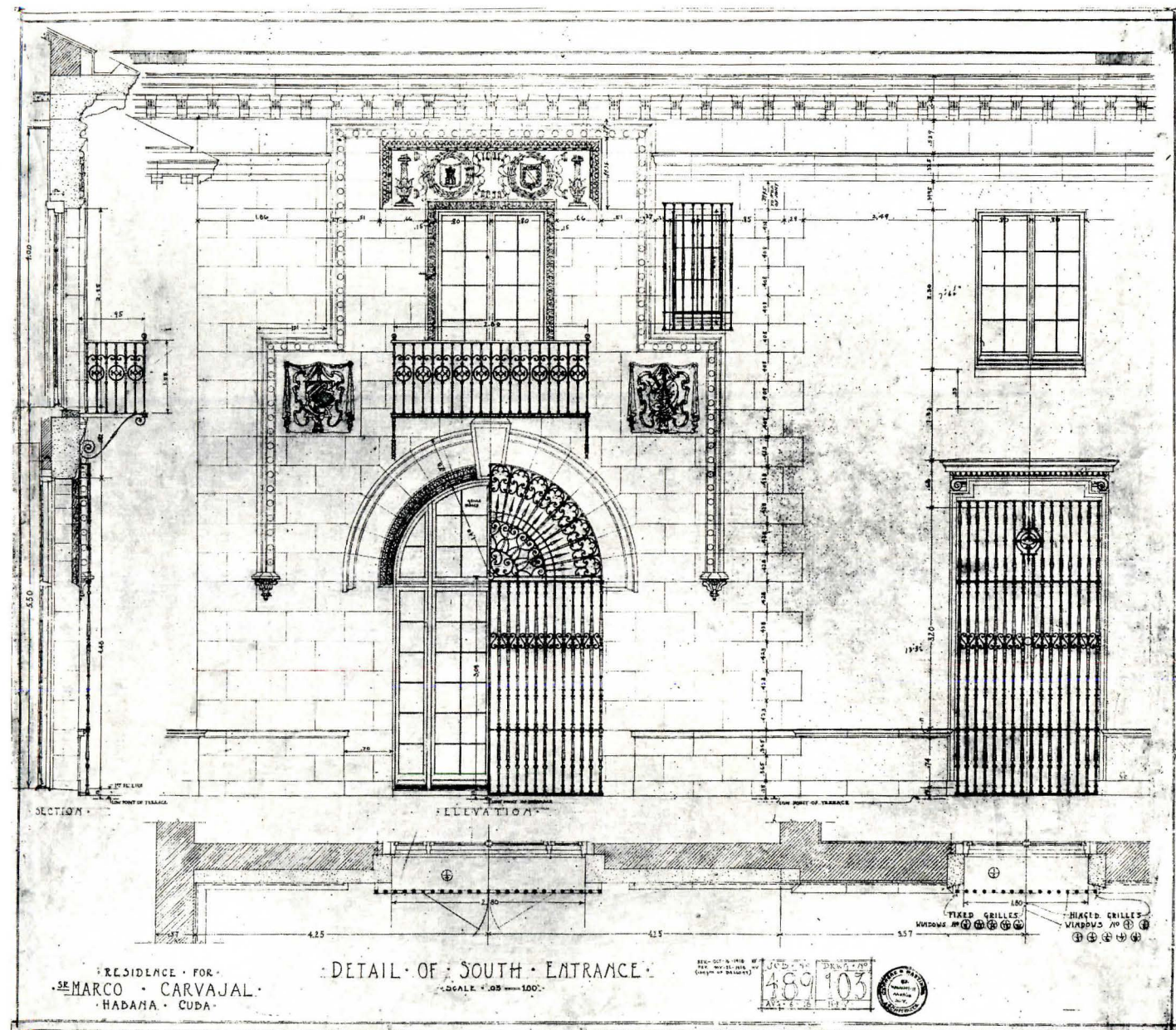


Figure 3. Detail of South Entrance, Residence for Sr. Marco Carvajal, Havana, Cuba. Carrère & Hastings, Architects.

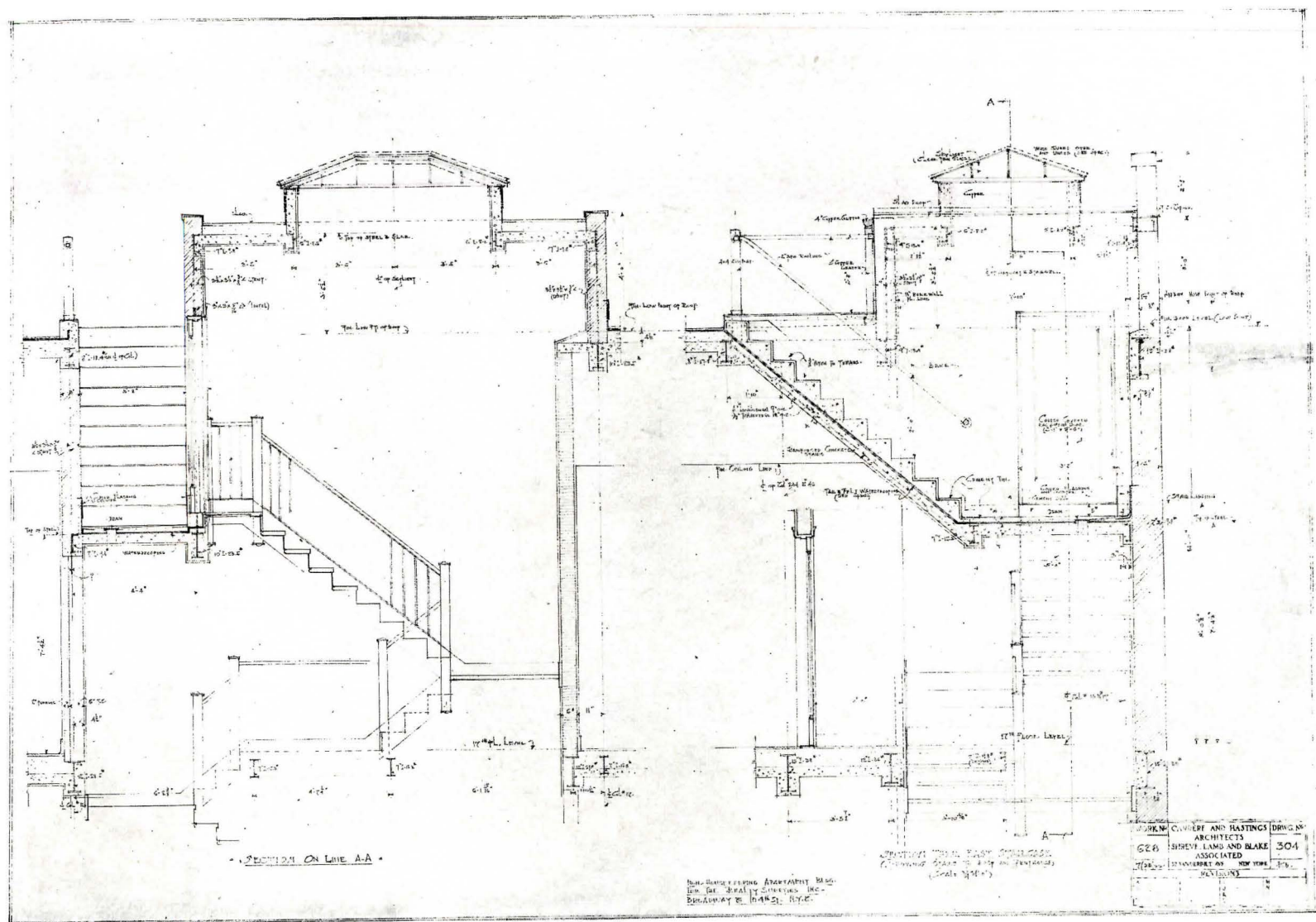


Figure 4. Non-Housekeeping Apartment Building for the Realty Sureties, Inc. Carrère & Hastings, Architects. Shreve, Lamb & Blake, Associated.

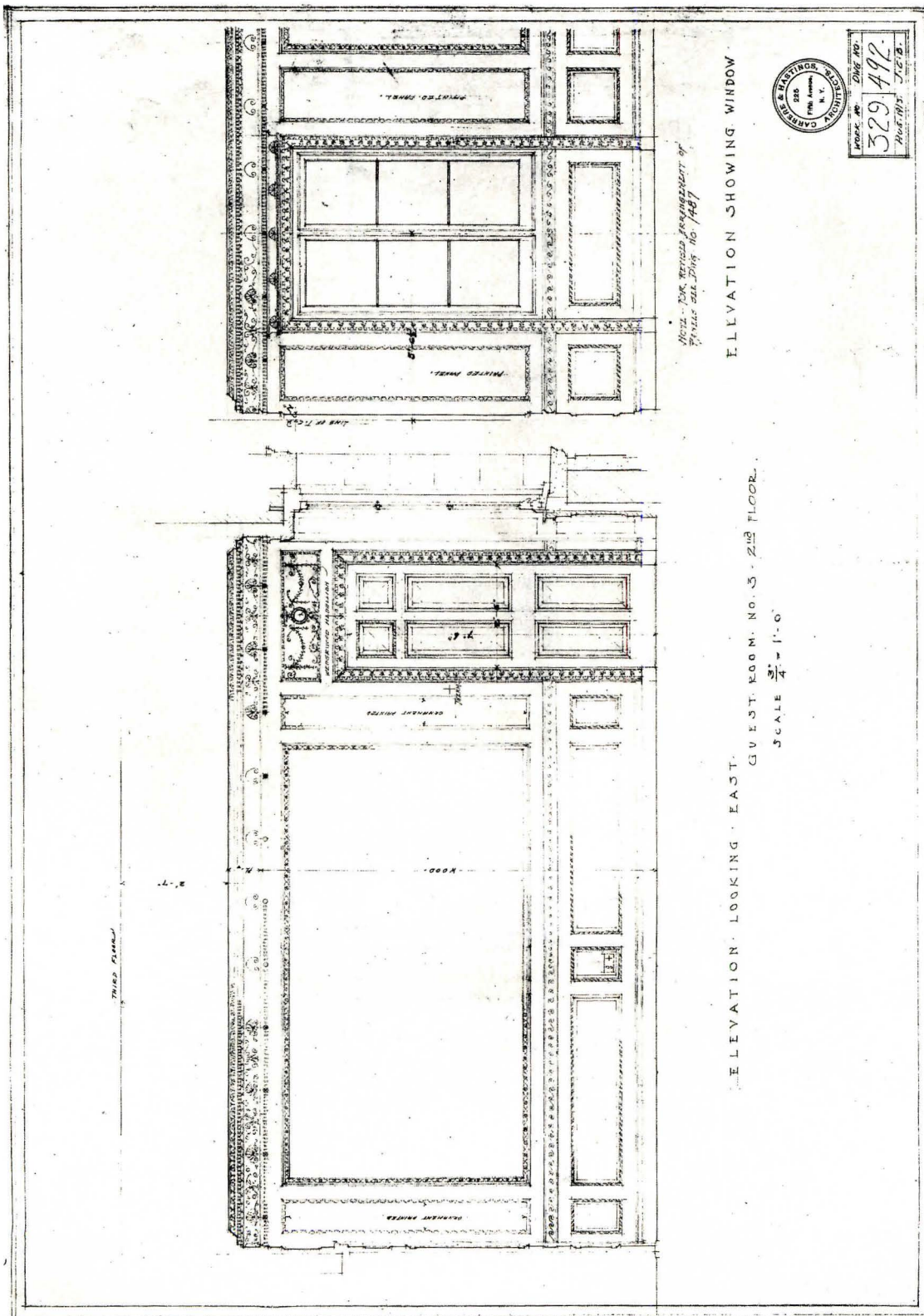


Figure 5. Interior Details. Carrère & Hastings, Architects.

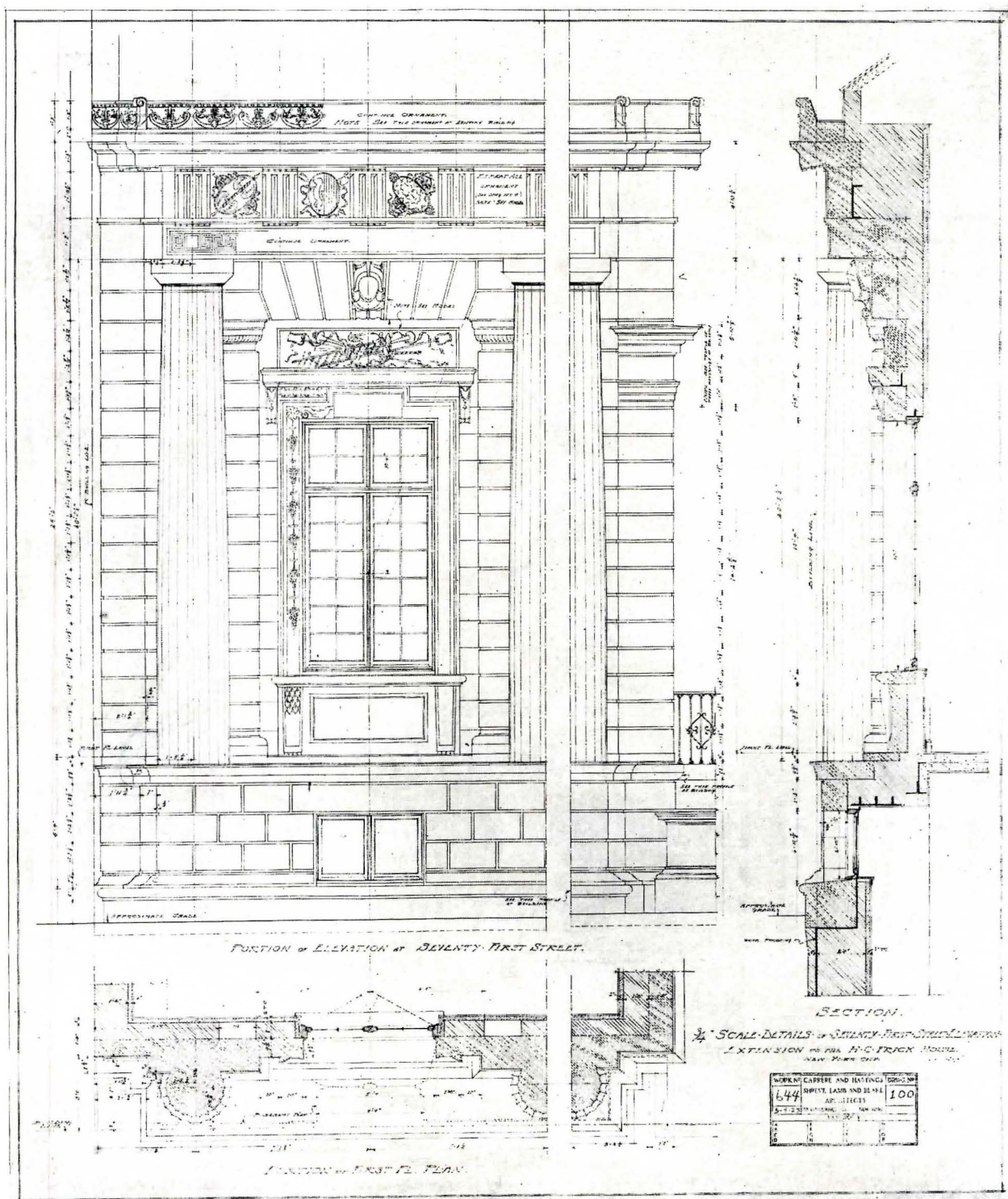


Figure 6. Extension to the H. C. Frick House, New York City. Seventy-first Street Elevation. Carrère & Hastings and Shreve, Lamb & Blake, Architects.

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windows indicated; ornament carefully worked out, section through the window over the door grille clearly defined. Notice on elevation how half of the grille in front of casement is shown and half of the casement is shown in the same opening. It is also noted which grilles are fixed and which are to open by noting the numerals of openings. Stone joints are figured, etc., all possible information for this part of the work is indicated; no questions could be raised from indications on this drawing how to estimate, detail, or execute the work as shown.

Figure No. 4 shows a working drawing of a stairway leading to the roof. Reinforcement slab under concrete steps is shown, waterproofing indicated, curbing and steel work for skylight noted, etc. Drawings of this kind are not necessary for estimating sets, for usually sufficient information to cover this work is indicated on the general drawings and materials necessary therefor called for in the specifications. Drawings of this character are very necessary, covering such points as stair work, windows and doors, and many other conditions required to be shown, for such drawings, as mentioned before, connect the specifications with the drawings.

Figure No. 5 is a detail of the interior of a room. The ornamentation is clearly indicated. In order to intelligently draw and figure a drawing of this kind, and as the actual rough work of the building is probably completed or finished enough for the contractor to obtain measurements at the job, a good rule to follow, is to note on all drawings for work, where rough construction has been started or completed

"All measurements to be verified at the building." For interior scale details it is not necessary to prepare all drawings at a large scale. Select the most important elevation, for example the wall showing the fireplace, draw this to large scale showing clearly indications of mouldings, cornices, detail of mantel, ornament, etc. The remaining drawings for the same room can be indicated at a smaller scale, say $\frac{1}{4}$ -in. to the foot, and wall panels, cornice, etc., noted. "All details are to be as shown on drawing number or elevation so-and-so." This method can also be followed for all details if repetition is necessary.

Figure No. 6 shows a detail of a building of a monumental character. Sectional details and part plans are shown and materials clearly noted. Stone work is figured from top of stone to top of stone, and to center to center horizontally. This drawing is a splendid example of an exterior stone scale detail. Shop drawings can be readily prepared therefrom. All dimensions have been carefully given. Ornament indicated and drawn well, but not carried out for needless repetition; notes are shown regarding the modeling of ornament; waterproofing indicated, etc.

Suggestions of economical ways of preparing drawings will be taken up later. Some of the examples illustrated with this article perhaps seem a little too elaborate for economical drafting. It must

be remembered, however, that many draftsmen enjoy making complete drawings and surely there should be joy in so doing; but as the drawings are merely a means to a definite result, unfortunately, dollars and cents must be taken into consideration. A good man will always judge what is necessary to draw fully, and where indication or part drawings only are required.

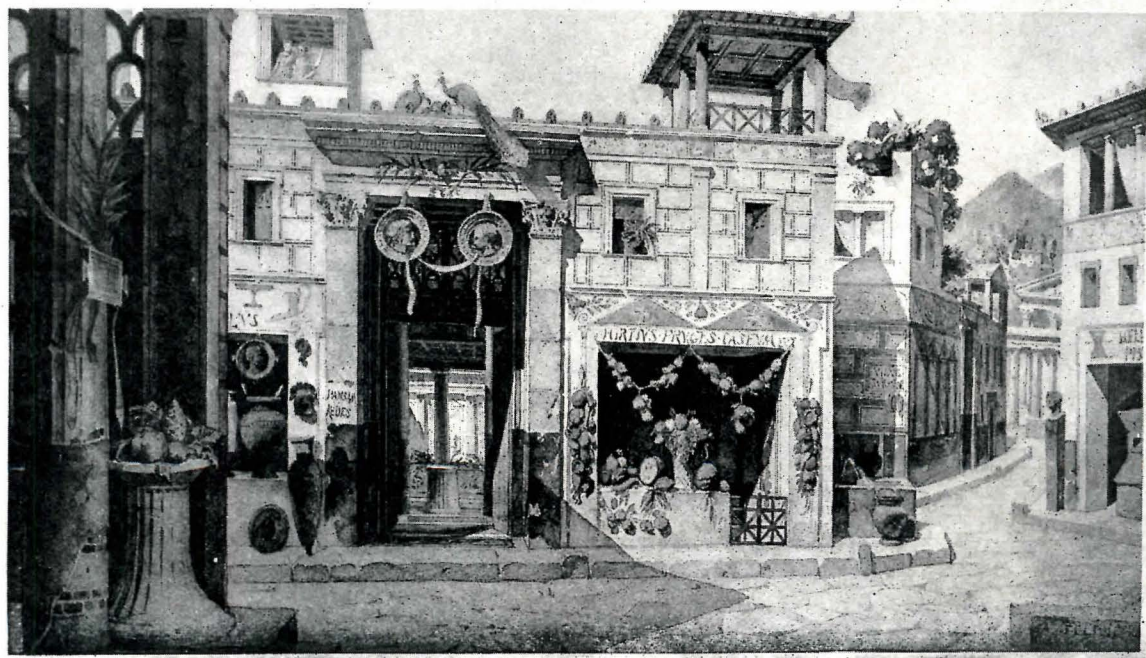
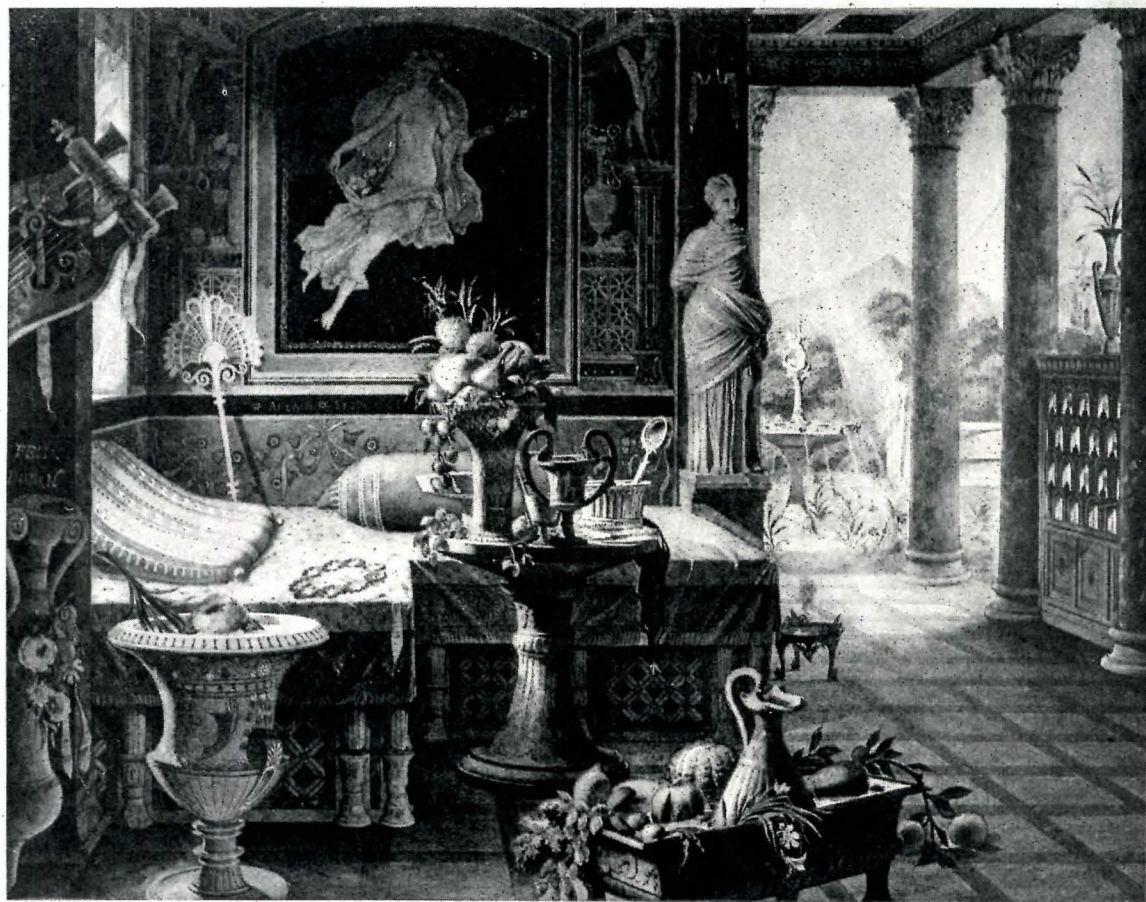
TRANSFER OF REGISTRATION

THE Committee on Public Information of the New York Chapter of the American Institute of Architects, has succeeded in establishing a precedent for the transfer of registration from New York State to other states through the National Council of Architectural Registration Boards. This is especially interesting to architects previously registered in New York without examination. A special examination known as a "Senior Examination" has been approved by the New York Registration Board and some of the difficulties previously encountered in attempting transfer to such states as Illinois, have been overcome.

New York architects registered by exemption who have, for more than ten years as principal or active head of an office, been actively engaged in the profession of architecture should apply to the New York State Board of Examiners for what is known as the "Senior Examination" of the National Council of Architectural Registration Boards. Architects of less than ten years' practice may apply directly to the National Council of Architectural Registration Boards for the "Junior Examination" if the applicant was not registered by exemption in New York and the regular New York examination is not accepted by the State to which transfer is desired. Both of these classes must also apply directly to the Secretary of the National Council of Architectural Registration Boards, 64 East Van Buren Street, Chicago, Illinois, for the necessary blanks and forms. They should designate the State to which transfer is desired, also the date and number of their home registration, whether by examination or exemption, and the number of years of practice as above defined. The Board then investigates the character and credentials of applicants, conducts any necessary examinations, and keeps the data on file for presentation to the authorities of any state in which the applicant may at any future time desire to obtain registration.

A fee of \$15.00 (par value in Chicago) should accompany the application to the Secretary of the National Council of Architectural Registration Boards. This fee is to defray expenses in connection with the investigation and examination and does not cover the individual state fees. A further fee of \$5.00 is charged by the Board for each additional state to which the documents are sent.

Those who desire further information concerning the advantages of registration through the National Council of Registration Boards should ask the Secretary of that Board for Circular No. 4.



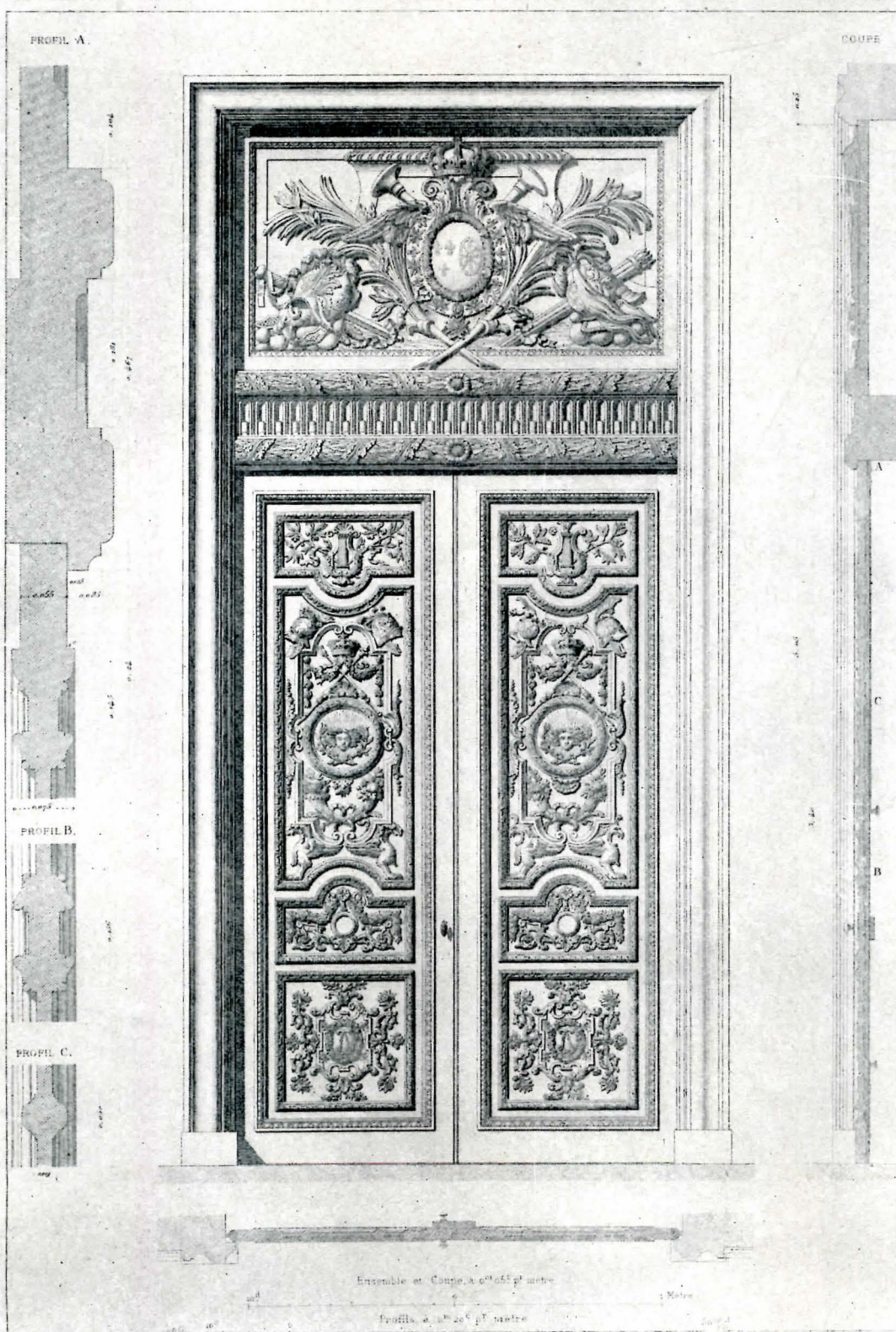
POMPEIIAN DETAIL RESTORATION AND COMPOSITION BY F. DUBAN
FROM H. D'ESPOUY'S "FRAGMENTS D'ARCHITECTURE ANTIQUE"

On the other side of this sheet is reproduced a plate showing two very good compositions by F. Duban which well present the character of Pompeian interior decoration and furnishing and of Pompeian street architecture.

DECORATIONS INTERIEURES... VOL. I.

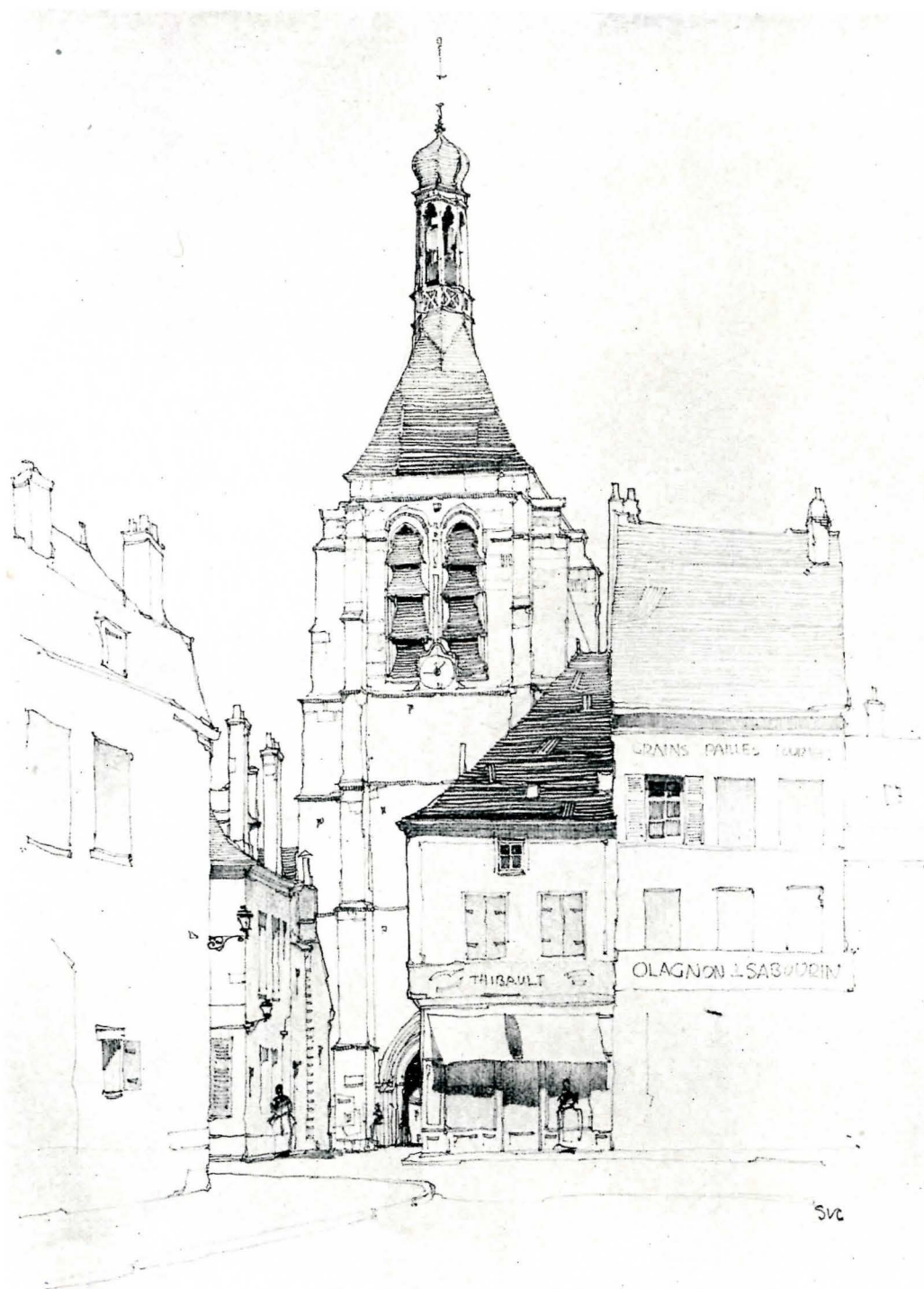
PAR M^r CESAR DALY, ARCHITE

LOUIS XIV. PL. 12



DETAIL OF DOOR, PERIOD OF LOUIS XIV.
FROM "MOTIFS DECORATIFS" BY CÉSAR DALY

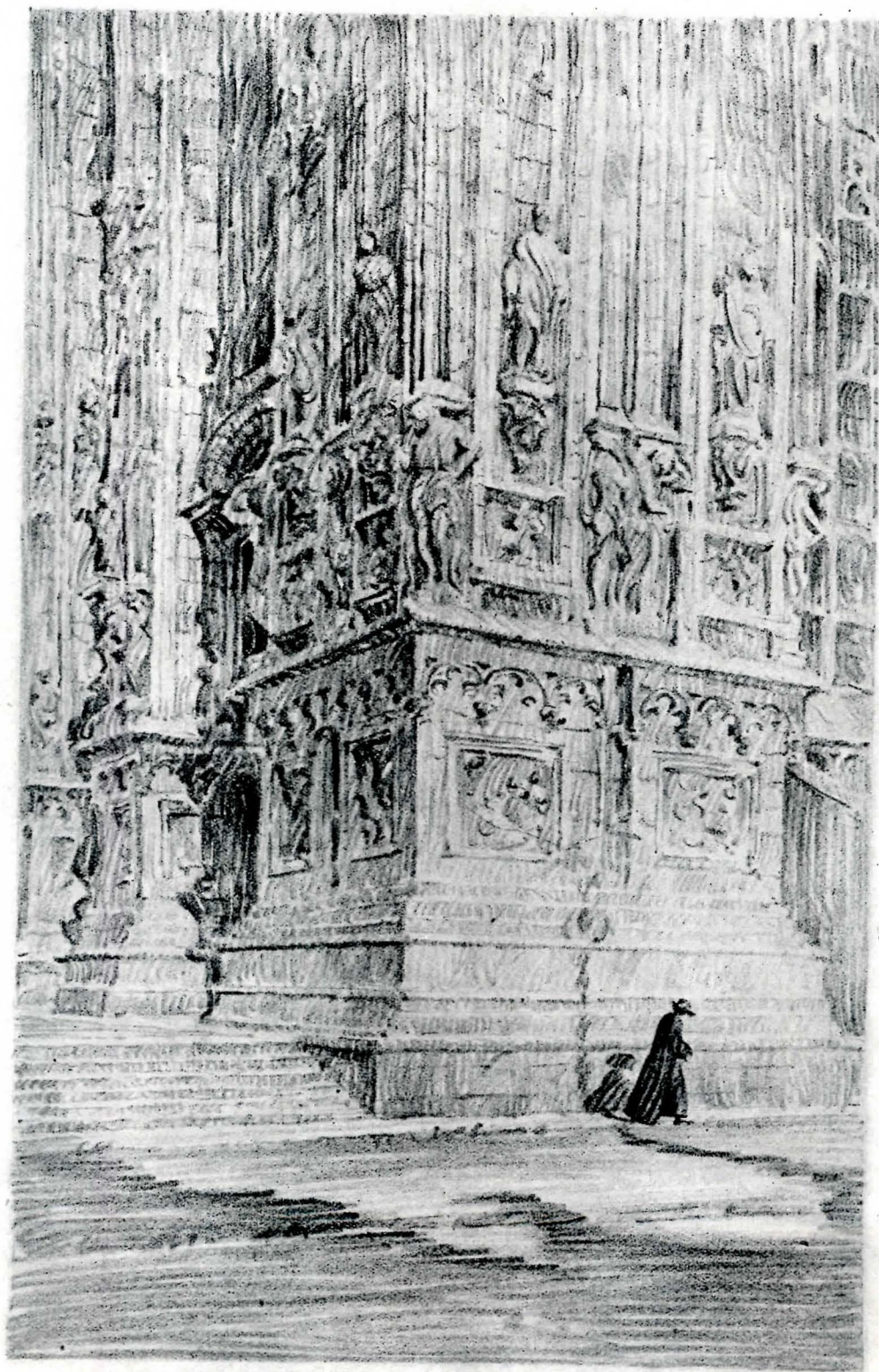
The plate reproduced on the other side of this sheet shows a most interesting Louis XIV. door treatment. It is marked by dignity and richness and shows an admirable mastery of design.



PROVINS - AUGUST 3

PENCIL SKETCH BY SAMUEL V. CHAMBERLAIN

The work of Samuel V. Chamberlain has become well known through the wide publication of his sketches and drawings in newspapers and magazines. The sketch reproduced on the other side of this sheet is a particularly good example of his manner and one of the best of his many sketches showing architectural subjects.



GREVILLE RICKARD

PENCIL SKETCH BY GREVILLE RICKARD, DETAIL OF MILAN CATHEDRAL.

The sketch shown on the other side of this sheet was made during Mr. Rickard's visit to Europe, 1921-22. At that time he travelled in England, France, Belgium, Italy and Sicily, spending a great deal of time in sketching, as he believes that sketching affords an unusual opportunity for training the hand in perspective, the eye to see correctly—to feel the depth and solidity of masses—in addition to furnishing keen enjoyment and stimulating the imagination.

THE STUDY OF ARCHITECTURAL DESIGN

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

THE PSYCHOLOGY OF SUCCESS

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, the Class B Plan Problem and the Archaeology Problem in later issues.—Ed.

WE WERE all taught when we went to school that all men are born free and equal. However, we soon realized that the equality was lost after birth. Some had wealthy parents; some had relatives or friends with "pull," and so forth. But in addition to any such inequalities that result from outside causes beyond our control, we soon see that inequality of attainment may result from such qualities as the ability to concentrate, patience, a willingness to work, and many other qualities of the same sort.

This is true in life; and true in architectural practice and the study of design. This study of design, especially as conducted by the Beaux-Arts Institute, is very much like athletics—the medals go to the men *who win the sprint*, who top the highest bar in the pole vault, who keep a fast, even pace for miles in the distance race, and *have something left for the final sprint to the tape*.

To do these things the athlete keeps in training; the coaches feel he won't have a chance to win if he "breaks training"—he won't have the "punch"

at the moment it must be counted on. The study of design in the atelier system is just as gruelling a process as any sport. If you mean to win—if you want to get to the top—keep in training. At the final effort your opportunity may depend on the last ounce of energy you can put into the contest—don't waste your vitality uselessly before that time.

There is a lot of useless "working all night." Men who let their work slide—waste their time, or cover lots of paper, carefully drawing *the same thing over and over*—their minds seemingly partly asleep—who always have to "charrette" to finish a problem, are usually a poor looking lot when the Paris Prize second preliminary requires forty-eight consecutive hours of plugging—or when a competition makes a "charrette" a worth while thing.

Some men are able to work faster than others, and, of course, do not have to work as many hours to do the same quantity of work. The point I want to emphasize is this: some day it will be important for you to be able to count on your stamina, your vitality—your health, in fact, in a

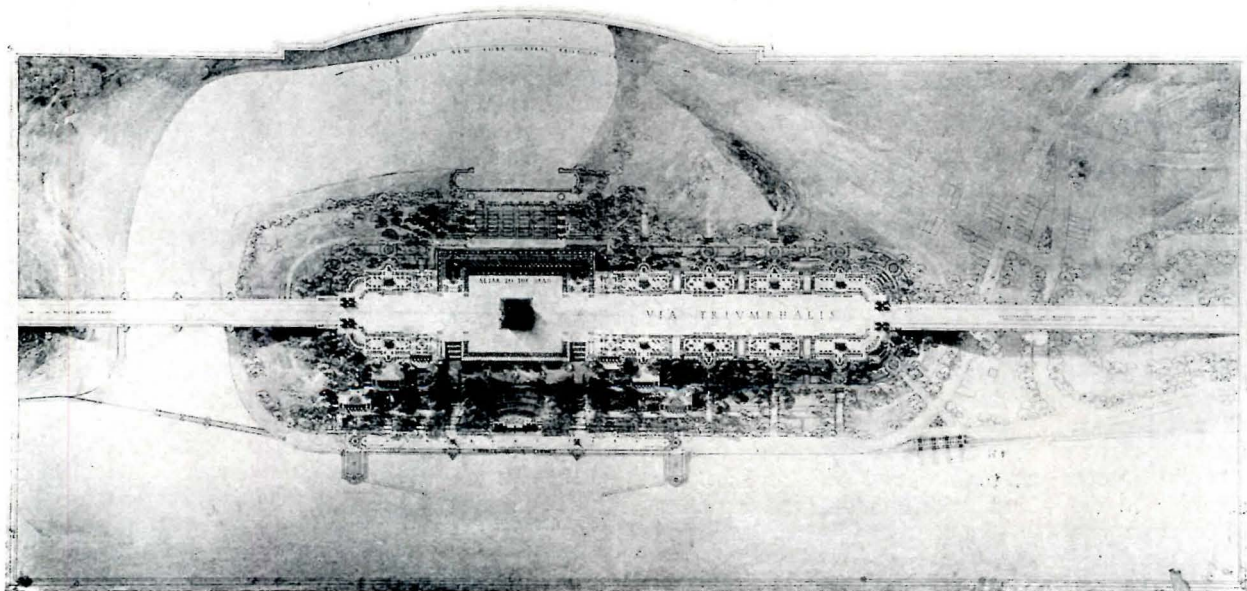


Figure 1. Plan of Winning Design by D. McLachlan, Jr., Atelier Hiron, 1920 Paris Prize of the Society of Beaux Arts Architects.

PENCIL POINTS

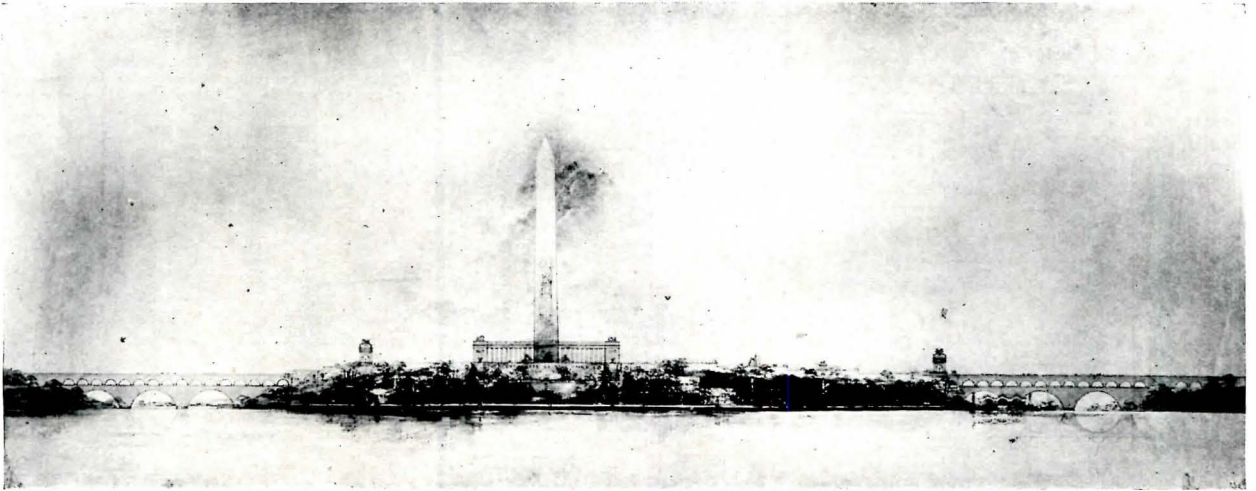


Figure 2. Elevation of Winning Design by D. McLachlan, Jr., Atelier Hiron, 1920 Paris Prize of the Society of Beaux Arts Architects.

competition that means everything to you; don't let it dribble away foolishly because you may have gotten the idea it is "the thing to do." No athlete, of course, is "ashamed" to go to bed at 9 o'clock—you do not need any excuse for making the most of your time.

To show that it is possible to succeed in Beaux Arts work without a procession of charrettes, I mention one example. Billy Hough (see Figures 4 and 5, April PENCIL POINTS) as a senior at college (School of Architecture, University of Pennsylvania) was, in season, on the football team, basketball team, track team—varsity teams all—(practice four to six hours each day, bed at nine) was Art Editor of the *Punch Bowl*—a monthly humorous magazine—and of the class *Record*, took the part of the heroine in the Architectural Society play of that year, and also of the Psi Upsilon play—and was one of the best men in his class in design—a class that had in it four men who later won the Paris Prize—Ellington in 1911, Kirkpatrick in 1912, Simon, 1913 (see Figure 4 in this issue and Figure 163, PENCIL POINTS for September, 1922), and Sternfeld in 1914; Hough ended the year by winning the Stewardson Travelling Scholarship. When he came back to study for his Master's degree, he was admitted as a logist (1913) in both the Paris Prize and Rome prize final competitions—withdrawn from the former to take the latter, and won.

This matter is one in which the critic of course will not feel called upon to give advice—it is up to each man to work out his own salvation.

At the same time, to get anywhere at all, it is necessary to work and work hard. Do as many problems as you can, put as many hours into each as you reasonably can—but make what time you do put into them count to its fullest extent by keeping at it so that your brain will be active—so that no line will be drawn without a good reason;—these reasons become sub-conscious in time, so it is all

the more important to start your training with a sensible idea of the proper use of time.

Do not be discouraged by not having immediate success. Some men do win big prizes on their first try; it may be a lucky chance, or it may be well deserved; but if we look at the record of the Prix de Rome competitions at the Ecole des Beaux Arts in Paris, the apex of school competitions in architectural design—we find frequently that a man has won after four, five, six or more attempts; that such a man is apt to be found "in the running" year after year, placing second, third or fourth at each try. A man has to be good to place second in the Paris Prize Competition three times in succession as did Burnham Hoyt in 1912, 1913 and 1914.

In the 1911 competition Simon was placed fourth. The jury in its report, stated that his work was clever, showed great ingenuity and imagination, and suggested that if this designer submitted to the regular discipline of the Beaux Arts training he should develop well. When he tried again and won in 1913, (see Figure 4) after trying to make his design logical and conservative with this report always in his thoughts, the jury's report expressed the one regret that his work was perhaps lacking in imagination, and called attention to the brilliant imagination shown in the drawings of Hoyt placed second.

You must remember that the jury is "human"—it is not a fixed and immutable thing like a mathematical quantity. You must get used to the variability of the standard of awards in jury decisions. The Beaux-Arts Institute jury varies in personnel somewhat with each jury, but even if the jury were composed each time of the same men there would be a difference of opinion on matters of taste at least, for art and taste are not mathematical entities that can be closely limited and sharply defined.

Sometimes the jury seems "lenient"; sometimes "hard-hearted"; sometimes stressing "the idea"; at

(Continued on page 54)

PENCIL POINTS

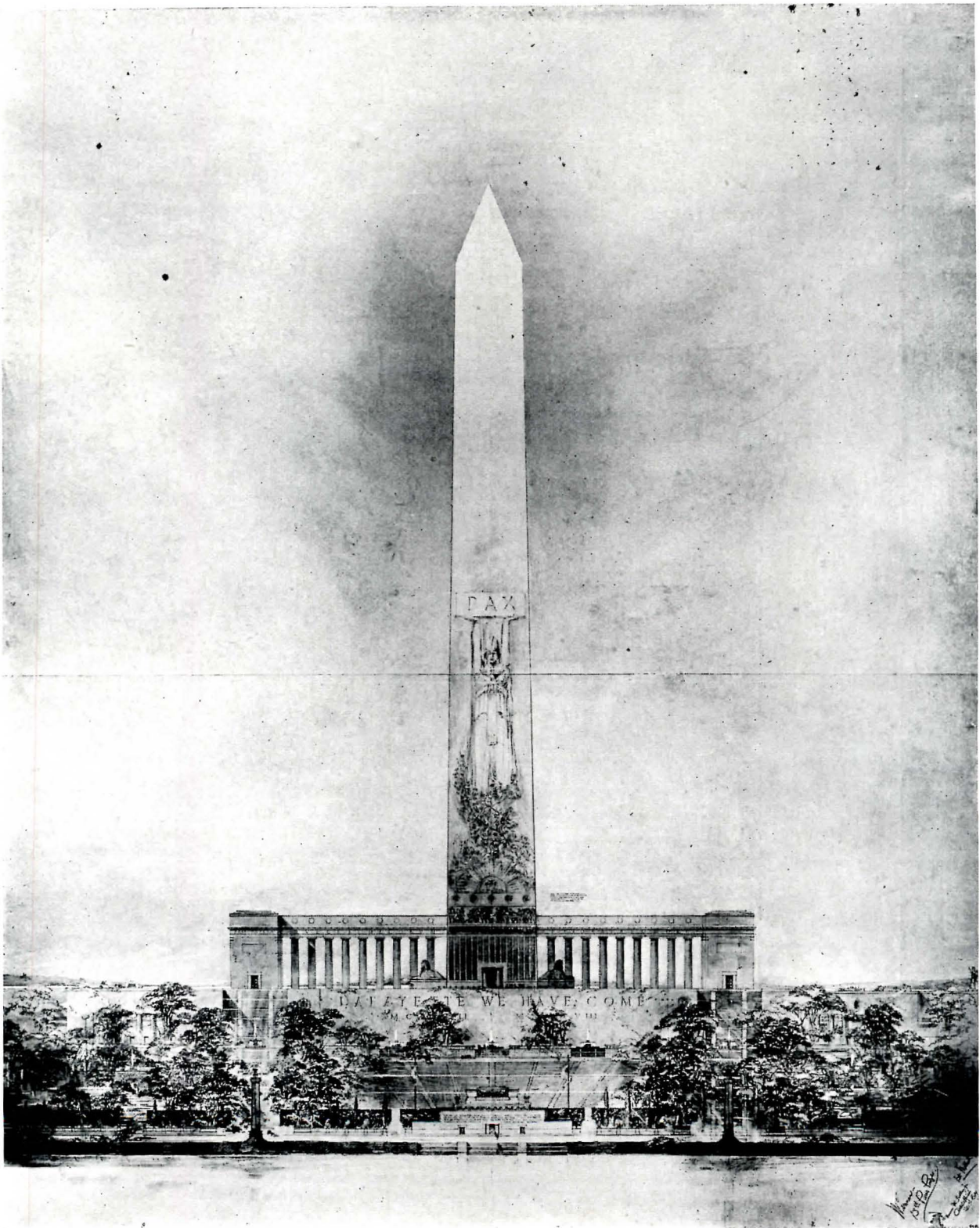


Figure 3. Detail of Elevation, Winning Design by D. McLachlan, Jr., Atelier Hiron, 1920 Paris Prize of the Society of Beaux Arts Architects.

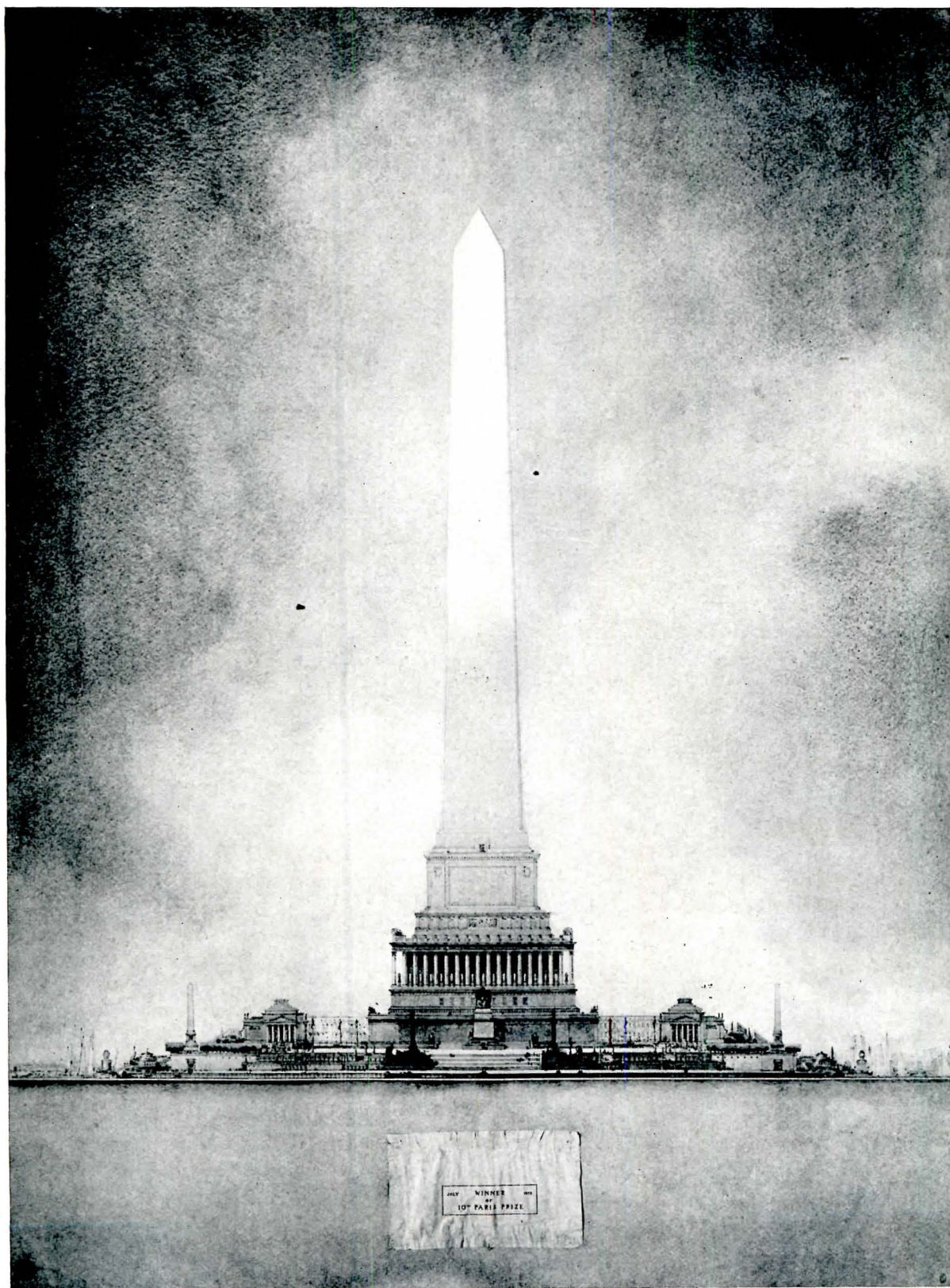


Figure 4. Elevation of Design by Grant Miles Simon, Winner of the Paris Prize of The Society of Beaux-Arts Architects in 1913.

THE LIBRARY IN THE DRAFTING ROOM

BY JOHN V. VAN PELT

SOME years ago a gentleman caught the idea of writing about architecture. Perhaps he was lured by visions of enormous profits from the sale of his books. His name was Vitruvius.

Since that day his tribe has waxed mightily in strength. The beautiful engraving of Lepautre, De Neufforge, Volpato, Piranesi and Pfnor has been displaced by photography, the intensive studies of Durm, Dörpfeldt and Viollet-le-Duc have been eclipsed by "The Significance of the Fine Arts."

A fairly representative list of books covering only one style or period may cost five hundred dollars. Ten thousand is not too much to spend on a really complete review of the various styles that have spread, creeping, like mould, over different spots of our earth at successive periods of time. Yet no one will say that before this wonderful shower of documents there was no beautiful architecture. Perhaps Adam and Eve did confine their development of art to fashion design, but we have heard with envy of the beauties and joys of Ninevah and Tyre. The loveliness of the hanging gardens of Babylon (not Long Island) are a nursery tale. Tut Ankh Amen has so vivified the wonders of his age that an Egyptian Renaissance is imminent. And these glories all happened before Vitruvius made his pile.

Mob psychology is a curious thing. Some one advocates the League of Nations and is successfully squelched by the representative of the Will of the People who at the next election nearly loses his seat for doing it.

You and I are different, but if this article were to advocate books as a stimulant to the imagination many would agree with me. If I turned about and argued that they are a hindrance and stumbling block to creative genius, again many would agree with me. Let us take a middle course. What is the good and what the bad in an architectural library?

There are two ways of using books if one excludes the method of the "Differentist" who only glances through a book to make sure some old codger has not cribbed the design he is evolving. Some designers make compositions that are new and formed to fit the problem in hand, but from whim or fancy or affection recall the feeling, the perfume of a period of the past. The recollection of a previously experienced agreeable impression or pleasure is a source of keen enjoyment to the majority of the human race. Therefore this reincarnation of the past, contributing as it does to charm those familiar with an earlier art, is defensible on perfectly logical grounds. The application must be reasonable. A Chinese temple or a pagoda covered with carved idols and steeped in the mysteries of the worship of heathen gods would not be in harmony with the severe cult of the Society of Friends. But the ritual of the American Episcopal Church

has not varied markedly from that of the Anglican Church or even from that of the Roman Church of the Twelfth and Sixteenth Centuries. Indeed a modern Beaux Arts Student's design served hot on the dish from France might be more out of keeping with the Churchly feeling than a pagoda.

Another group of designers, possibly fearful lest they may be unable to catch the refinement and beauty of an earlier masterpiece, having selected something on which time has set its stamp of approval, copy their model with skillful exactness and with lack of either originality or personal pride in their work.

The forceful and beautiful creations of Richardson, McKim, Bertram Grosvenor Goodhue, Henry Bacon, Louis Ayres, are examples of the first method. They differ from any particular building of old, but exhale a fragrance of another time and are enveloped in an atmosphere of refined scholarliness that calls forth immediate response from the initiated lover of art. Who dares say they are less worthy than the Paris Opera House or the Gare d'Orleans of more modern France.

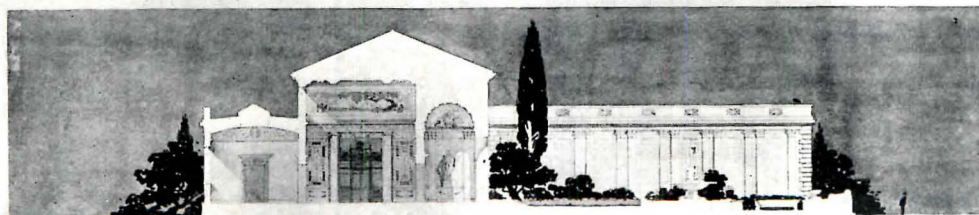
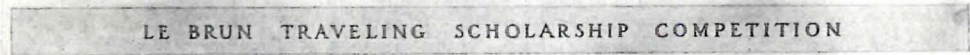
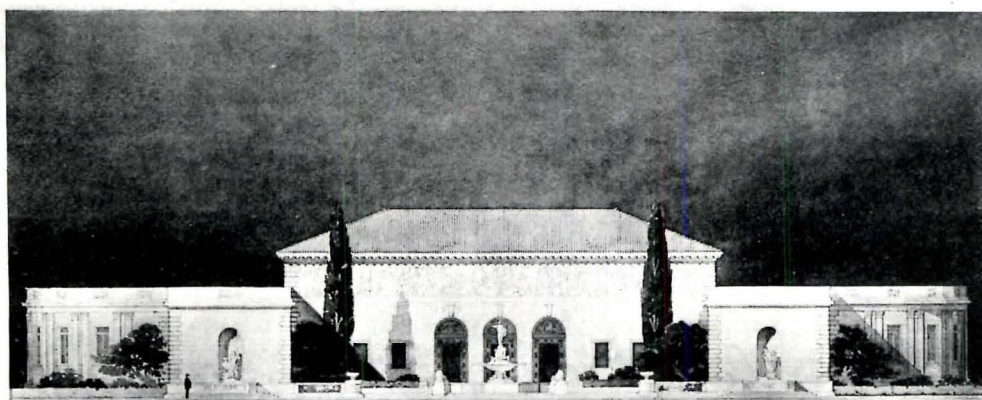
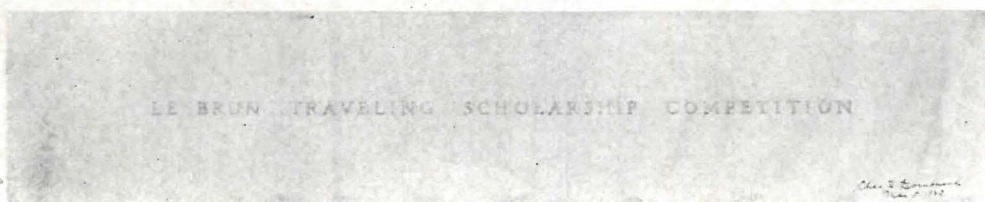
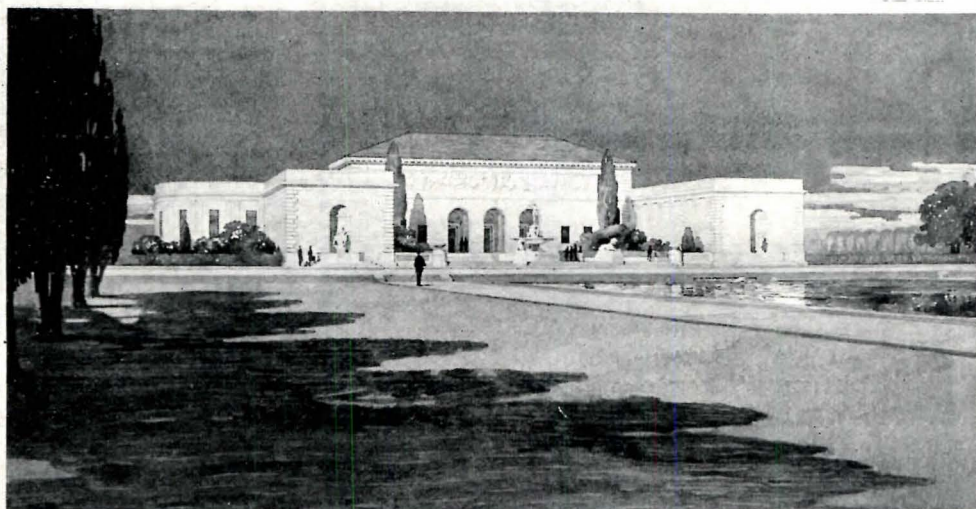
We are all familiar with revered reproductions of the Maison de François Premier and with our American versions of the Giralda Tower and the former Herald Building. They also are beautiful, but the initiated regrets his knowledge. He feels that something has been taken away from an older artist whom he loves because of the gift of pleasure he has already received.

How then shall an architectural library be used?

When I was attempting my first steps in outdoor painting, one of the men who had very definitely "arrived" told me never to try to find the color of any object by looking fixedly at and matching it on my palette. "Pass your eye rapidly over the whole panorama before you," he said, "and set down the impression of the color and value that you *then* receive." The process of assimilation of the atmosphere created by the architecture of an earlier period is not unlike that. If the designer studies one building only he is likely to forget that he is a creator of art and degenerate into a reproducer. He would better purchase a good measured drawing of his model, have it photographed to the required dimension, blue-print the photograph and turn it over to the contractor for bids. If he wishes to remain an artist it would be safer not to look too long at any one model, but to assemble the books and photographs that show all the masterpieces of the period selected, go through them from beginning to end, many times if necessary, till he is steeped in the feeling they evoke and then close them, put them away and evolve his own design, a composition that solves the special problem in hand.

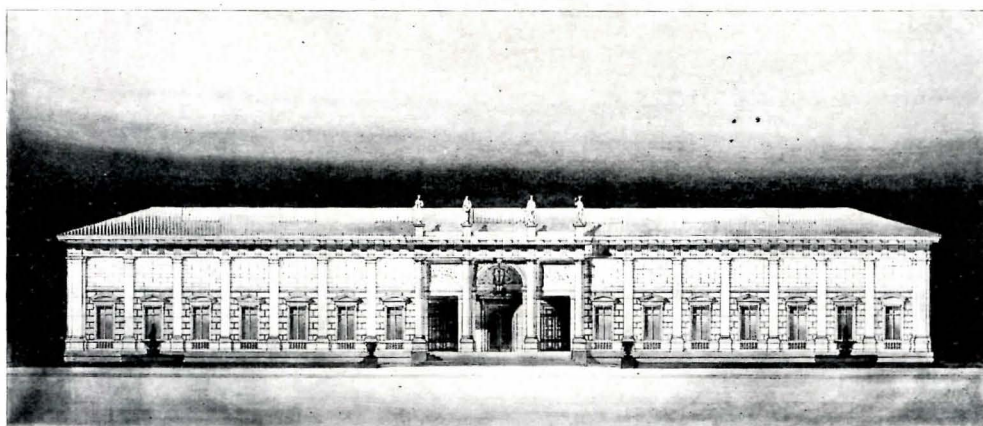
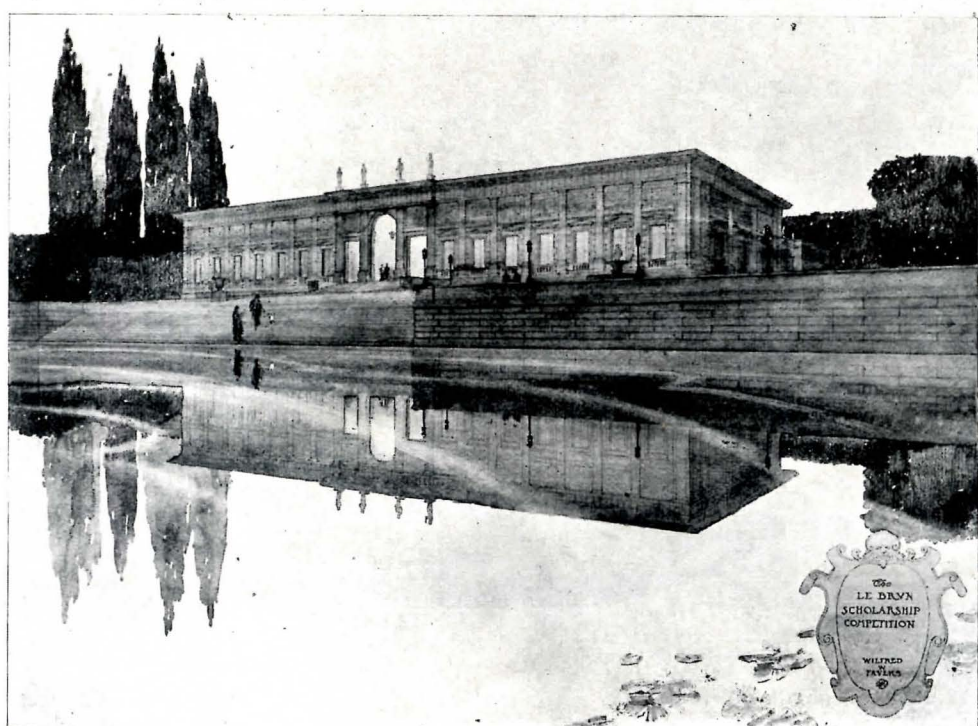
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PENCIL POINTS

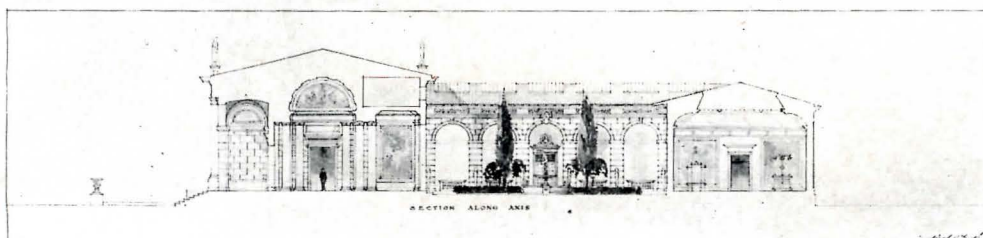


*Design Submitted by Charles H. Dornbusch.
Le Brun Travelling Scholarship, 1923.*

PENCIL POINTS



LE BRUN SCHOLARSHIP COMPETITION.



*Design Submitted by Wilfred W. Faulks.
Le Brun Travelling Scholarship, 1923.*

PENCIL POINTS

Published Monthly by

THE PENCIL POINTS PRESS, Inc.

Publication Office — Stamford, Conn.

Editorial and Advertising Offices — 19 East 24th Street, New York

RALPH REINHOLD, President

F. W. ROBINSON, Treasurer

EDWARD G. NELLIS, Vice President and Secretary

EUGENE CLUTE, Editor

W. V. MONTGOMERY, Business Manager

RAY D. FINEL, Advertising Manager

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Subscription rates per annum, payable in advance; to The United States of America and Possessions, Argentina, Bolivia, Brazil, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, Guatemala, Honduras (Republic), Mexico, Nicaragua, Panama, Paraguay, Peru, El Salvador, Spain and Colonies (Balearic Islands, Canary Islands and Spanish possessions on the north coast of Africa), and Uruguay, \$2.00. Single copies, 25 cents. Canadian Subscription, \$2.50. Foreign countries not mentioned above but in the Postal Union, \$3.00. Payment for foreign subscription should be made by International Money Order or American Express Money Order, drawn in terms of United States Funds.

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COLUMBIA ATELIER DINNER

THE Atelier of Columbia University held its annual dinner at Keen's Chop House in Forty-fourth Street, New York, on April 28.

Forty members and guests sat at the tables, which were in the form of a large "C."

After an excellent five-course dinner was served, Walter Conley, *Massier*, called upon Prof. William A. Boring, Director of the School of Architecture, who gave a short resumé of his recent trip through the Mediterranean and the adjoining countries. J. V. Van Pelt, Director of the Atelier, told of some of his interesting experiences as a student at the Ecole des Beaux Arts in Paris. John J. Schumann, Jr., former Paris Prize Logist, and former *Massier* of the Atelier, gave a most instructive talk on co-operation and the atelier spirit.

A small jazz orchestra composed of men of the atelier furnished entertaining music during the evening.

Unfortunately two of the three critics of the atelier, A. E. Flanagan and Harvey W. Corbett, were ill and unable to attend.

This dinner marked the close of a most successful year for the Atelier.

CHICAGO ARCHITECTURAL EXHIBITION

THE Thirty-sixth Chicago Architectural Exhibition at the Chicago Art Institute was held May 1 to May 31. The exhibition was under the auspices of the Chicago Architectural Club, of which Clarence W. Farrier is President; the Illinois Society of Architects, and the Chicago Chapter of The American Institute of Architects. Clare W. Hosmer was Director of the Exhibition.

The catalogue of the exhibition, a handsome bound book, has been received at the office of this journal and it is a work of which any architectural exhibition might well be proud, both because of the character of the exhibits it represents, and because of the excellence of the book itself in the matter of preparation, engraving and printing. This catalogue and the index of exhibits show that the exhibition covered a large range of well selected works of architecture and of the arts directly contributing to architecture.

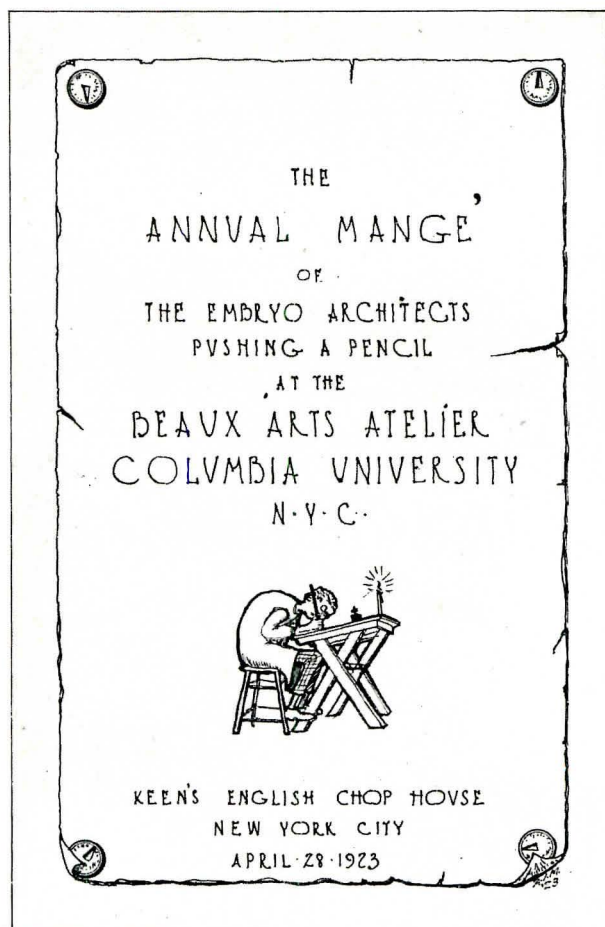
UNIVERSITY OF MICHIGAN

THE College of Architecture of the University of Michigan is to have a European scholarship, through the generosity of Mr. George G. Booth of Detroit. The scholarship will be awarded for the first time at the end of the academic year 1923-24 and will be in the sum of \$1,200.

The successful candidate is to be given considerable freedom in the choice of his field of work and observation abroad, and is to be selected by the architectural faculty on the basis of his total record as a student, ability in design, and fitness to do independent work abroad.

The University has had a course of lectures on art topics of unusual interest, the titles of which are given below: Mr. Lorado Taft, "Glimpses of a Sculptor's Studio;" Professor Frank J. Mather, "The Newest Painting;" Professor Alfred M. Brooks, "Gothic Spires;" Dudley Crafts Watson, "Modern Painting;" Henry Turner Baily, "The Miracle of Art;" Professor H. H. Powers, "Michelangelo and the Sistine Chapel;" C. R. Ashbee, English architect and craftsman, "The Rebuilding of Jerusalem;" Professor Robinson, "Recent Excavations at Sardis and Other Cities of Asia Minor."

There has also been a series of exhibitions of special interest to architectural students among which were a collection of drawings by Italian masters including work by Michelangelo and Andrea del Sarto; the International Collection of water colors; Russian paintings by Roerich; marines by Haley Lever; water colors by Haffner, Tuttle and Baker; etchings by Robert Fulton Logan; drawings by Samuel Chamberlain, Edward A. Schilling, and R. W. Tempest. The original Chicago Tribune drawings were also shown.



Cover Design for Menu, Columbia Atelier Dinner.

PENCIL POINTS

HENRY BACON RECEIVES THE GOLD MEDAL OF THE AMERICAN INSTITUTE OF ARCHITECTS

AN IMPRESSIVE ceremony, of a beauty and dignity befitting the occasion, signalized the presentation of the Gold Medal of The American Institute of Architects to Henry Bacon, as a tribute for his design of the Lincoln Memorial. Only thrice in its history has the Institute presented its Gold Medal to one of its members. Mr. McKim received the medal in 1909 and it was given to Mr. Post in 1911. On the evening of May 18, at the end of the Fifty-Sixth Annual Convention of the Institute, Henry Bacon received this emblem of recognition from the hands of President Harding.

The ceremonial of presentation of the medal took place within the great architectural setting of the monument and its approaches.

At the conclusion of the Convention dinner, which was held under a great marquee at the east end of the Reflecting Pool, the officers and members of the Chapters present at the Convention, together with representatives of the groups composing the Fine Arts and the Craft and Building organizations that participated in the work of executing the memorial, assembled at the end of the Lagoon opposite to the building.

Wearing robes the design and color of which differentiated the various groups, and bearing banners, the participants moved in procession towards the memorial, one column on either side of the Reflecting Pool. Drawn by men on either shore, a barge, decorated as were the barges of State in historic times, moved slowly between the columns of its escort. It bore the recipient of the medal attended by high officials of the Institute. The fluttering banners, the colorful robes and the flare of torches borne by the men on the shores made a brilliant scene to which the reflections in the rippling water of the Lagoon added a note of beauty.

When the barge reached the west end of the Reflecting Pool, Henry Bacon, accompanied by Daniel C. French, and Jules Guerin, ascended the steps of the Memorial to the box in which were President Harding and Chief Justice Taft.

William B. Faville, President of the American Institute of Architects, then introduced Chief Justice Taft who introduced President Harding.

President Harding made an address in the course of which he declared: "No man could have seen in his mind's eye the vision of this supremely appealing structure, or could have conceived it as the most appropriate memorial to the life and work of Lincoln, unless he was so fortunate as to sense the genius, the character, the simple aims and unquestioning integrity which were the dominant traits of the Emancipator."

"This occasion," declared the President, "not only envisages the career of Lincoln, but the progress of the nation which, by his patriotism and devotion, was saved to play its full part in the affairs of our world and our civilization."

"The dignity and character of the memorial," the President said, "have won it rank among the architectural jewels of the world."

Summing up the significance of this memorial, he said: "Here are typified the qualities which made Lincoln at once the dreamer and the doer, the designer and the builder.... Surely, as we survey it, we may hope that, in building the institutions of the Nation which Lincoln saved, there may be a like fidelity to the ideals which guided him."

At the conclusion of his address President Harding presented the Gold Medal of the Institute to Mr. Bacon, who spoke briefly in response, terminating a ceremonial that, it is to be sincerely hoped, marks the revival of the art of pageantry as a fitting means of expressing the dignity and beauty of great occasions. It was an event that made an ineffable and inspiring impression on everyone present. It was a signal success for the special Committee that planned and directed the Pageant. The chairman of this Committee was Mr. Howard Greenley, President of the Architectural League of New York, who was assisted by Mr. James Monroe Hewlett, President of the Mural Painters' Society. Mr. Irwin S. Porter was in charge of all administrative arrangements for this committee. This pageant marked another step in the progress of Mr. Green-



HENRY BACON

ley's consistent effort to give events of our modern life the beauty and expressiveness that characterized all notable occasions in every great civilization of historic times.

GEORGE WASHINGTON UNIVERSITY ARCHITECTURAL CLUB

THE District of Columbia Chapter of the A. I. A. held a joint meeting with the Architectural Club of George Washington University, in the University's architectural building, April 25. A highly creditable exhibition of student work was being held there at the time, which included Beaux Arts problems, freshman order problems, charcoal and water color sketches and some clever cartoons depicting Beaux Arts life. Refreshments and an entertainment were furnished by the students. The feature of the evening was the opening of King Tut's tomb by Lord Carnivorous and Cartersink revealing many relics of the king and his corps of architects. King Tut himself then came to life and called for entertainment. This gave two girls from the embryo architects squad a chance to interpret the dance of good old Egypt. Many of the audience saw themselves portrayed among the royal architects who were called in to serve the fancies of the dancing girls under protest from the royal treasurer. Everyone enjoyed this opportunity to become better acquainted and the students expressed the hope that the local chapter would honor them with another visit soon.

IN A letter recently printed in the *New York Times*, Theodore R. N. Gerdes, M. E., calls attention to the fact that the air of our streets contains a varying but considerable, and harmful, quantity of exhaust gases from automobiles. He points out, among other things, that the air currents caused by tall buildings tend to alleviate the condition.

He suggests that instead of using ventilating systems drawing air from near the street level, diffusing automobile exhaust gases into the interior, architects should plan shafts or stacks of maximum possible height for new buildings, so that air of the best quality could be secured for ventilation.

PENCIL POINTS



*A Life Study in White Chalk on Black Paper by Miss Elizabeth Whittingham.
See Illustration on page 53.*

PENCIL POINTS

SCHOOL OF APPLIED DESIGN FOR WOMEN.

ON THIS page is shown at reduced size a sheet of remarkably good chalk drawings, by Miss Elizabeth Whittingham, a first-year student at the New York School of Applied Design for Women. Miss Whittingham was awarded the scholarship prize for first-year life drawing in the Illustration Department. These little studies are done with directness and sureness and they show unusual keenness of perception. The main point of interest, however, is the fact that these drawings show the possibilities of the use of small sketches of this kind in the study of life drawing. One of the drawings is reproduced on page 52 at the full size of the original.

An interesting exhibition of the work of students was held at the school beginning May 15. The work shown included drawings by students in the Department of Architecture and Interior Decoration, also in various departments devoted to elementary training in illustration and to designing for various industries. In the last-mentioned field this school has long held an important position.

APPRENTICESHIP CLASSES FOR THE BUILDING TRADES.

THE opening of the Classes for Plasterers' Apprentices of the Trade Extension Courses at the South Philadelphia High School by the Philadelphia Building Congress, of which D. Knickerbacker Boyd is President protem, marks a step in the progress of training artisans in the building trades, a much needed work.

On August 17, 1922, The Philadelphia Building Congress created a Committee on Vocational Guidance and

Apprenticeship to co-operate with the Boards of Education of the City and State, and with other educational bodies, and with employers, and employees' organizations, and others, in making the building trades and crafts attractive to young men, and in affording fullest means for the education and employment of efficient workers.

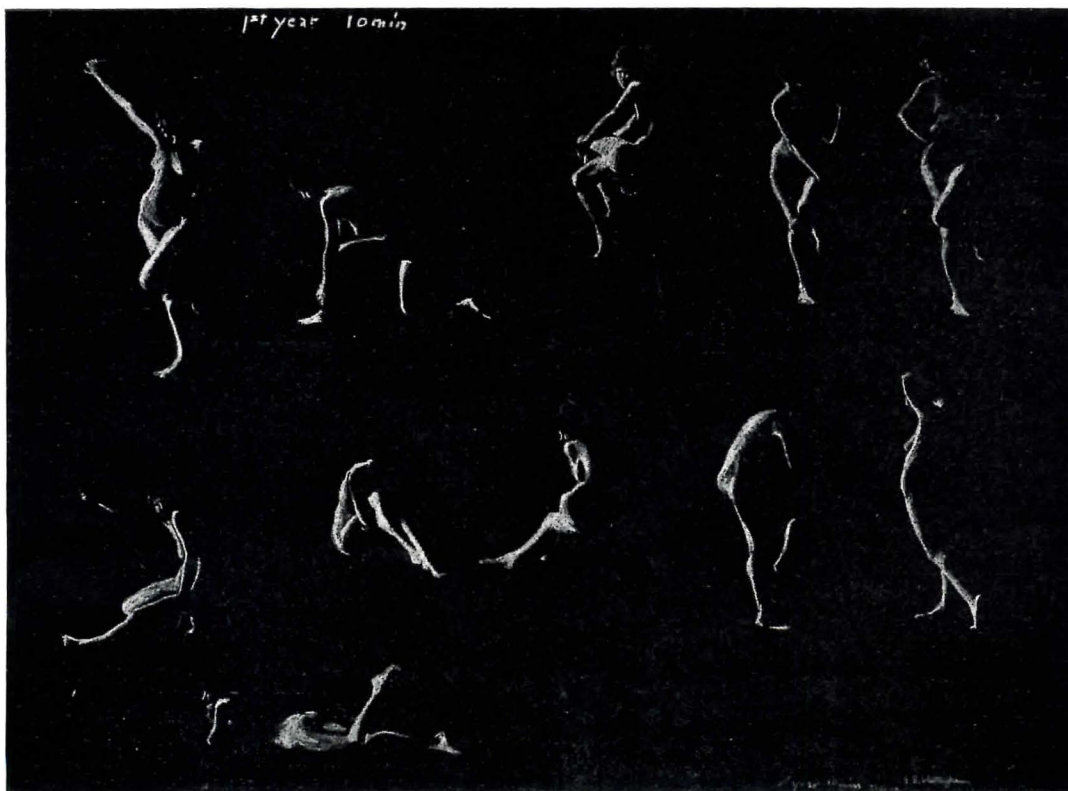
As a result of the deliberations of this Committee, a Sub-Committee on Plastering was appointed. These two committees have brought about the establishment of the classes in a remarkably short time. The course of study is thoroughly practical and well-rounded.

The Board of Education authorized last December the organization of extension classes in plastering and other building trades in the South Philadelphia Evening High School and it has been proposed that the next classes to be formed shall be for the education of apprentices in the bricklayers trade. This kind of educational work is clearly of the greatest importance to architecture, as the need for greater numbers of skilled artisans is well recognized and the Philadelphia Building Congress deserves commendation for its work in this direction.

COOL ROOMS IN A TROPICAL CLIMATE

UNDER the title "Cool Rooms in a Tropical Climate" the May issue of *Hotel Management*, shows a plan, photographic views and detail drawings of the New Colonial Hotel, Nassau, Bahamas, The Munson Steamship Line, owners, Kenneth M. Murchison, architect.

The text, conveniently arranged in the form of captions to the pictures, explains the points of this excellent and interesting solution of a practical problem in design. *Hotel Management* is published at 342 Madison Ave., New York City.



Sheet of Ten-minute Studies from Life by Miss Elizabeth Whittingham, First Year Student at the New York School of Applied Design for Women. Miss Whittingham Was Awarded the Scholarship Prize in First Year Life Drawing. Instructor, Mrs. Brenetta H. Crawford.

PENCIL POINTS

THE STUDY OF DESIGN

(Continued from page 44)

others, looking more particularly at the study that has been spent on the idea, etc.

This variability is true of life—of clients. It is a well known fact among painters that a canvass may be rejected by the jury for an annual exhibition—and if sent to the exhibition at the same place the succeeding year, be accepted. It was turned down the first time not because it was unworthy, but because it had no particular appeal to the men who composed that particular jury. Fortunately architectural design is less subject to caprice or questions of personal taste than painting; the “practical requirements” of architecture always tend to keep its feet on the ground.

For all these reasons one should avoid “playing to the jury,” if you know who they are to be, for you may guess wrong on their predilections—or you may not know one of them who may turn out to be the strongest, the most persuasive (or most stubborn) among them.

Do your best as you see and feel and understand architecture—and take your medicine philosophically, studying your failures in comparison with premiated work in a sincere effort to pull up closer in the next contest. Hunt for the faults—not in the jury, but in your own work. Is it, honestly, the best that could be done. Are there not some places that you feel yourself could have been improved, had you had a little more time? Was your trouble, perhaps, in not laying out your time wisely?

Certain things stand out as necessary for success with a jury in competitions in architectural design.

1—The “parti” must be good—it must “solve” the requirements of the problem—cleverness of presentation, of detail, of the study of certain parts, may all win “commendation”—but they never win a competition for a scholarship or a prize if the parti is faulty.

You will at once see that here success depends to a great extent on good thinking at the time of making the esquisse.

2—Drawings must be well studied—there should be no appearance of awkward corners or undigested *poché* in plan, or ill-chosen or badly placed ornament or features in elevation; both elevations and plan must have good proportions.

3—The design must be interesting—not commonplace. We have already spoken of the work of Burnham Hoyt in this respect. Of course “there is a time for everything” and it would be foolish to attempt to dress up a problem with all kinds of “folderol” if it is uncalled for. There is, at times, a value in the most extreme simplicity—but the greater the simplicity, the greater the study required to make that which is put in absolutely satisfying. A design may be imaginative even though dignified and severe, as may be seen in McLachlan’s Paris Prize of 1920—another monument problem.

4—The design must be well presented, to make the psychological appeal at the first sight of the jury on which so much depends. This means well drawn, and well rendered; the architecture well modelled, the third dimension well expressed; entourage well studied in relation to the architecture and rendered in proper value; it also means that the sheet must be well “composed” as a sheet—some part emphasized as a focus and everything else arranged with this in mind; the different drawings arranged to “compose” with each other, borders made to work with the lines of the “chassis” or stretcher frame.

In a scholarship competition it is also essential to have all drawings equally complete—plan, section, elevation, all carried to the same point, and not one elaborately finished at the expense of the others.

Good drawing and presentation alone, as we have just said, will not win a competition—but they always insure a careful consideration on the part of the jury, while a poorly presented drawing is at a great disadvantage in this respect.

And finally, do not work for immediate results. Try to work toward a future goal of ever greater knowledge of design, a surer sense of proportion, an increasing vocabulary of forms, greater ability at expressing and presenting this knowledge, and a sound method of making the most of conditions, of available time, of procur-

able documents and of sound criticism. With one’s endeavors pointed in such a general direction, success will come one day or another—for come it will.

THE LIBRARY IN THE DRAFTING ROOM.

(Continued from page 47)

It is unsafe to attempt to tell any artist how to work. From one point of view it is useless. I do not actually know that Mr. Bacon or Mr. Ayres or Mr. Goodhue follow the method I have suggested. They may refute my implications. I do believe, however, that such a use of books would be less likely to result in slavish copies than the fixed examination and study of a single model to which I have found many students and drafts-men prone.

The sum of all I have said comes back to the basic fact that the really great artist will always be a creator. He will use any tool, but his expression will come from within himself. A library cannot create. It is only one of the important tools to be turned to great account in the hands of a master.

AWARDS IN COMPETITION FOR A LAMP DESIGN.

THE jury for the competition for lamp designs held recently by the Decorative Arts League under the auspices of The Art Alliance of America, has announced the following awards:

Mr. Warren W. Ferris of New York City was awarded the first prize of \$300. The jury considered his design from the points of beauty, shape, proportions and harmony of color. Miss Mary G. Bishop of Montreal secured the second prize of \$200, her specimen receiving this high honor as much for its delightful simplicity as for its actual beauty. Miss Ann Priest of Baltimore received the third prize of \$100, and Miss Flora E. George, Carlisle, Penna., Miss Jessie Rummel, New York City, and Miss Carla Rasmussen, Astoria, L. I., all received prizes of \$100 each because the designs submitted were particularly adaptable to the purpose for which they were created.

On the score of beauty combined with practicability and usefulness, Miss Bishop’s design was awarded \$400 extra and given the Blue Ribbon.

An interesting exhibition of designs was held by the Decorative Arts League at 65 East 56th Street, New York City, at the conclusion of the competition.

The purpose of the Decorative Arts League is to make available decorative objects of genuine merit at the price of the commonplace.

BUREAU FOR PART-TIME WORK

AN ORGANIZATION which specializes in providing women of education and special training for part-time work as secretaries, typists, bookkeepers, file clerks, etc., is the Bureau for Part-Time Work, 105 West 40th Street, New York City. This service makes available capable women who because of home duties, or other work or studies can take only part-time employment. Since the amount of time they are able to give is all that is required in many cases, this kind of arrangement works out nicely for the architect or other employer as well as for the part-time worker. The organization has on its advisory board a number of men and women prominent in educational, vocational and social-welfare work.

A MOST interesting and valuable collection of material for study and reference is found in the twenty-four page special insert in the May issue of *The Modern Hospital* since it contains reproductions of the designs to which prizes or honorable mention were awarded in the competition for the plans of a small general hospital, conducted by *The Modern Hospital*. The illustrations show plans, elevations and other drawings while the text provides a description, and a critical analysis of each of these designs. *The Modern Hospital* is published at 22 East Ontario Street, Chicago, Ill.

PENCIL POINTS



JOHN POSTLER

JOHN POSTLER, President of the Cincinnati Architectural Society, for 1923, was born in Cincinnati in 1889. He received his early training in the local "Tech" school and then entered the employ of Garber & Woodward, architects, Cincinnati. It was in this office that Mr. Postler received the greater part of his training in architecture.

For two years he studied the problems of the Beaux-Arts Institute of Design in the Atelier of the Cincinnati Architectural Society.

In 1921 Mr. Postler toured Europe, going to France, Spain, Italy and England. During this time he made measured drawings of many important buildings. He also brought back many sketches and rubbings, which he had found time to make, from fine examples of old-world architecture.

Upon his return to Cincinnati, Mr. Postler once more entered the office of Garber & Woodward, and in 1922 he was made an associate of the firm.

ADDRESSES WANTED

WE SHALL appreciate it if those whose names appear in the following list will send correct address to us.—PENCIL POINTS.

C. B. Ross, Berkeley, Calif.; Don Bradford, Los Angeles; Samuel Finely, Los Angeles; George P. Hales, Architect, Los Angeles; J. D. Johnson, Los Angeles; Isabel C. Martin, Los Angeles; Taylor M. Uhler, Los Angeles; F. Wynkoop, Long Beach, Calif.; Ernest E. Hunt, Ocean Park, Calif.; O. A. Jenkins, San Francisco; C. C. Maybach, San Francisco; Henry H. Brock, Washington, D. C.; I. C. Garber, Atlanta, Ga.; W. Moir, Chicago; H. C. Peters, Chicago; R. S. Wilkinson, Chicago; V. A. Booth, Indianapolis; Arthur B. Christensen, Atlantic, Iowa; Lewis A. Clapp, New Orleans; Kenneth Kingscott, Lansing; Dayu Doon, Minneapolis; J. E. Erickson, Minneapolis; Thomas L. Martin, St. Louis; H. Peterson, Kansas City, Mo.; E. F. Dunning, Brooklyn; C. A. Friedel, Brooklyn; R. E. Laskie, Buffalo; Robert A. Cox, New York City; Eldridge Hedges, New York City; Louis Sonntag, New

York City; Fred A. Seumens, North Pelham, N. Y.; Henry A. Martin, Syracuse; C. H. Culpepper, Raleigh, N. C.; Prof. J. N. Bradford, Columbus, Ohio; F. W. Bohne, Youngstown, Ohio; J. W. Schmidt, Tulsa, Okla.; John Bogdan, Philadelphia; J. Wheaton Lynch, Philadelphia; W. R. Wallace, Philadelphia; C. G. Dunnells, Pittsburgh; Carl L. Baumann, Port Huron, Michigan; James B. Brown, Dallas; C. H. Perry, El Paso; James Baugh, Waco; B. C. Underwood, Seattle; Juan Acevedo, Mayaguez, Porto Rico.

PERSONALS.

C. D. HILL AND CO. AND J. W. DEHNERT, Architects, have removed their offices to Suite 501 Kress Building, Houston, Texas.

FREDERICK C. KLAWITER has opened an office for the practice of architecture at 1611 Pioneer Building, St. Paul, Minn.

JOHN F. WEHRELL, formerly with New York and Sawyer, is now in the office of Howells and Hood.

MICHAEL A. CARDO has removed his office to 405 Lexington Avenue, New York.

HINES AND FISHER have opened an office for the practice of architecture at Room 205 Central Building, Hagerstown, Md.

ROBERT A. LOCKWOOD has opened a studio at 30 East Ontario Street, Chicago, Ill.

WOOD AND BRADNEY, Architects, have removed their offices to 70 Andrews Building, Buffalo, N. Y.

SAMUEL S. OMAN AND SAMUEL LILIENTHAL has formed a partnership for the practice of architecture and engineering with offices at 64 West Randolph Street, Chicago, Ill.

EDWIN F. GUTH has been made president of the new company formed under the style of The Edwin F. Guth Company, in which are united the interests of the St. Louis Brass Mfg. Co., and the Brascolite Company of St. Louis. Mr. Guth has been a prominent figure in this field for more than a score of years.

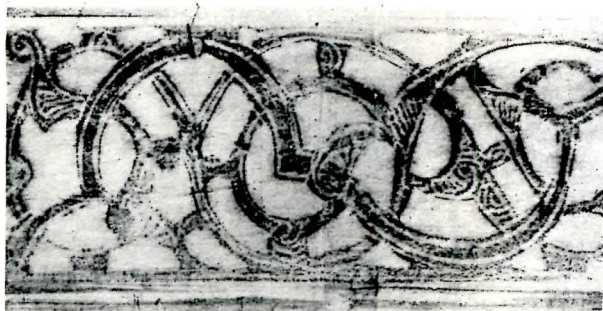
HOTEL REQUIREMENTS

(Continued from page 25)

most often called upon to design. If the architect has not allowed enough working space to permit of the correct and economical operation of the house, this mistake must eventually be made up for by the operator.

It is well to remember that a point that is too frequently overlooked in hotel planning is the necessity for ample provision for carrying on the work of caring for the guests—for the kitchens and their dependencies, and for the comfort and convenience of the employees. No one but a hotel man who has had to operate in cramped quarters can fully appreciate the seriousness of lack of proper provision in this respect. The Hotel Pennsylvania has, in round numbers, two thousand three hundred employees, and the Waldorf-Astoria has one thousand four hundred. In both instances the great percentage of these employees are in the catering department, the restaurants, and kitchens, where they must have adequate space in which to work. Provision must also be made for the comfort of these employees for their feeding and care. They must have lockers, shower baths and many other conveniences that need to be taken into account in making the plans for a hotel. Though everything must be done for the comfort of the guest, for it is from him that the hotel's revenue comes, this effort will count for little unless the hotel has ample working space and an adequate and contented organization. It has always been that the losses come from the back of the house.

(To Be Continued.)



Rubbing of Ornament.

MAKING RUBBINGS.

WE ARE in receipt of a letter from Wm. L. Hoffman, Assistant Professor, Department of Architecture, the Pennsylvania State College, describing a very useful method of making rubbings of architectural detail under difficult conditions. At the head of this column is reproduced at reduced size, a portion of the rubbing referred to, while extracts from the letter are printed below:

"I read with much interest the description of the method used in making 'rubbings.'"

"Last summer while doing some research work in the Philadelphia Memorial Hall, I had occasion to make 'rubbings' of some grille work on an Arabic doorway from a mosque in Cairo. All of the usual methods failed to obtain the results, inasmuch as the depressions being large, the paper had a tendency to crack and tear.

"One of the museum guides came to me and showed me how I might get a 'rubbing.' He first placed a sheet of carbon paper over the grille, carbon side up; next, the paper on which the 'rubbing' was to be recorded, and then with an ordinary scrubbing brush he rubbed the surface. I never saw 'rubbings' produced more quickly or with better results.

"I am enclosing herewith a small sample of the results obtained."

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:

The death of Mr. Charles D. Norton has come to every one of us as a great personal loss. He was in Rome last Summer with his family for a week or so; he was in excellent spirits and he seemed to be in good health. You all will miss him tremendously in your meetings. He gave generously of his money, time and energy. It will be hard to adjust ourselves to his loss.

A new student has registered with us in the School of Fine Arts, namely, a Harvard Fellow in Architecture. A composition by Sowerby, Fellow in Music, is to be produced next Sunday at the Augusteo under the direction of the celebrated English director Coates: the piece is for two pianos and full orchestra. Mr. Coates has already arrived—he is staying with Mr. Lamond. Mr. Lamond has bought a small closed Fiat, which is proving of the greatest use to his Department of Music.

The whole Classical School has started on its Greek trip under the guidance of Prof. Van Buren. They were in Pompeii and Naples last week, and they were to sail last night from Brindisi after a day at Taranto (which has an important museum of Southern Italian antiquities). This year, for the first time, we have been able to secure a 50% reduction and reserved compartments on the Italian Railways, and a 50% reduction on the boats to Greece.

Messrs. Manship and Faulkner are selecting marbles and obtaining estimates for the Thrasher-Ward Memorial. They are going to produce a fine monument.

Miss Alice W. Longfellow has given Mr. Lamond \$100 for the concert to be given at the time of our Spring Exhibition. Rev. H. W. de Nancrède has presented the Library with ninety-four books on various topics. Mrs. George B. McClellan is in town and interesting herself in the purchase of books for the Library. Mrs. William T. Jackson, a graduate of Boston College, reports that her college is to become a contributing institution for one year: she hopes that the contribution will become annual.

Mrs. William Caleb Loring of Boston died suddenly in Rome about two weeks ago. She was the wife of Judge Loring, the President of the Board of Trustees of the American School of Classical Studies at Athens, and the sister of Bishop Lawrence of Massachusetts. Mrs. Major Henry L. Higginson has been in town: she came to an important musicale given in the Villa Aurelia by the Department of Music, at which compositions by all three of our Fellows were given, and she made us two other visits. Mr. Anson Phelps Stokes and family are also here: I had the pleasure of taking them over the Studios, and they lunched with us one day together with Col. and Mrs. George B. McClellan.

There has been a Congress in Rome of the International Chamber of Commerce, and five or six of the delegates of the American Section, including their President, came to look at the Academy.

Boni has been made a Senator of the Kingdom of Italy. Yesterday (Saturday) afternoon we had an orgy of tennis. The Champion of Oxford University, the ex-champion of Italy, and one of the other ranking Italian players drove and smashed over our tennis court in the worst approved fashion.

From a letter written by Frank P. Fairbanks, Professor in Charge, School of Fine Arts, we quote the following:

Our first year painter and sculptor, Messrs. Floegel and Stevens, are making a tour of southern Italy and Egypt preparatory to a trip in Greece.

J. K. Smith, senior architect, has completed his ceiling study of the apse of S. M. del Popolo by Pinturicchio and has finished a very handsome rendering of the facade of the Palazzo Farnese. Smith will leave in a few days for America to be married and will later return with his wife to complete his Fellowship.

The work of the architects, painters, and sculptors in general has been a continuation of last month's activities.

Ciampaglia and Schwarz, our third and second year painters, visited, with Director Stevens and myself, the studio of Cav. Pietro Gentili, who is an authority on the manufacture and repair of tapestries. There we saw the work of tapestry-making in various stages, studied the methods of restoration and examined the various qualities of threads as well as being shown the methods of identification used by the manufacturers. On the way back to the Academy we made a visit to the house of Benvenuto Cellini, situated in a labyrinth of streets in Trastevere. The condition of the house is pathetic but the graffito elaboration of its facade shows evidence of what was once a gem of rich elegance.

The Department of Music's principal activity was a concert at the Villa Aurelia, with a program consisting of the works of the Fellows in Composition, Sowerby, Hanson and Thompson. There was a distinguished gathering of nearly two hundred people, with many Italian composers and musicians present. The salon of the Aurelia, with its inspiring vistas of Rome, furnished an ideal atmosphere for the enjoyment of such a program.

Owner will sell, singly or in one lot, the following unused original editions: Price packed for express F. O. B. New York. Edfices de Rome Moderne, Letarouilly, bound, \$125.00; Zeiglebauwerke, Strack, \$35.00; Arte-Italiano, Vols. 1, 2, 4, 5, 8, 10, bound, \$100.00; Monograph, McKim, Mead and White, not bound, \$115.00; Details of Italian Buildings, Kmrof's, \$17.50; Renaissance Architecture in Lombardy, Paravicini, \$12.00; Brochure Series, complete bound, \$70.00; Odds and ends thrown in \$450.00. May be inspected in New York by appointment. Box 128, PENCIL POINTS.—Adv.

THE SPECIFICATION DESK

A Department for Specification Writers

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 are printing this set of specifications in order that they may be criticised by our readers. Last month we printed the second installment and in this issue we continue. 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 criticise 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 another portion of the specifications—let's have your criticism.

PLUMBING AND GAS FITTING

(Continued)

The main line from street and through cellar to be 2", with valves at front cellar wall. All pipe to be laid with a fall to the meter. All pipe used in said building to be Standard quality.

All center lights that run through ceiling to be run through block nailed between joists.

Where gas brackets occur, and there are no studding against same, this contractor will put in blocks making a stiff support. He will also figure on seeing that brackets and ceiling lights are accurately located.

All gas pipe to be hung where necessary with substantial pipe hangers of approved type. This contractor to include the running of $\frac{1}{2}$ " gas pipe out through rear wall of residence a distance of 5'-0" for garage connection, exact location to be as shown on survey.

PLUMBING:

NOTE:

All pavements, curbs or streets disturbed or damaged must be replaced.

Plumber will instruct general contractor where to leave all pockets, etc., in walls as he will have to do all the cutting should above be neglected.

The plumber shall do all the necessary digging for pipes and fill in again with earth well tamped in place. All excess earth from trenches to be thrown out of building. Great care must be taken not to undermine or weaken the walls. All pipe that run through walls, as well as all other cellar soil and drain pipes, to be put in before concrete footings and stone work is started.

Where soil pipes from rain conductors go down at corners, same must be carried along the outside of building at least 5'-0" before same comes through walls. The plumber will not be allowed to cut joists or walls without the consent of the architect. All rain conductor pipes must be in exact positions for rain conductors so no offsets will be necessary.

SOIL PIPES:

Furnish and put in place for closets in all bath rooms and toilet in cellar 4" cast iron soil pipes, which must be carried down to cellar bottom and out through building as shown on basement plans, where connect up to nearest sewer connection with 8" terra cotta sewer pipe.

Above pipes must have a fall of not less than $\frac{1}{4}$ " per foot. Said work must have a perfect smooth joint inside.

All connections made to street sewer to be made under the direction of the City Engineer, and all plumbing work in the building to be according to the City Laws.

SEWER PIPES:

Sewer line properly trapped to be continued 5'-0" out from rear wall for garage.

All pipe to be carried on an even grade, so that every line will thoroughly drain. If necessary, grade must be obtained by Engineer's level, in which case plumber will pay for same. All pipe to be buried through cellar. From cellar toilet and second and third floor bath rooms 4" cast iron soil pipe shall be run up through roof as especially noted on attic plan. Pipes should not be carried through roof any greater height than required by the City. All vertical pipe to be concealed. Where soil pipes pass through roof a water tight joint must be made by providing flashings of 5-lb. sheet lead 18" square, with funnel around pipe.

All flashings to be well secured to roof in a neat and workmanlike manner. All soil pipe to be sound and strong and free from flaws and to be put up in a strong manner, with the necessary fittings. All soil and vents coming through roof are to be brought out at concealed locations.

WASTE AND VENT PIPES:

Waste pipes of all lavatories, bath tubs, and sink to be $\frac{1}{4}$ " seamless brass pipe, properly trapped and connected to soil pipe. All vents to be $\frac{1}{2}$ " and 2" galvanized iron pipe, properly connected to the vents of all closets before passing out of roof. Vents of sink to run to roof separately. Place bell traps in cellar where shown, same to be flush with finished floor. Cast iron drum traps and cast iron bends to be used throughout.

REFRIGERATOR DRAIN:

Refrigerator to be drained in keeping with the City Laws and as shown on plans to have plain galvanized iron sink, which will have cold water supply and shall be provided with trap, etc., complete in all respects. Plumber will include galvanized refrigerator drain receptacle piping same to the sink above specified.

JOINTS:

All joints in cast iron pipes to be caulked with molten lead and oakum. All joints between cast iron and lead pipe must be made by means of proper brass soldering unions. Joints in lead pipe to be wiped and done in a neat and workmanlike manner. All joints in terra cotta pipe to be caulked with oakum and approved make Portland cement.

PACKING AND COVERING OF PIPES:

Plumbing contractor will figure on packing in space between studding where soil and supply pipes occur in first story partitions with mineral wool the object being to make the pipes noiseless. Plumbing contractor will also count on covering hot water pipes where they occur under tile floors with a strip of tin or with hair felt to allow for expansion. He will also pack pockets around pipes that occur in outside walls to prevent freezing.

FIXTURES:

CELLAR TOILET:

To be — — — Co.'s plate 4533 "P—" vitreous china closet bowl, No. 6 cast iron enameled closet tank fitted with —'s flush valve — ballcock N. P. brass supply pipes with "—" wheel handle angle compression stop, N. P. brass flush connection, and No. 4550 $\frac{1}{2}$ golden oak open front seat and cover.

PENCIL POINTS

LAUNDRY TRAYS:

To be ——— Co.'s plate 4592 three (3) part set of enameled iron laundry trays arranged with $\frac{1}{2}$ " finished brass "R———" compression bibbs and soap dishes above the trays, $1\frac{1}{2}$ " rough brass three part continuous waste, and 2" rough brass plain "P" trap.

REFRIGERATOR DRIP SINK:

To be ——— Co.'s 12x16", plate 4586 enameled iron sink supported on brackets and arranged with cold water faucet only, and $1\frac{1}{2}$ " plain brass "P" trap with cleanout plug.

LAUNDRY STOVE WATER FAUCET:

Furnish and install approved make and pattern cold water faucet 4'-0" above floor directly over laundry range as noted on cellar plan.

KITCHEN SINK:

Kitchen sink, 20x36" size, to be as shown in ——— Manufacturing Co.'s catalogue plate P-6800-E with following changes—porcelain enameled one piece rolled rim sink supported on concealed wall hanger fitted with standard N. P. Q——— compression stream regulating combination double sink faucet with swinging spout and china lever handles, duplex strainer and $1\frac{1}{2}$ " No. 1 adjustable "P" trap. Sink furnished with underside painted white.

SECOND STORY BATH ROOMS:

BATH TUB:

Bath tub to be as shown in ——— Manufacturing Co.'s catalogue plate P-2387-L "W———" porcelain enameled all-over one piece bath for left hand corner with $4\frac{1}{2}$ " rim and left hand end outlet fitted with I——— top nozzle supply and waste, fitting through end wall. Size to be 5'-6".

LAVATORIES:

To be ——— Co.'s plate 4502, size 22x30" arranged with N. P. compression all china handle basin cocks, N. P. pop-up basin waste, $\frac{3}{8}$ " N. P. iron pipe size brass supply pipes, with "R———" N. P. wheel handle angle compression stops, and $1\frac{1}{4}$ " N. P. cast brass plain "P" trap with cleanout plug.

WATER CLOSETS:

To be ——— Co.'s plate 4527 vitreous china "C———" syphon jet closet bowl with No. 5 cast iron enameled closet tanks, fitted with Young's flush valve, M——— ballcock, N. P. iron pipe size brass supply pipe with "R———" wheel handle angle compression stop, N. P. flush connection, and No. 5 white Cellu-varno saddle seat and lid.

SHOWER:

To be as shown in ——— Co.'s catalogue, plate 4475 which calls for N. P. brass overhead needle shower head with straight arm and flange to wall, $\frac{1}{2}$ " concealed shut-off valves with forearm all china handles and china wall escutcheons. This contractor shall figure on the above faucets and arm for over-head shower at the left hand side of stall instead of at rear. He will also figure on a N. P. curtain rod, best quality duck curtain, curtain rings and hook and chain to hold curtain back, completing the above installation in all respects.

ATTIC BATH ROOM:

BATH TUB:

To be ——— Co.'s 4'-6", plate 4457, enameled iron bath tub, fitted with N. P. compression index bath cock, $\frac{3}{8}$ " N. P. iron pipe size brass supply pipes, and N. P. brass connected waste and overflow with chain and rubber plug.

LAVATORY:

To be ——— Co.'s plate 4512, size 18x21" enameled iron lavatory, fitted with No. 22 N. P. compression index basin cocks, $\frac{3}{8}$ " N. P. iron pipe size brass supply pipes with "Republic" N. P. wheel handle angle

compression stops, N. P. cast brass plain "P" trap with cleanout plug, chain and rubber plug.

WATER CLOSET:

To be ——— Co.'s plate 4533 "———" vitreous china closet bowl, No. 6 cast iron enamel closet tank, fitted with Young's flush valve, M——— ball cock, N. P. brass supply pipes with "R———" wheel handle angle compression stop, N. P. brass flush connection, and No. 50 birch mahogany seat and lid.

INSTANTANEOUS WATER HEATER:

Plumber will figure on installing complete in all respects a No. 4 R———, P——— or T——— instantaneous water heater.

HOSE OUTLETS:

Hose outlets to be provided where marked on drawings, counting on N. P. outlets with detachable key and plate against wall. Size to be standard with threaded end for hose connection.

SUPPLY PIPES:

Continue cold water lines out through rear wall a distance of 5'-0" for garage, include stops and drains at cellar wall and encase pipes in terra cotta sewer pipe.

Connect with the streets water main (allow distance as shown on survey) by means of a 1" ferrule and leading with a 1" caliber XX strong lead pipe to inside of basement wall, inserting in same, at curb line, roundway stop cock. Provide same with cast iron expansion box which shall be set level with curb. Inside of wall rise with aforesaid 1" lead pipe, flush with finished floor, and provide same with wiped joint and 1" brass nipple, brass valve on nipple, and make valve drip connection above same. Rise with 1" seamless brass pipe to ceiling of basement and lead full size to rear of house to a point opposite instantaneous water heater with a 1" branch to same; continue with $\frac{1}{2}$ " for branch to laundry trays and from this point $\frac{1}{2}$ " to sill cocks and $\frac{1}{2}$ " to cellar toilet.

The branch for laundry trays shall be $\frac{1}{2}$ "; the branch for cellar toilet shall be $\frac{1}{2}$ "; the branch for kitchen sink shall be $\frac{1}{2}$ "; the branch for second story bath rooms shall be $\frac{3}{4}$ "; the branch from second story bath room up to third floor bath room shall be $\frac{5}{8}$ ".

There shall be placed on each branch, where it leaves the main distributing line, full size approved type and make compression valves.

From the instantaneous water heater rise with a 1" distributing main to within 6" of cold water distributing main, and parallel same to all branches from same excepting sill cocks and collar toilet of same size as called for for cold water. Place compression valves similar to above specified on each branch and branch riser. In addition place a valve on the hot water line, where it leaves the boiler, with a $\frac{3}{8}$ " drain connection connected with drain from boiler.

All risers shall be run full size of branches to the respective group of fixtures except where pipes will be reduced from second floor to third floor bath room as above mentioned.

It is the intent of these specifications to provide for a noiseless installation so plumbing contractors will figure on installing their materials accordingly.

Bath rooms shall be supplied with proper size cleanout traps properly located, from which the various branches shall be lead to the fixtures of such sizes as required by the manufacturers of same.

All supply pipe shall be brass pipe iron pipe size as manufactured by the A——— T——— Company of Boston, Mass., or approved equal.

All supply pipe shall be arranged in neat groups and hung from ceiling of basement on strong and substantial expansion hangers, spaced not further than 6'-0" apart, arranging the whole system to drain toward the instantaneous water heater so that any time, if required, the entire system can be drained to the sewer without the use of vessels for bailing, etc.

Carpenter will furnish all boards for pipes.

Hose outlets as specified to be placed where marked on plans.

PENCIL POINTS

All cast iron sewer pipes for rain conductors to stop 6" above grade. Galvanized iron rain conductors will be cemented into cast iron sewer pipes in a neat manner by this contractor. All pipe to be of good lengths as no small leavings shall be used.

NOTE:

The plumbing work in the above building to be in strict accordance with the rules and regulations of the Plumbing Department of the City of _____.

Plumbing contractor will furnish and install water meter and will pay all costs for same.

ELECTRICAL WORK:

The building is to be wired for lamp outlets, switch outlets, receptacle outlets and meter outlet for a total of lamps shown on the drawings, and to include the installation of cut-out devices and switches. Contractors making bids for electrical wiring and appliances must familiarize themselves with other work in progress or contemplated in the building, so that the true spirit and intent of these specifications, of which said drawings are a part may be fully complied with. Contractors under these specifications shall begin work at proper stage of erection and proceed as rapidly as is consistent with good workmanship and not interfere or delay in any way the progress of the other contractors.

WIRES:

Wires throughout the building to be of an insulation approved by the Board of Fire Underwriters of _____ County, also the Electrical Department of the City of _____, for this class of construction and of carrying capacity for the delivery of current to the farthest light on any circuit with not over 2% drop between that point and source of supply.

INSULATION:

The general approved system of knob and tube work to be employed except at such points where outlets are located against brick or stone walls, where iron conduit and appropriate fixtures are to be established in conjunction therewith. The contractor will be careful to comply with all the new rules recently established.

(To Be Continued)

A CRITICISM OF SPECIFICATIONS

FROM Whitman Dart, Kansas City, Mo., we have received the following letter regarding the specifications offered for criticism:

Some of the following criticisms of the specifications published in the April PENCIL POINTS may be result of being only familiar with local conditions but as you will undoubtedly hear from all over this broad land, I take pleasure in trying to do my bit in the highly laudable work of improving the quality of building specifications.

Index should be in alphabetical order; when one is looking up something while on the job or at the telephone one is invariably in a hurry.

Find it advisable in case of a general specification, such as this seems to be (though not definitely so stated) to either list branches of work included, or else the work not included as "Hot Water Heating System, grading of ground, and etc., will be let under separate contracts." This should be at the beginning of the specifications.

The first requirement of Part 5 is one that every specification writer would be overjoyed to see fulfilled to the letter, but the writer's experience has been that contractors will take advantage of discrepancies every time they think they can get by, and he does not see how a general admonition to be honest is going to help any.

Most contractors keep a set of drawings and specifications on file at their permanent office and should do so, therefore the provision of Part 15 that "all" shall be kept on the job had better be "at least one complete set to be kept on the job."

As many contractors estimate all work themselves even though they intend to sub-let some of it later, the writer's experience is that it would be hard to enforce the clause in Part 16 regarding submitting a list of sub-contractors before the general contract is signed. This is particularly true of "rush jobs" and most commercial jobs are "rush."

We find that it facilitates work both in writing and in using specifications as well as making a more orderly and business like arrangement, to use heading and sub-headings, thus:

CONCRETE FOOTING AND RUBBLE STONE WORK:

Work included: Here specify where above kinds of work are to be used, etc.

FOOTINGS:

STONE:

MORTAR:

WORKMANSHIP:

ETC.:

The way the above specification under discussion is written one must read through six paragraphs to find any one of the above dozen items. Also there is a fine chance of omitting something when writing the specification as it cannot be reviewed quickly and specifications are written in a rush 90 per cent of the time.

It is our practice to leave general dimensions, such as depth of basement, thickness of walls, etc., to the drawings. The drawings cannot be made properly without showing these things, so why repeat.

The mortar specification (which ought to be a sub-heading under Rubble Stone Work) is indefinite as to proportions of the mixture. In this locality there would be an argument right at the start at to what constitutes "rich proportions."

There is no provision for submitting shop and setting drawings, models, etc. These are always required here for a number of branches of work, among which is Cut Stone.

While the above may seem like a long list of knocks there are many clauses, particularly in the general conditions, which appeal very favorably to the writer.

GOOD ENGLISH IMPORTANT IN SPECIFICATION WRITING

WE HAVE received the following letter from William G. Bell, Maintenance and Repair Sub-division, U. S. Veterans' Bureau, Washington, D. C.

I have read with interest your recent articles on specification writing, and am availing myself of the invitation in the previous and current issues to criticise the specification printed therein, and to discuss the question of specification writing in general from my experience in this occupation.

It seems inexplicable to me that there are so few specification writers who can write correct English. I have known engineers and architects who could dictate a perfectly clear and well written letter, but who, when writing a specification, used interjections, disconnected phrases and incomplete clauses in lieu of complete sentences.

The specification offered for criticism is a product of this kind. It would appear that you have selected a bad specification with deliberate intent, in order to offer plenty of opportunity for criticism.

If such a specification should appear as an exhibit in a law suit, a skillful lawyer could twist the wording to mean anything desired. I have known of cases where contractors were able to get away with things that were contrary to the true intent and meaning of the plans and specifications because the specifications were written in such poor English that the architect dared not enforce his interpretation.

No one should write specifications unless he has an elementary knowledge of the English language, and there is no excuse (except laziness) for any reasonably educated person turning out any such English as this. Has the writer never heard of, or has he forgotten the proper usage of "shall" and "will"?) Does he not know that the participle "to be" cannot be used as a predicate without a verb?

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The "General Condition" clauses seem to indicate that the writer does not have very much confidence in the correctness of his plans and specifications, considering the emphasis he places in the clauses bearing on the *intention* of the plans and specifications agreeing.

Why not list the drawings by their titles, and why mention what is figured on them?

Under "Excavation," there is much information that should appear on the drawings.

Why the side heading "Note" under "Concrete Footings and Rubble Stone Work?" Why not state in the side headings the subject matter of the paragraph that follows? Why mention brands of Portland cement? Is the writer unaware of the existence of the American Society for Testing Materials, and its standard specifications and tests?

Why is the thickness of the concrete floor in the cellar specified under "Excavation?" The drawing should show the thickness, and the specifications should describe the mix of concrete, method of laying, finish, etc. All these things should be specified under "Concrete Work" rather than "Excavation."

Under "Brick and Hollow Tile Work" should first be a clause "Scope of the Work," followed by paragraphs covering "Common Brick," "Face Brick," and "Hollow Tile."

Under "Face Brick Work" there is a clause which would indicate that the specification writer does not know the building laws of his city—a shameful confession to make.

The paragraphs on steel and iron work show the same poor arrangement and lack of thoroughness that appears throughout the specification.

There should be a heading entitled "Roofing and Sheet Metal Work," commencing with a clause entitled "Scope of the work," followed by the heading "Tin Work," "Copper Work," "Galvanized Iron Work," "Slate Work," etc. The gauge of metal of the galvanized iron gutters should be specified.

I have been writing specifications for the last fifteen years in large government and private architectural and engineering organizations, with varied systems of office organizations.

I have been required, in 90 per cent of the cases, to write the specifications simultaneously with the preparation of drawings.

In such cases, I take the preliminary drawings, go through them, make up a questionnaire listing all the points requiring to be mention in the specifications and give this to the "squad boss." The squad boss is made responsible for seeing that all dimensions, and the location of the different kinds of materials and finishes are indicated on the drawings. I then confine myself as nearly as possible to the description of the workmanship and materials, and the classification and arrangement of the specifications so that it is perfectly clear as to which contractor is to do the different kinds of work.

In order to produce good specifications, it is necessary to have not only a good specification writer, but a good squad leader as well, and good team work between the two.

SHALL AND WILL

FROM Virgil L. Johnson, Philadelphia, Pa., we have received the following letter regarding the specifications offered for criticism in these pages:

In reading your specification published in the May issue of "PENCIL POINTS," which you offer for criticism, it would seem that there has been a failure to discriminate in the use of the words "shall" and "will." This is a common error in the use of the English language by Americans, due largely to the fact that in grammar school the pupil is first taught to recite "I shall or will love," etc., thus giving the impression that both words have the same value.

There is, however, considerable difference in the use of the words shall and will. The latter should never be used by the speaker in giving a command in the second or third person.

The best example or illustration is given in the Ten Commandments. If we take pains to study the twentieth chapter of Exodus we will notice the strength expressed in

the word "shall." Then if we change the wording introducing the word "will" in place of "shall" we notice at once its weakness.

The specification is a part of a contract and is a written statement from the architect commanding the contractor to do certain work in the execution of his part of the contract. Therefore, the architect can do nothing better than express himself in the strongest kind of English.

In re-writing this specification whenever a command is expressed, I would change "will" to "shall" and such words as "must be," "to be," "are" to the stronger expression of "shall be."

PARAGRAPHING SPECIFICATIONS

WE HAVE received the following constructive criticism from Benedict Farrar, of the firm of Study & Farrar, architects, St. Louis, Mo.:

As you have invited suggestions, and criticism, of the specifications which you have been publishing recently in "PENCIL POINTS," we are writing to express an idea which occurs to us in reading over our April and May numbers.

We feel that the context of your published specification is good, but that for practical purposes the arrangement and paragraphing might well be improved upon. Our conception of a specification is that it should bring before the bidders first, and the contractors second, the intention of the architects in the simplest and quickest manner. Nothing is gained in the long run by making the specification vague and by requiring an estimator and the foreman to hunt through a lot of items in which he is not immediately concerned, to find the particular clause which is applicable to the case in point. It has been our experience that the best method of arranging the different items which go to make up the complete specification, is to group them under main headings; each main heading to include all the work which is to be figured and executed by a particular trade or contractor. Thus:

IRON WORK

I BEAMS:

*
— — — —
— — — —

ANGLES:

— — — —
— — — —

WROT IRON GRATINGS:

— — — —
— — — —

etc.

BRICK WORK

KIND OF BRICK:

Face —————
Backing —————
Fireplace —————

MORTAR:

— — — —
— — — —

etc.

If the above method is followed, and the specification carefully indexed, there will be no occasion for a Stone Mason to read through any paragraphs referring to brick work, or a Sheet Metal Man to hunt through the Iron Specification to find anything that is under his contract.

We have found it also to be a very good plan to place as many figures as possible in the specification rather than among the plans, such as door sizes, sizes and thickness of wood casings, sizes and thicknesses of flooring, size of tiling etc. Such figures are usually easier to read from specifications than from plans, and this leaves just that much more space for the information which cannot be conveyed in any other way than by drawings.

We trust the above suggestions will be of some value to the readers of "PENCIL POINTS," and that you may continue the publication of the "Specification Desk" with letters of criticism, both of which are of considerable value to a specification writer.